AFGHAN WOMEN’S EDUCATION FOR CLIMATE RESILIENCE

“EDUCATED WOMEN BUILD STRONG COMMUNITIES.”

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ABSTRACT

As climate change threatens all living things around the world, research suggests that societies with higher levels of education have higher adaptive capacity and resilience to climate change. Considering Afghanistan’s adult literacy rates of 37.27% (combined men and women) male literacy rate of 52.06%, for females at 22.6% (Afghanistan - Literacy rate, 2023), puts the country at a higher risk and makes it one of the most vulnerable countries to climate change along other political and economic issues. In other words, if higher education translates to higher adaptive capacity during the climate change era, then Afghanistan is at a higher risk compared to many countries in the region. While the rest of the world is seeking to increase literacy rates and fight climate disasters at their full capacity, Afghanistan’s current government does not allow half of its citizens to get an education which could be a force to survival. Afghan women are forbidden to attend secondary school and higher education institutions. Activists from across the world have called upon the Taliban to end their education ban for women and girls, stating that education is a basic human right. This paper draws upon desk research and selected international evidence to show a connection between women’s education and a society's capacity for adapting to climate change and coping with climate crises.
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<tr>
<td>CAMEED</td>
<td>Campaign for Female Education</td>
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<tr>
<td>CRI</td>
<td>Climate Risk Index</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>ND-GAIN</td>
<td>Notre Dame Global Adaptation Initiative</td>
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<td>NDCs</td>
<td>Nationally Determined Contributions</td>
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<td>NGO</td>
<td>Nongovernmental Organization</td>
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<td>UN</td>
<td>United Nation</td>
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<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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<td>UNICEF</td>
<td>United Nations International Children's Emergency Fund</td>
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<td>UNL</td>
<td>University of Nebraska-Lincoln</td>
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<td>UNMC</td>
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<td>University of Nebraska at Omaha</td>
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Climate change is a major threat to the human race and to global development in the 21st century. This needs immediate action from all nations and individuals. Current climate change is driven largely by the emission of greenhouse gases. These emissions are in turn due to the burning of fossil fuels for industrial processes, transportation, and electrical power generation, among other things. Agricultural and food system activities are also significant emitters of greenhouse gases. Climate change, according to The United Nations Framework Convention on Climate Change (UNFCCC) is “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable periods”. (UNFCCC, 2023)

Climate change on planet Earth is not without precedent. Before the current interglacial period, there was an ice age that began 2.5 million and lasted until 11500 years ago. That was followed by a warming period during which much of the earth’s glaciers melted. The earth's climate subsequently became warmer – but at a more gradual pace. In order words, it took us thousands of years to have the climate we have today. However, the industrial development, rapid use of natural resources, and increased economic activity that characterizes much of contemporary society have accelerated climate change. The faster changes can be translated into less time for humans to prepare and adapt. Based on the data from the National Oceanic and Atmospheric Administration, “the earth's temperature increased by an average of 2 degrees Fahrenheit since
1880, while the rate of warming is more than twice as fast as 0.32 per decade since 1981.” (Blunden, 2023) Unless human societies make rapid and fundamental changes in energy, industrial production, transportation, and food systems global temperatures could increase twice as much as in the last century. This would cause extreme heat waves, an increase in the number of days where the temperature exceeds levels deemed suitable for healthy human life, an increase in sea levels, and increased natural disasters such as flooding, drought, landslides, and wildfires. All together climate change puts humans and other living beings at a tremendous risk.

To fight climate change, a historical step was taken in December 2015 when 194 countries signed the Paris Agreement that obligates signatory nations to keep global warming under 2°C at 1.5 °C. Each country is obliged to prepare an action plan for “Nationally Determined Contributions” (NDCs) to lower their emissions and advance global efforts to keep temperature levels as low as possible. On the other hand, fighting climate change will require financial resources which most developing countries do not have access to, hence, developed countries pledged to provide financial support as part of the Paris Agreement (London, 2023).

Following the Paris Agreement, nations are taking measures to reduce global warming and the risk of climate change. Most of these measures fall into two categories, mitigation, and adaptation. Mitigation activities include reduction in greenhouse gases, improved mass transit, and waste management, while adaptation is groundwater management, sustainable agroforestry, ecosystem protection, purchasing less, and reusing more. Some of these measures overlap and can be considered both mitigation and adaptation simultaneously such as waste management, using green energy, and changing to sustainable and eco-friendly business. When it comes to combating climate change, listed activities are always discussed, however, there is
an area that is hardly touched. Efficient and effective in terms of cost and adaptability, societal investments in education for women and girls enable the mobilization of all human talent, creativity, and initiative toward the urgent task of building social, economic, and physical resilience to the negative consequences of climate change.

This project paper will provide evidence on why women's education in Afghanistan is essential for building resilience to climate change. Afghanistan is a least developed country in which the majority of the population relies on agriculture for its livelihood and poverty rates are among the world’s highest. In the last couple of decades severe droughts, floods, landslides, earthquakes, and storms have brought not only financial loss but significant loss of human life as well. The government has little capacity to prepare and respond to natural disasters or the increasingly extreme and unpredictable weather that accompanies climate change Equal access to education can equip women and girls with the literacy, confidence, and curiosity essential for the country to confront climate change at full capacity. The economic cost of restricting education and employment opportunities for females is also enormous, to their families, communities, and the nation. Prosperity expands options for building resilience and adaptive capacity for climate change. Poverty limits them.

This project paper is developed utilizing secondary sources and selected international evidence studies. The overarching question is “How can investments in women's education help strengthen climate resilience among Afghan households and communities?” Before providing further details on women's education and climate resilience, I would like to provide an overview of the current climate situation in Afghanistan.
Afghanistan Overview

Afghanistan is a landlocked nation in the middle of the Central, West, and South Asian regions. It has considerable mountains which the highest peaks as high as 7,000 meters (m). At lower altitudes are large expanses of arid steppe and desert regions found in the southwestern plateau. Although there is no vegetation in lower altitudes, it supports biodiverse ecosystems and unique landscapes (World Bank Group, 2021). It is composed of different ethnic groups with diverse cultures and traditions. According to UNICEF Afghanistan Education Equity Profile for Adolescent Girls, “The majority of people in Afghanistan – around 71 percent – live in rural areas, with 24 percent living in urban areas, and 5 percent are nomadic Kuchis” (UNICEF, 2019). Decades of war and conflict have made the country one of the most deprived nations in the world. The political crisis of 2021 and the fall of the democratic government translated into an economic crisis, job losses, and economic deprivation. The new government is not recognized by the international community which negatively affects the country’s political and economic situation. The families are experiencing substantial pressure for sustaining their lives. According to the Norwegian Institute of International Affairs “By mid-2022, poverty is estimated to impact up to 97 % of the population” (NIPI, 2022). Thus, the population is facing a signification risk of malnutrition and undernourishment.

Afghanistan Climate Trend

Although its contributions to global climate change are very modest, Afghanistan is one of the countries most vulnerable to the associated disruptions. Moreover, Afghanistan has few resources to invest in adaptation. The effects of climate change can already be seen and felt. According to the World Bank Climate Risk profile of Afghanistan, “weak climate mitigation
responses and heightened insecurity significantly affected crops and livestock in 2021” (World Bank Group, 2021). There is a direct relationship between climate change and extreme weather.

**Temperature:** Temperature in Afghanistan is increasing faster than the global average (0.18 °C). The average temperature between 1901-2016 stood at 12.9 °C. There was a 1.8°C mean increase between 1951-2010. The greatest increase was in the east (2.4°C) while the lowest was in the Hindu Kush region of (0.6°C). There is potential for a further increase of 1.4°C-5.4°C by the 2090s (World Bank Group, 2021). As the volume of mountain glaciers continues to decrease, long-term disruptions in freshwater resources for drinking and agriculture can be expected. Between 1990-2015 there was an 18.5% reduction in the volume of mountain glaciers (NIPI, 2022).

**Precipitation:** While Afghanistan has experienced less than a 10% reduction in annual rainfall between 1951-2010, the drought frequency increased in southern and western Afghanistan during that period (SIPRI, 2022). The following map shows water stress in Afghanistan in 2020. Almost 80% of the country experiences water stress at medium to extremely high levels. Being a landlocked country, the main sources of water in Afghanistan’s river basins are seasonal rainfalls and snow which is now threatened by global climate change.
When it comes to climate change and its adverse effects, Afghanistan is one of the top 10 most vulnerable countries in the world. According to the Climate Risk Index 2021 report, Afghanistan is the 6th most affected. (David Eckstein, 2021, pp. 7-10)

The immediate impacts of severe drought and high temperatures are expected to be food shortages and population displacement. “Approximately 22.8 million people – 55 percent of Afghanistan’s population – are experiencing high levels of acute food shortages. Severe drought has hit more than 80 percent of the country, crippling food production and forcing people from their land” (IFRC, 2021). Drought is expected to persist over time and to be increasingly severe. Further calamities, especially in the food systems, are widely predicted. What we need at this time is a system of governance and national institutions that will give the issue of climate change
preparation the urgency that it deserves, and build a national response characterized by transparency, respect for the rights of all Afghans, and official recognition that the challenge cannot be successfully met when 50% of the population is essentially sidelined.

**Background**

The effects of climate change around the world and particularly in Afghanistan are not ignorable. The *UN Climate Diplomacy Report* from 2020 states, “Climate change is real. I invite anyone who may still doubt this to visit Afghanistan and witness first-hand the alarming melting of the Pamir/Hindu Kush glaciers in the northeast. Afghanistan has already been and will continue to be, heavily affected by the negative impacts of climate change” (WFP, pp. 3-4). Unfortunately, climate change in Afghanistan is not a potential future problem, it is a present crisis, threatening the lives of millions. The anticipated disruptions to food systems are especially threatening for reproductive-age women and young children. Yet, denied education, Afghan women and girls are forced to confront climate-related challenges to household food security and livelihoods with an incomplete understanding of their options.

Afghanistan's physical, social, and economic vulnerability puts it at a higher risk for the worst consequences of climate change. It is likely to experience more severe climate-related natural disasters than most countries. According to *Climate, Peace and Security Fact Sheet* February 2022 report “Afghanistan is experiencing rising temperatures, changing precipitation patterns and increasingly frequent extreme weather events, and currently, its worst drought in 27 years” (NIPI, 2022). Displacement, competition for diminishing land and water resources, and civil conflict following droughts, floods, and other natural disasters have been extensively documented globally.
National Priority

First, decades of war and unrest in Afghanistan pushed the governments to set priorities based on immediate needs rather than long-term goals. Ending the war and bringing peace and stability always overruled resilience-building for impending climate-change crises. Therefore, during the past two decades, more than one-third of the annual budget expenditure was absorbed by the security sector, precluding its use for other purposes such as climate mitigation and adaptation. “Former President Ashraf Ghani acknowledged that the government lacked the funds and capacity to manage the impending crisis.” (Thomas, 2023)

Climate Susceptibility

Second, Afghanistan's climate is susceptible to global warming. Since Afghanistan is a mountainous country it has an arid climate, thus, the source of the majority of surface water is high mountains. According to the Afghanistan Climate Change Report, prepared by World Food Program in coordination with Afghanistan National Environment Authority, “Increasingly frequent and severe droughts and floods, accelerated desertification, and decreasing water flows in the country’s glacier-dependent rivers will all directly affect rural livelihoods—and therefore the national economy and the country’s ability to feed itself.” (WFP, p. 8). A rise in the temperature will result in snow melt-down, which will cause floods and casualties to the people, livestock, and farms. Second, a reduction in the annual rate of precipitation and long and continuous droughts will also claim the lives of many living beings, including humans. The World Bank study of Afghanistan states that “Events over the early 21st century show the extreme vulnerability of Afghanistan’s communities to hazards such as drought and flash flooding. ‘This vulnerability is amplified by poverty, undernourishment, food insecurity, and
inequality” (World Bank Group, 2021). If we want to know the impact of global warming, the situation in Afghanistan is a real-life example.

Economy

Third, “Climate change exacerbates the deteriorating conditions for agriculture-based livelihoods and food insecurity.” (NIPI, 2022) Afghanistan’s economy is highly dependent on agriculture. The sector is providing livelihoods to almost half of the working population, not only meeting certain domestic needs but also contributing to annual exports (~77%). Dried fruits alone comprised 35% of total exports in 2019. “Almost 70% of the rural population depends mostly on agriculture” (Preen, 2023). The agriculture sector is more sensitive to climate change than any other sector (FAO, 2023, p. xi). Without proper adaptation and mitigation measures a large part of the agriculture economy will experience a significant decline in productivity, which will increase food insecurity among the citizens. Almost 90% of Afghanistan’s export products are primary and resource-based products, while 50% of India’s exports are technology based. Pakistan has the highest proportion of non-agricultural exports among neighboring countries at approximately 77% of total exports (Pakistan Bureau of Statistics, 2023). Afghanistan will need an educated citizenry to support a transition from climate-sensitive primary resource-based exports to technological exports.

Exports Composition - 2019
Fourth, in the absence of resources for conventional crops to grow, people will use alternative options. For instance, “some studies have linked reduced rainfall or irrigation flows in some areas with increased poppy production”. (WFP, pp. 8-9) Now, even if people decide to adapt and cultivate crops that may require less water, they may plant something deadlier for the community.

**Women and Climate Change**

Research suggests that the effects of climate change are not gender-neutral, and women and children are among the highest-risk groups. “UN figures indicate that 80% of people displaced by climate change are women and in times of extreme weather conditions such as drought, girls are vulnerable to being pulled from school to help their families make ends meet, either temporarily or permanently” (Staff, 2020). If we look from a development and humanitarian
perspective, women, and the poorest people experience the most direct and heavy effects of climate change.

Globally women, especially those in low-income countries, feel the impacts of continuous drought, lack of nutrition, and severe weather conditions most acutely. According to the One Earth article, “The world’s poorest countries are the most vulnerable with women making up the majority of the 1.5 billion people living on less than $1 per day. Worldwide, women aged 25-34 are 25% more likely than men to live in extreme poverty.” (Schueman, 2023) The research also shows that, after any natural disaster, women face higher rates of both sexual violence and health problems. In many rural and traditional households (i.e., Pashtun tribes), the women cannot visit a doctor without a male chaperone. And usually, these women must wait for days in pain for men to take them to the hospital. In the time of crisis, when men are also affected it could be worse. “Over the period 1981–2002, a sample of 141 countries found that in unequal gender societies, more women die from disaster events than men.” (Schueman, 2023)

To summarize, although climate change will affect all, it will affect women in disadvantaged communities more. There are multiple reasons such as gender-based differences in time use, limited input into policy discussions and decision-making, and lack of survival skills like swimming, running, and sheltering that account for the differences between women’s and men’s vulnerability to climate change risks (Sharmin, 2013). Thus, women should be educated and trained to be able to decide, draft and implement policies, and fight climate change alongside their male partners.
According to UNESCO's recent report on Afghanistan women's education, “Since 23 March 2022, 1.1 million secondary girls have been prevented from attending secondary school until further notice” (UNESCO, 2023). This shows a detrimental impact on young women in higher education. The social, economic, and environmental costs of this loss of human talent are incalculable. Afghanistan faces a future with far too few female teachers, doctors, nurses, entrepreneurs, and civil servants. Lacking opportunities and role models, society limits the ability of its girls and young women to imagine, create, help, to build strong communities, and be the forces for positive change and problem-solving that the nation needs.

The immediate economic cost, according to UNICEF is, “keeping girls out of secondary school costs Afghanistan 2.5 percent of its annual Gross Domestic Product (GDP)” (Mort, 2022). “If the current cohort of three million girls were able to complete their secondary education and participate in the job market, girls and women would contribute at least US$5.4 billion to Afghanistan’s economy” (Mort, 2022).

Now, that we know why the country is at risk, what is it that we can do to reduce the impact of climate change at the most primary level? The hypothesis suggests that women's education is crucial for countries to survive climate change impact. Therefore, the research question is, how Afghan women's literacy can mitigate climate change risks to ensure their household survival? The goal is to find the correlation between women's education and climate mitigation. The findings should help tackle the problem and build a resilient household followed by a strong community, society, and world at large.
CHAPTER 2

Literature Review

Climate change is a worldwide phenomenon that threatens the lives of every living thing, including human beings. There are many ways to mitigate and adapt to the rapid change in our ecosystem, including shifting to clean energy, preservation, and reforestation, avoiding excess consumption, and waste management. Less frequently mentioned is the importance of women’s and girls’ education in addressing the global challenges of climate change mitigation, adaptation, and resilience enhancement. Women's education will create a ripple effect in a community threatened by climate disasters. According to the Malala Fund report, “ensuring girls’ access to education is a sustainable and cost-effective way to improve societies’ resilience to climate change.” (Funds, 2021) The report also shows that countries with lower levels of education have suffered from a higher loss from droughts and floods compared to those with higher levels of girls’ education. We can infer that education plays a key role when it comes to preparing for and coping with climate change, in addition to the broader set of ways that education improves women’s lives. The following three impacts of women’s education on climate resilience are emphasized.

Women's Education – Climate Disaster Reduction

A 2013 study examined the correlation between girls’ education and disaster risk reduction. Findings show that if “70% of women ages 20–39 received at least a lower-secondary education, disaster-related deaths in 130 countries could reduce by 60% by 2050” (Funds, 2021). Moreover, the Notre Dame Global Adaptation Initiative (ND-GAIN) indicates that more schooling for girls
increases the country’s resilience to global climate disasters. “For each additional year of
education that girls acquire, countries’ resilience to climate disasters increases on average by
1.6–3.2 points on the ND-GAIN Index” (Funds, 2021). Muttarak and Lutz (2014) identify
education as a tool that prepares society to stand against disaster. ‘Education can directly
influence risk perception, skills and knowledge and indirectly reduce poverty, improve health
and promote access to information and resources […] educated individuals and societies are
reported to have better preparedness and response to the disasters, suffered lower negative
impacts, and can recover faster” (Lutz, 2014).

The 12 years of education for women is crucial to becoming resilient and prepared to fight global
12 years of quality education, they are more likely to have the skills to withstand and overcome
shocks resulting from extreme weather events and changing weather cycles, in turn helping their
families and societies adapt to the worst effects of climate change” (Funds, 2021). In other
words, if women have 12 years of education, they can not only help themselves during the crisis
but also prove to be an asset to society rather than a burden. Their ability to think, act, and
execute helps society to become sustainable and resilient.

Moreover, the Inter-agency Network for Education in Emergencies indicates that women's education
to address climate change is important because, “Education can reduce girls’ vulnerability to the
effects of climate change by increasing their resilience, adaptive capacity, and disaster
preparedness, with these benefits extending to girls’ families and communities and across
generations” (Emergency, 2022). Thus, women's education is a key player when it comes to climate change mitigation.

Sima Bahous, Undersecretary-General of the United Nations and Executive Director of UN Women, during the 66th session on the Status of Women, stated, “We know with certainty that climate and environmental crises and disasters are escalating. When we foster and invest in women’s resilience, we are building the defenses of the future as well as the assets of today” (Bahous, 2022). She continued. “We must close the global gender digital divide and gender gaps in education, information, and skills” (Bahous, 2022). Many researchers concluded that countries with higher levels of gender equality experience high levels of environmental well-being.

Women's Education – Better Climate Outcomes

Numerous studies indicate a strong correlation between women's education and better outcomes for the planet. In addition, during a climate crisis, gender equality will improve outcomes for families and communities. In other words, when women are educated, they not only make better decisions but also execute them more efficiently. For example, evidence from India and Nepal strongly suggests that including women in forest management groups helped better resource governance and conservation outcomes. The Global Economy & Development Working Paper claims that “When girls are better educated and included in decision-making, […] mortality and injury due to drought, floods, and other weather-related disasters could be reduced by more than half.” (Pegram, 2019)

Furthermore, environmental programs with an equal number of women and men have better environmental outcomes compared to those with limited females. “Research on forest
conservation projects in Indonesia, Peru, and Tanzania found that when gender quotas were introduced to groups, those groups conserved more trees than groups without gender quotas. In addition, the study found that payment for services was spread more equally in groups with gender quotas than those without.” (Sims, 2021) Again, women that are not educated will not be able to secure positions in most of these activities.

Women Education – Climate Leadership

Participation of women in decision-making cannot be possible without an education. “There is growing evidence that when girls learn to lead, participate and make decisions, it results in positive environmental and sustainability outcomes for the wider community.” (Funds, 2021)

Many studies suggest a direct correlation between women's education and climate change adaptation and mitigation. The UN Women Watch Fact Sheet reports that women can make substantive contributions through their knowledge and experience on issues related to the management of natural resources. “For example, women in leadership positions have made a visible difference in natural disaster responses, both in emergency rescue and evacuation efforts and in post-disaster reconstruction, as well as in the management of essential natural resources, such as freshwater” (Women, p. 7).

If Afghanistan is to meet the immediate danger posed by rapid climate change, the government must eliminate current prohibitions on women’s and girls’ education. Moreover, by opening up employment opportunities and career pathways to qualified women, the country can access the skills, expertise, and knowledge that women possess to bring the required changes. Of course, the Afghanistan government must first realize that climate change exists and that its future as a prosperous, politically stable, and culturally rich country demand that it starts addressing it. For
that, the nation needs a citizenry in which both genders are afforded opportunities for quality education.

**Instructive Examples of Women’s Involvement in Climate Resilience Initiatives**

State and civil society initiatives that engage women in climate resilience work are emerging across the world. The following examples from India, Malawi, and Bangladesh offer ideas and inspiration.

**India**

India, the world’s most populous nation, recognized a need for women-led climate actions which could help with intersectional and long-term solutions. First, it is believed that “Population growth is one of the most important factors in the climate debate, and the best way to reduce it is by non-coercive means, namely by the education of women through secondary school” (Citizen, 2023). Thus, the southern Indian, state of Kerala has been studied, where girls’ literacy rate stands at 93% compared to the entire national rate of 39%. Similarly, “families in Kerala on average have 1.7 children compared to 5.5 through other Indian provinces” (Citizen, 2023). Kerala can be used as an example for the rest of the states in the country. In addition, Kerala’s Wayanad district harbors tiger reserves and wildlife sanctuaries. The reserves are crucial to India’s biodiversity. “The district has introduced an ambitious women-led policy, the Meenangadi Carbon Neutral initiative, that aims to achieve carbon neutrality through a community-focused, bottom-up approach” (AGHA, 2022). India is using its women's force to achieve its climate goals.
Third, the Mahila Housing Trust in Ahmedabad educates and empowers the most vulnerable women to become agents of change to tackle inequality and climate change. The government in the State of Maharashtra launched the Women 4 Climate mentorship to address climate issues. Moreover, in coastal districts of Odisha in India’s east, where climate change already affecting women, a local committee consisting of both genders in equal numbers was created. The committee implements various policies to mitigate gender-based vulnerabilities to climate change. This example can be used for areas already affected by climate change.

Finally, in India’s far-northern Jammu and Kashmir region, women living in rural communities are among the most affected by the adverse impacts of climate change. A women-led NGO there, the Swaniti Initiative, has been working for state governments across India on various sectors and themes, showcasing the ways that inclusivity is key to combating the climate crisis.

Malawi

Malawi adopted the National Gender Policy in 2016. The purpose of the policy is to strengthen gender mainstreaming and women empowerment at all levels to facilitate the attainment of gender equality and equity in Malawi. The Climate Change Learning Strategy recognized the challenges African women and girls face in supporting their families in light of climate change. Malawi believes that it will not succeed in addressing climate change challenges if women do not play a key role in capacity building to improve their knowledge and skills in climate change adaptation and mitigation. The National Gender Policy advocates for alternative sources of energy, women's involvement and participation in natural
resources management, environmental degradation mitigation, and climate change management. (Resources, 2021)

In Malawi, an organization called CAMFED, *The Campaign for Female Education*, is actively working to fight against the climate crisis through women's and girls' education. According to Kamentz, “Drawdown and the Brookings Institution affirm that universal, high-quality education for all genders is key to tackling the climate crisis.” (Kamenetz, 2022) Thus, Malawi is using its full capacity to fight climate change.

Bangladesh

Bangladesh is a south-Asian country, facing a high risk of climate change. Thus, to mitigate some risks of climate change, Bangladesh has adopted a couple of measures. First, the country educates and empowers women to adapt to climate change at the community level. A group called ActionAid Bangladesh composed of women assesses climate risks and then identifies action plans. Finally, they execute the action plans in the community. “This community-based approach empowers women to express their needs and increase their resilience to climate change” (Change, n.d.). Toward that end, they helped installation of 110 improved cooking-stove, built 10 temporary dams to preserve fresh water for irrigation, and created cluster villages for landless families in flood-prone areas. This shows that women not only take responsibility for finding solutions but also for implementing them. Second, Bangladesh is prone to many floods which was claiming the lives of girls and women. Hence, as part of the education journey they are learning how to swim. Third, “Bangladesh has strong stand-alone policies in both climate change and gender equality” (UN Women,
In other words, the Bangladesh government is making efforts not only at the community or local levels but also at the national level to tackle the problem.

If we look at the examples of Bangladesh and Malawi, and India, we can conclude that the process of women empowerment and climate change adaptation and mitigation can happen through a series of activities. First, to grant women and girls access to education; second, to appoint women to positions where they can make and execute decisions of societal consequence; and third, to support their activities through laws, regulations, and policies.

These above examples leave no doubt – that women’s involvement is critical to tackling the climate disaster, yet women in Afghanistan are denied even the most basic access to education. The above countries, while well ahead of Afghanistan in terms of women’s educational access and opportunities for societal leadership, offer inspiration for what could be. Ending restrictions on education for women and girls ends a vicious cycle of vulnerability not just for the country’s female citizens, but for the entire nation.
CHAPTER 3

A Way Forward: Restore Educational Opportunity, for Afghan Women and Girls

Decades of war, natural disasters, poverty, and internal displacement have already taken a huge toll on the Afghan people. The 2021 takeover by the Taliban changed the country’s future in a different direction. Women are denied access to education and forbidden to work outside of their houses. Afghan society faces a future darkened by climate change without the full talent and potential of half of its citizens.

Education is often described as a basic human right, yet women in many regions across the world continue to face restrictions to educational access based on gender, poverty, and ethnicity. Although climate change will affect all of humanity, the impacts on women are predicted to be more severe. “UN figures indicate that 80% of people displaced by climate change are women and in times of extreme weather conditions such as drought, girls are vulnerable to being pulled from school to help their families make ends meet, either temporarily or permanently.” (Staff, 2020) Women have both a need and a right to know the predicted consequences of climate change, how it could impact their families, and what they can do to create greater household and community resilience to those impacts. Quality education for women and girls is a prerequisite to climate resilience. In addition, according to Christina Lowery, the CEO of Girl Rising, a non-profit advocating for girls’ right to quality education, “Extreme weather events destroy livelihoods and worsen poverty, and girls typically bear the brunt with spikes in child marriage, trafficking, and domestic violence.” (Taylor, 2021)
An immediate action needed for mitigating these impacts is to restore education for girls through the secondary (or higher) level. Afghanistan already has the physical infrastructure as well as a cadre of trained, experienced teachers. This existing school infrastructure can be used to help prepare women and girls for the task of rebuilding post-war Afghanistan into a more prosperous and just society. Importantly, women’s and girls’ education can contribute to a far greater set of ideas for addressing the impending challenges associated with climate change. *I would like to emphasize that the strength or weakness of the next generation lies largely with women. Yet, ironically women are denied the preparation and support needed to better fulfill society’s most critical role.* Globally women feel the impacts of drought, lack of nutrition, poverty, and less predictable weather conditions. Women will carry, nourish, and raise the children who will comprise the next generation. Would a weak mother be able to raise strong children? The answer is not so complicated. A weak mother means a weaker child regardless of their gender. Not letting women practice their basic rights poses risks to households, to society, and to the world in general.

Not all girls will complete secondary school. Even fewer are likely to continue to post-secondary or higher education. Some women will choose to end their formal education earlier and establish a family. Others will continue their schooling while simultaneously starting a family. Looking beyond the immediate need to reverse the ban on women’s and girls’ education, there are important mid to long-term actions to consider.

Even with an education and some measure of financial independence, there is no way to ensure that Afghan women will have authority over many important life decisions, especially regarding
how many kids they will have in the future. Therefore, they must be equipped with the skills and
knowledge to help their household and community thrive in a changing climate, regardless of
their educational or occupational status. There are many ways that women can help build
climate resilience for households, communities, and organizations. These can include the small,
day-to-day actions and decisions related to consumption, food choices, waste management, soil
and water conservation and management and the informal education and socialization of
children.

**Recommendations – Actions**

To build greater resilience to the worsening climate disaster in Afghanistan, it is strongly
recommended that the government implement the following near-term and longer-term actions.

**Near-term actions**

At a minimum, Afghanistan government should restore access to secondary school and
university education for girls and women. Making secondary education compulsory for all, boys
and girls alike, would be a large step forward. Additional policies that support and encourage
women’s education and equal opportunity should be adopted.

**Mid-term**

The Ministry of Education should revise the curriculum and add units of instruction regarding
climate science and the everyday actions that can help avoid the worst impacts of climate
change. Depending on the grade level and nature of the education program, curricular
adaptations could also include practical instruction on climate-smart agriculture, natural resource
management, and other applied topics.
(1) Establish Environmentally Responsible Household:

Quality education gives girls the skills and knowledge to respond to climate-related disasters and the changing resource landscapes around them. The contributions of educated girls to their communities increase a region’s overall resilience to climate shocks. In the global south, most women are housewives. In most traditional societies’ women are responsible for household management tasks including cleaning, food preparation, and childcare. Although women’s roles in the household are often dismissed as mundane and less important than those of a male “breadwinner”, many household decisions – from what food to prepare and food storage practices, to managing the waste and composting, and selecting and properly using cleaning products that are safe for the family and the environment, Therefore, the schools’ systems should not only teach how to read/write, but how to live a responsible and natural life.

Examples of sustainable living strategies from other countries can inspire ideas and adaptations useful in the context of Afghanistan. For example, Sweden began an awareness and educational campaign to encourage citizens to separate household waste into different colored waste bags. “The waste that cannot be recycled is burned in plants that transform their combustion into energy (a process known as “waste to energy” to provide electricity for 250,000 homes in the country. Recyclable elements follow the normal process that converts them into new materials.” (Mind, 2020). Japan is working toward implementing a zero-waste strategy. “The country’s government promotes and encourages the separation of waste, and citizens rigorously manage their waste through a system of classification and pick-up
schedules that they fulfill flawlessly” (Mind, 2020). The town of Kamikatsu in Japan has already increased waste recycling to 90% and aims to hit 100%. We learn from such examples that very high participation in waste management campaigns is possible, but we first need to educate and create the system. Creating opportunities for Afghanistan’s children to learn these practices while still in school can produce the environmentally conscientious and responsible generation essential for a more livable future.

(2) Transfer indigenous women’s knowledge to new generation through official learning

The second part of curriculum changes should focus on indigenous women's expertise which is fading due to several factors such as modern technology and globalization. “To further preserve biodiversity and limit its degradation, indigenous people can and should play a leading role in the global response to climate change. This should be particularly emphasized with regards to indigenous women who play a vital role as stewards of natural resources” (Women, p. 2). Studying the methods many indigenous women followed to sustain their families and communities can give us crucial information for building resilience to the threats of climate change. Women in the many low-income countries including Afghanistan, make up almost half (or more) of the agricultural labor force. They are responsible for cultivating, harvesting, storing, and importantly, for postharvest management of food and other supplies needed to survive through harsh winters. They make sure that a fair portion of the harvest is sold at the market for cash to pay for the rest of the living costs while saving the rest for daily consumption and next year’s cultivation of certain grains and vegetables. This is a critically important role in feeding the population of Afghanistan. Women’s
involvement in agriculture activities is common and central to food security in the global south.

Afghan indigenous women have vast knowledge and skills gained through their traditional roles as healers, culture shapers, and caretakers of water and land. According to the OneEarth article, “Due to their close relationship with the land, indigenous women hold unique and invaluable traditional ecological knowledge, as well as a spiritual and philosophical approach to healing the Earth and its climate.” (Schueman, 2023) This can contribute greatly to building resilience, cutting greenhouse gas emissions, and scaling environmental preservation on a global level. Their traditional knowledge provides natural solutions to nutrition, energy, waste management, and agriculture.

Moreover, let me give an example of the perfect natural nutrition cycle that people in rural Afghanistan practice. Most of the families are farm owners, and they also keep some animals like chickens, goats, cows, and sheep. They get fresh, organic food from plants and dairy and protein from animals. The leftovers are fed to animals. While human and animal wastes are used as fertilizer. There is autonomy, price control, and access to the most fresh and organic food. Such knowledge and skills need to be passed down and preserved. I believe such experiences should be transcribed and added to the school’s system. People living in urban areas, sometimes do not appreciate the hard work of farmers and herders who add the least amount of waste to the environment and live the utmost natural and organic lives. Adding these practices will help generations to know the value of people’s hard work in rural areas. Growing up I felt that people around me were not appreciating living or working in rural
areas, that is how my perception was shaped, but over time I understood that there is a blessing in living attached to nature.

(3) Enhance Women Survival Skills

Besides illiteracy, socio-cultural norms can limit women from acquiring the information and skills necessary to escape or avoid hazards. For example, Women often lack the ability to swim and climb trees to escape rising water levels. “In the wake of the 2004 tsunami, an Oxfam report found that surviving men outnumbered women by almost 3:1 in Sri Lanka, Indonesia, and India.” (Halton, 2018) The reason men survived was most probably due to the ability of swimming. We can look at the example of Bangladesh and recommend that women once at school should be taught how to survive and increase their skills such as swimming, climbing, and running. For those who are not educated about climate change and are not interested in going to school, we can invest in programs and use safe spaces, and girls’ clubs to introduce them to life skills, climate change, and clean technologies.

**Longer term actions**

(1) Appoint women in decision-making capacities.

Well-educated women should have the opportunity and encouragement to take leadership positions from the community level to the national level. Given the chance, women’s leadership will change the course of Afghanistan’s future in a positive and bright direction – a future where there is peace and prosperity, a stable and more predictable climate, and abundant, well-managed resources. Women’s voices must be represented in the design of climate and environmental programs, policies, and implementation strategies.

(2) Support Creation of a Responsible Society.
Women who are not in prominent decision-making positions should nevertheless be granted more public recognition for their contribution to the collective future. Regardless of social status or position, women’s role in sustaining their family’s health and wellbeing, conserving the natural assets of their communities, managing household spending, and raising children have great societal value. Women have an opportunity to teach their family members how to act responsibly when it comes to the environment and world resources. Women need not be trained teachers for this role. Rather, they can teach through example and by explaining in “everyday language” how environmentally responsible living is consistent with other important family, cultural and spiritual values. Practical education programs and participation in community-based women’s organizations can help them carry out this role more effectively. Such programs and groups can organize around a variety of activities, depending on what is most important to the women themselves. Examples include promoting less consumption and more reuse, producing food organically or with minimal external inputs, family nutrition and health, and various types of clean community initiatives.

The below graphic summarizes the three steps recommendations:
Main goal is to let women educate to prepare them climate change

<table>
<thead>
<tr>
<th>Near-term</th>
<th>Mid-term</th>
<th>Long-term</th>
</tr>
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<tbody>
<tr>
<td>• Restore access to secondary school and university education for girls and women • Policies that support and encourage women's education and equal opportunity should be adopted.</td>
<td>Women should be taught how to swim, run, climb during a disaster Ministry of Education should revise the curriculum and add units of instruction regarding climate science and the everyday actions that can help avoid the worst impacts of climate change, to establish environmentally responsible households, preserve indigenous women knowledge through formal education; enhance women survival skills.</td>
<td>Appoint women in decision making capacities Create a responsible society</td>
</tr>
</tbody>
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For those who are not educated about climate change and are not interested in going to school, we can invest in programs and use safe spaces, girls' clubs to introduce them to life skills, climate change and clean technologies.

Figure 3: Three steps recommendations
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Overview Of Women's Education in Afghanistan

Afghanistan Education System History

Afghanistan as a least-developed country that experienced decades of war is the only country where females are not allowed to go to school. The history of education here, like any other country had multiple phases. First, people were primarily studying at home and education was passed down through fathers to the descendants. At that time, men were entitled to get an education. Later, it became more formalized, and people were studying in local schools. Again, only men were encouraged to go to school. Females’ education was highly discouraged.

Modernization brought many changes to the education system. It announced an equal education opportunity for both men and women which took over the world over time. However, Afghanistan has not always experienced an improvement or an upward-slopping education trend. The first and main reason was the long war in the country. In addition, the ruling of certain groups that believe women's education is wrong.

Afghanistan experienced four phases of education attainments which are summarized in the sections below.

Phase 1: Before 1900 there were only two schools; one for the Military and another for Royalty. Therefore, the public could pursue education in traditional manners in Madrasas, Masjids, and homes.
Phase 2: took place between 1901-2001. As a new project, the formalization of modern education in a country where most of its population believes in traditional methods is difficult and very sensitive. Any small slip can cause bloodshed. Hence, this must happen gradually and cautiously. The first school was established in 1903 (Maktabe Habibya). Later books were published, a teacher training college was established, and the Department of Education was created. As part of modernization equal education rights should have been ensured. Therefore first girls’ high school, Masturat, was founded. Rapidly, more schools were built, and technical and vocational schools were established. However, in 1928 they introduced co-education in one of the schools in Kabul for first and second grades, which resulted in tensions between the religious leaders. This was an end to a blooming era, where Kalakani took over Kabul and closed all the schools.

Kalakani was able to rule for 9 months after which Nadir Shah took over and in 1931 women were allowed to take classes in Masturat Hospital. Girl’s high school was established which was called a nursing school for a long time to prevent any kind of social upheaval. By 1978 1 million students were studying all over Afghanistan, and universities were built in Herat, Kandahar, and Balkh. In 1991, “There were 577 primary schools with an enrollment of 628,000 pupils including 212,000 girls. Enrollments in secondary education and higher education were 182,000 and 24,000 respectively” (Samady, 2001, P. 77). In 1992, there was political unrest in the country, which adversely affected modern education. Only a few places in the north had active classes. In
1995, the Taliban took over and completely closed schools, especially for girls. Only religious studies in religious schools (madrassas) were allowed for boys, until the start of the new era 2001.

"According to UNESCO, over the past two decades, Afghanistan lost an estimated 20,000 experts and academics, while its 17 universities and institutes were left devastated by conflict" (UN News Service, 2002).

**Phase 3:** of education started in 2001 - 2021, after the Bonn conference which was a promise to a democratic government with equal rights to education for all. After the first fall of government of the Taliban in 2001, a new constitution was adopted which ensured free education until B.A. level for all. During this time, enrolment increased 10 fold, “Estimates indicate that between 2001 and 2015, total enrolments in primary education increased from around 0.9 million to 9.2 million. The proportion of girls’ enrolment too rose from zero to 39 percent. In the post-2001 era, the number of public universities and higher education institutions rose from seven to 38 and
private universities from zero to 140.” In 2001, only around 7000 students were enrolled in public universities. This number rose to 197,247 by 2019. Similarly, female enrollments in public higher education institutions rose from virtually zero in 2001 to over 54,861 by 2019.

Phase 3: Timeline

**Summary**

After 2001 and new constitution which was ensuring education for all and encouraging women education particularly, the literacy rate has grown exponentially. “Estimates indicate that between 2001 and 2015, total enrolments in primary education increased from around 0.9 million to 9.2 million. The proportion of girls’ enrolment also rose from zero to 39 percent. In the post-2001 era, the number of public universities and higher education institutions rose from seven to 38 to and Private universities from zero to 140.” In 2001, only around 7000 students were enrolled in public universities. This number rose to 197,247 by 2019. Similarly, female enrollments in public higher education institutions rose from virtually zero in 2001 to over 54,861 by 2019.

*Figure 6: Afghanistan education system between 2001 – 2021*
Phase 4: Post-August 2021

After the Taliban took over Afghanistan in August 2021, the first thing they voided was the constitution and all the conventional laws. Education was no longer considered a basic right for everyone in Afghanistan. The government established itself as the ultimate decision-maker. Although the Taliban took over the country one more time, their ideology of denying women access to education has not changed. Therefore, here is a time series of their decision regarding women's education which has gotten worse over time.

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1 Further achievements during the third phase: (1) the literacy rates for women increased from 17% to nearly 30%, and (2) in August 2021, female primary school students accounted for four out of 10.
These decisions affect not just a small number of people, but millions. According to a Princeton University report, “Today, 80% of school-aged Afghan girls and women, 2.5 million, are out of school. The order suspending university education for women, announced in December, affects more than 100,000 attending government and private institutions.” (Ahmadzai, 2023)

**Education System Overview**

Afghanistan is composed of primary, secondary, higher, vocational, and religious education, and teacher training. The former government of Afghanistan mandated nine years of compulsory education (primary education and lower secondary education). Although education was free until the B.A. level, the demand was exceeding the supply. As a result, in the last decade or more, dozens of for-fee private institutions, most of them also for-profit, have been established to absorb the young generation.
Admission and Enrollments

Students can be enrolled in primary education with no requirements and should study middle and secondary school in a sequence. Enrollment in bachelor’s degree programs in public higher education institutions depends on the student’s performance on the national university entrance examination, the Kankor Exam. The private school will also take an entrance test where acceptance is higher than in public schools. The bachelor’s degree depending on the major can last between 4-7 years, whereas the first year is general education. After completing a bachelor’s degree, if a student wanted to further pursue a master’s degree there are not many opportunities available. Some Private schools and public schools do offer a handful of programs; however, most students travel abroad for master’s and Ph. D.