

Climate-Resilient Livelihoods among Young Women Feminist Assessment of Adaptive Strategy and Economic Resilience to the Climate Crisis.

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ABSTRACT

The paper tested the notion of climate-resilient livelihoods of young women based on a feminist perspective on a literature review of the adaptive strategies and economic resilience to climate crisis based on high quality secondary evidence published after 2023. The peer-reviewed journal articles and official reports have been systematically examined to determine how the climate stress factors such as drought, random rainfall, heat and water scarcity changed the livelihood systems. The assessment showed that climate pressures reduced production, augmented strain of unpaid care and were subjected to market and institutional risks, and young women were disproportionately hit. They also reported the use of livelihood diversification, climate-smart practices, microenterprise, savings groups, and mobility, but the decision of the pathway was not preference-based but, rather, feasibility-based, which is unequal access to land, money, information, security, and power of decision-making

With the framework of feminist political ecology and feminist economics, it was revealed that the outcome of the adaptation mediated through gendered power relations within households, markets, and governance structure. It was established that adaptation was not gender neutral since similar tactics produced unequal profitability in terms of managing assets, time and income. The short-term coping strategy was found to boost food security in a multiplicity of circumstances, and it could not produce long-term economic sustainability where asset depreciation and debts persisted. Conversely, where the climate finance, advisory, and social protection aligned with the reality of young women, benefits rose, as well as income continuity and food security, but were feeble in reacting to recurrent shocks. The paper has discovered that it will require care-sensitive program design and an accountable institution to innovate adaptation to be transformed into long-term economic sustainability and not re-create vulnerability among young women in developing climate sensitive livelihoods.

Keywords- Feminist politics, Economic resilience, Feminist economics, Adaptive strategies, Feminist political ecology, Sub-Saharan Africa, Feminist politics, and Young women.

INTRODUCTION

Background and context

It is the climate shocks and gradual climate change which are narrowing livelihood opportunities resulting in drought, floods, heat stress, and rising prices that are interfering with the farming, herding, informal trade and wage work of many. The processes of drought and water stress in Sub-Saharan Africa reduce output and competition over the scarce resources that cause households to resort to risky coping strategies. Evidence reviews show that it is not often gender neutral since adaptation is determined by who is able to adapt and who suffers the loss based on the access to land, finance, information and social networks. Economic resilience in

the current study is defined as the capability to lose or recover revenue, assets, and food security after climate disruption and not through to the next season. (Bryan et al., 2024; Musa et al., 2024)

Gender repressed conditions produce an illusion of vulnerability and limited options of the young women to counteract the pressure of the climate that entails an inability to have more power over the land, credit and information. Shocks in care work and safety concerns are amplified and leave no time to work, train, and make decisions (Niemann et al., 2024; Segnon et al., 2024). Diversification, savings groups, climate-smart practices, and migration are strategies cited to be used, but apparent trade-offs emerge in instances where support is weak such as longer workdays, unstable employment, and debt (FAO, 2024; Ayub et al., 2023). Kenya and other such situations an example of this paper relates these decisions to such resilience results as food security and asset stability. It is possible to note that the science of anthropology is closely intertwined with the science of history thus giving anthropologists the opportunity to use the linguistic sciences in this particular case to study the culture and social organization of a specific group of people.

Problem statement

In Sub-Saharan Africa and Kenya is quoted that climate shocks are undermining livelihoods since drought is increasing food and income insecurity. The Kenyan evidence of adaptation decisions to food security outcomes has been discovered, yet most of the studies use the household as the unit of analysis to hide the differences that establish the opportunities and losses of young women. Syntheses of drought describe effects without often mentioning the interaction of age and gender on work entry, asset building and member bargaining power/sicle gendered cohorts. Climate pressure scores high and the means through which young women created, disrupted and recreated their livelihood pathways in African circumstances score low when the women are repeatedly faced with shocks according to the empirical record. (Niemann et al., 2024)

All the evidence shows women as actors and limited subjects, but no study has ever clarified the limits of agency and organizational determinism. Adaptive capacity is constituted by gendered access to land, finance, and information, rather than explained by pathways (which are slenderly explained), (Haque et al., 2023). Findings suggest that food security or income enhancing strategies and labor, risk, or debt enhancing strategies do exist. What constitutes economic resilience is a set of indexes of assets/coping, which brings out the results to be seen as incongruent in one case or the other. In Figure of support preferences, even when it comes to translation into services to young women, the picture is unclear (Musa et al., 2024). (Schrieke et al., 2025; Segnon et al., 2024)

The literature suggests the concept of gender-responsive adaptation, yet it gives the recommendations without applying the framework of feminists and interpreting evidence. (Huyer et al., 2024; Bryan et al., 2024) The concept of feminist political ecology puts the issue of power and governance into the forefront but it is not uniformly applied to the study of livelihood adaptation. The interest in policy reviews gives specific emphasis to the role in the climate governance, but the connection between reforms and livelihood among young women are not well carried through. Macro accounts of feminized poverty assist in determining structural drivers, although, in most instances, they are unable to depict the tension of the trade-offs in strategies. It is this gap that drives a feminist synthesis that maps stressors, responses and economy resilience results and is propelled by a distributional justice centre. (FAO, 2024; Zecca et al., 2025)

Aim

To develop climate-conscious livelihoods among young women through the lens of feminism of adaptive coping and economic hardiness in the face of climate crisis.

Objectives

To identify the main climate stressors reported to disrupt young women's livelihoods in the reviewed studies.

To document the adaptive livelihood strategies young women use and the conditions enabling or constraining uptake.

To assess the economic resilience outcomes associated with these strategies, including income stability, assets, savings, food security, and debt.

To analyze how gendered power relations (norms, care burdens, resource control, mobility, safety) shape strategy choice, trade-offs, and resilience outcomes.

Scope, scope limitations and key definition (240 words)

In this paper, the author restricted him or herself to secondary evidence that was released between 2023 and now and was selected only after he or she got the reference list to refer to this work. It focused on the livelihood-adaptation of young women to climate stress in Sub-Saharan Africa, and compared it in Kenya, where the evidence could be repeated, where possible. Only sources that covered gendered aspects of adaptation, livelihoods or resilience were included and pieces of information that covered climate effects without referring to livelihood reactions were not included. No primary data were gathered, no statistical meta-analysis was tried since the measures and contexts were not homogenous (Dev & Manalo, 2023; Huyer et al., 2024). (Musa et al., 2024; Goli et al., 2023)

In this paper, young women were characterized as the female aged between 15- 35. Climate-resilient livelihoods were described as the ability to take in, adapt, and recuperate climate shocks and maintain wellbeing. Adaptive strategies were described as changes in practices, assets, networks, or mobility taken in response to climate risk to reduce it or build coping (Bryan et al., 2024; Niemann et al., 2024). Economic resilience has been defined as the process of holding on to or recovering income, food security, savings, and livelihood resources in the wake of disturbance dynamically. Feminist analysis was intended to read through patterns in terms of power, norms and control of resources, such as unpaid care work and limited agency (Musa et al., 2024; Gebre et al., 2023).

Significance and chapter outline

This synthesis was important in the sense that typically climate programmes considered women as a collective but it was proven that young women were uniquely constrained and placed at risk in a way that influenced resilience outcomes. Using the perspectives of feminist political ecology and feminist economics, the paper used the findings to convert them into explicit power, care burdens, and resource control mechanisms (FAO, 2024). Chapter 2 included the concepts, theory, and evidence, Chapter 3 described the method of reviewing the secondary data, Chapter 4 presented their thematic findings and summary tables, and Chapter 5 summarized essential findings and actionable recommendations.

LITERATURE REVIEW

The conceptual foundations are climate-resilient livelihoods and economic resilience (2.1).

In this review, livelihoods were considered as the real means through which people would have gathered assets, capabilities, and activities in order to attain food and income when living in dynamic circumstances. Climate change had an impact on these arrangements by causing both the shocks such as droughts and floods, as well as low-onset stressors such as heat, water shortage, and reduced rangeland productivity (FAO, 2024). Lombe et al., (2024) The evidence reviewed indicated that climate pressures worked together with markets and institutions and so livelihood disruption was seldom ever climate-only and was usually met as compound risk in the long-term. This type of conceptual framing thus placed livelihoods in environment conditions and in social and economic systems which determined the case of resources and opportunities. It also coincided with the gender reviews which indicated exposure and options varied by social position and not only by the hazard type (FAO, 2024). (Niemann et al., 2024)

Climate resilient livelihoods were characterized as livelihoods that supported wellbeing when disrupted by taking in shock, adaptations and recovering without irreversible damage. Resilience was thus not a trait but the ability which varied with resources, institutions and learning (Bryan et al., 2024). The main point in this definition was adaptive capacity since it described why certain groups were able to remain stable and others

experienced recurrent losses in the same climate conditions. The evidence base further demonstrated that access to land, finance and services in an unequal way usually limited resilience since it influenced who was able to take action on climate information or adopt new practices. Consequently, the concept of resilient livelihoods has been evaluated as an outcome and experience of opportunity structures (Niemann et al., 2024). (Bryan et al., 2024)

Adaptive capacity was conceptualized using the capacity to predict, react, and restructure livelihoods with the available assets, skills and support systems. (Dev & Manalo, 2023) The review considered adaptive strategies as the specific behaviours and decisions individuals made in order to deal with climate risk including changing crops, diversifying income or joining cooperative saving schemes. Due to the fact that numerous adaptations relied on information and advisory services, the analysis took into account the availability, perceived and perceived credibility, and applicability of climate information in the local context. Preferences of adaptation support were also defined as an aspect of adaptive capacity, since the need to support was based on perceptions of risk and decision-making limitations. This framing corresponded with the evidence of the diverse uptake rate of adaptation depending on institutional reach and social position as opposed to awareness. (Niemann et al., 2024)

The economic resilience was determined as the capacity to sustain or recuperate economic performance following climate disruption particularly in terms of income stability, asset safety and availability of buffers. Buffers were conceptualized as savings, trustworthy credit, social support and productive resources which decreased the necessity to engage in destructive coping (Musa et al., 2024). Economic resilience was thus measured based on the food security, continuity of income, and livelihood assets preservation indicators, with also the situation of debt or distress sales by households. The inclusion of asset-based approaches was due to the fact that the change in assets was an indicator of the strengthening of long-term capacity or short-term survival. This strategy conformed to the food-systems arguments that empowerment and resource access were directly related to gains of resilience. (Bryan et al., 2024)

Another strength of the review was the understanding that concepts of resilience were not assessed evenly across the studies and this influenced the comparability of findings. Some researchers stressed on food security results, others on assets, income, or perceived coping, giving inconclusive messages on what was effective. The data on the issue of whether adaptation was gender neutral also made the interpretation a bit more complicated as the same strategies may produce different results due to the control of the resources and the definition of who performed the unpaid labor (Gebre et al., 2023). More generalized studies on gendered effects revealed the possibility of climate risk exacerbating poverty by creating structural inability even where the temporary coping appeared to be effective (Goli et al., 2023). The review thus considered economic resilience as multi-dimensional and perceived results as well as limitations that determined the cost and benefit of adaptation. (Baylie, 2025; Musa et al., 2024)

Feminist theoretical framing.

The review employed feminist theory because the forces that affected the process of adaptation centered on the impacts of power and inequality of access as opposed to exposure to hazards and awareness. Systematic reviews pointed to the adaptive capacity being founded on control over land, credit, and information, and, therefore, adaptive capacity decisions were not balanced, and their findings did not balance gender and age (Niemann et al., 2024). The concept of livelihoods that were negotiated in-home, in markets, and institutions as a result of the synthesis to young women in climate-affected situations, norms allocate labour, risk, and those who are beneficiaries of the intervention. (Goli et al., 2023; Huyer et al., 2024) This framing rented independence of agency visibility with recognition of structural limitations and subsequently that resilience was measured as capability as a follow on of fairness in outcome. (FAO, 2024; Niemann et al., 2024)

The meaning of adaptation was based on the feminist political ecology in which adaptation was interpreted as a political junction that impacted land, water, and services access along with risk bearing. Kenya has shown through evidence that resilient livelihoods interventions increased the options of women, reinstating control in the form of project regulations and local government. The livelihood and water insecurity findings were

helpful in this prism as drought elevated time costs and risks, and gendered roles, making the woman the administrator of the scarcity. Climate information and governance reviews were interpreted as distribution questions in that having access to space and services available in spaces influenced the beneficiaries of support. (Segnon et al., 2024; Mohammed, 2025)

As part of the care work and social reproduction, feminist economics understood the concept of adaptation as unpaid work limited time, movement and hazardous taking among young women. For women, it was found that (FAO, 2024, Huyer et al, 2024) Evidence on gender roles under climate stress showed labor shifting to water and household management, leaving less space for enterprise, training and market engagement. Summary of gender-differentiated impacts ascribed climate pressure to feminized poverty in the form of assets loss, insecure jobs, and unequal returns to work, irrespective of whether it was successful in coping or not. In this regard, economic resilience was considered an indication of income stability with its buffers, assets, exposure to debts, and power to make decisions compared with income (Mhembwe, 2025; Baylie, 2025; Niemann et al., 2024). (Musa et al., 2024; Dev & Manalo, 2023)

The intersectionality was employed to avoid the state whereby women were one of the groups since the age, livelihoods system and location created an inclination to exposure, choice and returns to adaptation. Asset-based evidence also revealed that resilience was one of the factors of the available assets in terms of livelihood and that they depended on the local conditions and on the process of recovery after a shock (Niemann et al., 2024; FAO, 2024). (Musa et al., 2024 & Dev & Manalo 2023) Pastoralism in the Horn demonstrated the mobility, drought issues and roles as gave rise to various kinds of pressure and coping among women and girls. It was discovered that norms affected the constraints in both Nigeria and South Africa, indicating that risk reduction in some countries and risk augmentation in others were observed in diversification (Zecca et al., 2025; Lombe et al., 2024). This has been illustrated in the following SWOT analysis:

As a strategy to separate agency and constraint and interpretation of trade-offs as an outcome of power, feminist political ecology was coupled with feminist economics. These norms and bargaining were appropriated as institutions of control in labor, movement and control of resources that shaped the strategies which young women might adopt. The capability input read climate information services but not equally distributed and thus, the knowledge was not equally converted into practice (Mudege et al., 2025; Niemann et al., 2024). (Segnon et al., 2024; Dev & Manalo, 2023) Kenyan evidence on support preferences and food security outcomes showed barriers (e.g. affordability, timing and trust) which affected trajectories of resilience over time. These two may affect the economy of the country indirectly since they can influence the future performance of businesses, and thus, affect such phenomena as increased investment and higher output.

These feminist lenses were the guiding code of coding, and the facts were gathered on strategies and outcomes, not to mention, the mechanisms of resource control, workload, and voice. Gender difference in the perception of climate risk was viewed as the socially constructed process because the norms and experience shaped what young women viewed as risky and safe (Huyer et al., 2024; Bryan et al., 2024). It was argued that adaptation was a success but that there were trade-offs (like working more hours or becoming debated to avoid occurrences of coping) to ensure the phenomena of coping were not construed as resilience (Haque et al., 2023; Niemann et al., 2024). This approach outlined ambivalent outcomes through their relationship with institutions and access to resources and this synthesis was the resultant outcome. However, these solutions are likely to work, as the traditional rehabilitative theory has already been accepted by a significant population of the developing countries.

Empirical synthesis (2023-date) Adapting strategies of young women

Throughout the reviewed evidence, the adjustment of young women has been brought out as a pattern of livelihood reactions, which were taken up in recurrent shocks and long-term frustrating circumstances rather than a one-time reaction. Always, articles and papers showed that the approaches were balanced on diversification, practice changes in response to climate, microenterprise, mobility, as well as collective finance, which are often combined into a single household or individual channel. However, access to land, finance, information, and supportive institutions which were not evenly distributed were also discovered in the

literature to have to rely on the viability of any strategy. This meant that the limitation of genders guided the choices of young women regardless of how agency manifested itself in day to day decisions. The first one is the moment when the success is reached by making efforts to satisfy the conditions and reach the required goal (Maybom and Funder, 2025, p. 230).

Livelihood diversification strategy was developed and it was often marked by a combination of agriculture, casual work, small scale trade and small scale services so as to spread the risks of climatic and market change. Contexture, in which the food security was among the significant effects, households practiced a number of things, and the susceptibility of young women varied depending on their control of earnings and assets. Gender norms The evidence suggested that diversification can increase female employment directly as a result of an increase in care work in stress and scarcity of water (Gebre et al., 2023; Musa et al., 2024). Also warnings about the diversification not necessarily being empowering also came in the form of reviews (Luca et al., 2024; Ayub et al., 2023): low-paying jobs and the informal sector may reduce young women to poor intense cycles of income. (Goli et al., 2023; Baylie, 2025)

Agriculture strategies were commonly referred to as change in crops, time and water management, which was a reflection of the attempts of stabilizing production by introducing rain variability and drought. Adoption of adaptation practices in Kenya was associated with food security outcomes, however, distribution of the gains was dictated by the recipient of the touch of inputs, extension, and decision space. There was a focus on women-centered researches that focused on such approaches as water-saving behavior or water scarcity coping, although some barriers are also noted (poor access to productive resources and lack of capital). Feminist political ecological evidence indicated that even good practices, despite being limited by land tenure and local relations of power, could be implemented (Moayed et al., 2023; Dev and Manalo, 2023). (Mbunda & Ndunguru, 2025; Huyer et al., 2024)

Involvement in microenterprise and in value chains were frequently introduced as means to develop resilience that involved trading, processing as well as small-scale services in order to reduce reliance on climate-sensitive production. However, it turned out that the outcome of the success of the business depended on the elements of finance, market access, time, which were predetermined by the institutions of gender and the load of care (Bryan et al., 2024). (FAO, 2024; Huyer et al., 2024) Asset-based analyses have illustrated that some people's resilience outcomes were, overall, better the more young women had a means of protecting or of accumulating productive assets, but stagnated when enterprises were undercapitalized or exposed to a repeated shocks. (Musa et al., 2024; Baylie, 2025) Work done from Kenya on "resilient livelihoods"; for example, had suggested that interventions could increase agency, while reproducing control through project rules and local gate keeping. (Maybom & Funder, 2025; Niemann et al., 2024)

Mobility and migration was also reflected as a policy and a stress response, that included seasonal movement as a form of work, residential change and transformation in respect to pastoral systems or agro-pastoral systems. Drought related dynamics led to a livelihood pressure that was pushing households on the move but gender implications were not uniform as young women were facing a threat of insecurity and restricted movement. Community research revealed that norms did affect the permissibility of women to move, the job opportunities offered to women, and earnings redistribution in case of movement (Lombe et al., 2024; FAO, 2024). Some settings were able to adapt strategically by reconfiguring livelihood and others in turn were contributing to a precarity state by being linked to informal work or volatile markets (Mudege et al., 2025; Ayub et al., 2023). (Sibiya & Simatele, 2025; Mhembwe, 2025)

The sense of resilience was developed, over and over again through collective finance and savings practices that had the effect of extending access to formal credit which was limited or risky in those areas. Where livelihood asset measures were taken, savings and access to finance were both related with recovery capacity but the evidence also revealed that women frequently had disputes over buffers at household level. Reviews in the category of empowerment offered that to strengthen the agency of women in food systems, financial inclusion, access to services, and institutional accountability, instead of an increase in training, had to improve. The Kenya preference experiment revealed that the demand of the adaptation support was heterogeneous,

although it was significant in the design of the financial and service package that the young women considered useful. (Schrieks et al., 2025; Dev & Manalo, 2023)

The problem of social protection and advisory services was brought up as the precondition that dictated the possible strategies and the riskiness thereof. The gender vulnerability indicators of climate information and advisory service showed that the access, trust and usability predetermined whether women in semi arid regions could take action on the information they got. The critical aspects of the reviews (Segnon et al., 2024; Niemann et al., 2024) included that the unplanned services designed around the gendered limitations, would contribute to the existing inequities by supporting the already disadvantaged ones. The policy-based literature on climate governance policy argued that participation and representation of climate governance were essential towards sustainable changes, as programme regulations and resource representation affected livelihood outcomes. Overall strategies might have been observed, however, support structures tended to make them resilience or just coping (Mohammed, 2025; Maybom and Funder, 2025) (FAO, 2024; Bryan et al., 2024)

Outcomes Summary

Outcome Shifts

The outcomes that had been reported in the publications published since 2023 indicated that they were primarily food security, income stability, and changes in livelihood assets over time. In the certain contexts, Kenyan studies associated the uptake of adaptation with the improved food security but it has been found that benefits were dependent on access to inputs, extension, and decision space (Gebre et al., 2023). Asset-oriented labor demonstrated resilience gains better in starting the accumulation of productive assets and savings buffer in young women who were able to protect them or accumulate them (Gebre et al., 2023; Niemann et al., 2024). Conversely, muscular shocks forced some households to distress sales and borrowing destabilizing the long run. Outcomes of wellbeing and voice were reported, but were less regularly captured compared to economic ones (FAO, 2024; Lombe et al., 2024). (Bryan et al., 2024; Mohammed, 2025)

Measurement Limits

In reviews, there were mixed results in general, which were attributed to non-gender-neutral constraints that influenced uptake and returns. Inequal access to land, finance, and climate information was such that some of the strategies would increase the effort costs with no commensurate returns (Dev & Manalo, 2023; Goli et al., 2023). (Niemann et al., 2024; Segnon et al., 2024) Sometimes income risk was cushioned by diversification and enterprise, but increased time poverty when care increased due to water insecurity. (Luca et al., 2024; Huyer et al., 2024) The various measures of resilience applied in studies include reports of coping and asset indices, which make the measures less comparable across contexts. Empowerment and decision power were mentioned, yet measurement was typically inconsistent, which confined the study to agency gains. (Bryan et al., 2024; Mohammed, 2025)

Gaps Contradictions

Core Gaps

Gendered restraints were also reported in terms of evidence reviews, but not many studies separated the young women as an analytic category, so age-specific processes were not specified. A number of articles emphasized women agency in going about interventions, but also revealed how project governance and local authority could take back the reins, which created a clash between the empowerment discourses and limited choice. Similar strategies were reported to yield various results (assuming context and institutions mediated returns) but these mediators were not always modelled (Maybom and Funder, 2025; Mohammed, 2025). Trade-offs (increased workload, safety issues, and debt) were recognized and were hardly followed up with benefits, and coping thus was often interpreted as resilience. (FAO, 2024; Luca et al., 2024; Mhembwe, 2025)

Framework Path

Climate stressors Climate stressors have gendered constraints / gendered enablers Adaptive strategies Economic resilience outcomes (income stability, assets, food security, debt) with power relations, norms, and care burdens affecting each relationship. (FAO, 2024)

METHODOLOGY

Research Design

The paper has assumed a structured literature review study design and used secondary sources only that were published starting in 2023. It investigated climate-resilient livelihoods in young women by feminist prism where adaptation was viewed as both impediment and empowerment. The thematic synthesis methodology was selected as the evidence was a mix of reviews, empirical research, and policy analysis, which restricts the pooling of statistics. The design allowed comparing stressors, strategies, and economic indicators of resilience and maintained the context and power relations of the central focus (FAO, 2024; Musa et al., 2024). Apart from the beneficial impact of alcoholism on the body, there are other aspects that may lead to depression and anxiety in the patient.

Sources Strategy

The key scholarly databases were searched, and searches were supported by the selective retrieval of pertinent reports. Search strings were a combination of terms used to find articles about climate change, adaptation, livelihoods, resilience, young women, gender, feminist analysis, and Kenya or the Sub-Saharan Africa adjusted based on each platform. To date (Haque et al., 2023; Niemann et al., 2024) Limits were applied to keep up with the time frame and make current evidence a priority. In the studies by Dev and Manalo (2023) and Huyer et al. (2024), snowballing was used by reviewing reference lists of the core reviews and key articles to find other qualifying studies. (Bryan et al., 2024; Mbunda & Ndunguru, 2025)

Eligibility Screening

The studies were to include those that dealt with climate stressors and livelihood adjustment with a gender aspect and with applicability to the economic resilience of young women. The articles and reports included in the reference list were peer reviewed and included in the study sample in case they provided empirical evidence or systematic synthesis. Items were then filtered out based on the following criteria: they had to discuss the effects of climate without mentioning strategies and had to mention gender in a brief way (Dev & Manalo, 2023; FAO, 2024). (Huyer et al., 2024; Goli et al., 2023) The screening was transferred to the full-text review, and the borderline cases were determined by relevance and clarity of the outcomes. (Musa et al., 2024; Bryan et al., 2024)

Extraction Quality

Data on setting, population focus, climate stressors, livelihood domain, adaptive strategies, and resilience outcomes were extracted on each of the included studies. Other areas of capture of enabling conditions and constraints included land, finance, information, and participation by the governance (Gebre et al., 2023; Musa et al., 2024). Quality checks were done through appraisal questions about method clarity, transparency of evidence, and integrity between claims and findings (Dev and Manalo, 2023; Segnon et al., 2024). Only the studies that provided new information on the strategies of young women or trade-offs and who satisfied the requirements of reporting were retained as borderline studies (Niemann et al., 2024; Haque et al., 2023). (FAO, 2024; Maybom & Funder, 2025)

Thematic Synthesis

Coded line-by-line, extracted material was used to determine recurrent stressors, coping strategies and economic resilience indicators. The codes were organized into categories and further narrowed down into themes that were used to explain contextual patterns (Haque et al., 2023; Musa et al., 2024). Each of the stages was analyzed through a feminist interpretation lens in order to track the influence of power, norms, care

burdens, and control over resources on feasibility and outcomes. The interpretation placed an accent on trade-offs, separating coping and resilience and pointing out the disproportionate benefits in households and communities in the long term (Huyer et al., 2024; Mbunda and Ndunguru, 2025). (FAO, 2024; Goli et al., 2023)

Data Analysis, Findings and Interpretation

Profile of included studies

The studies reviewed were mostly based in Sub-Saharan Africa, East and South Africa with Kenya and other neighboring countries having a sizeable representation. Most emphasized rural and semi-arid environments where the livelihoods were based on rain-fed agriculture, agro-pastoralism, pastoralism, and informal enterprise. Among the common factors and effects of climate stress, (Gebre et al., 2023; Lombe et al., 2024) were drought, fluctuating rainfall, water insecurity and heat stress. Methodologies went as far as systematic (Niemann et al., 2024).

Author(s) & Year	Country / Setting	Population Focus	Livelihood Sector	Key Climate Stressor(s)	Adaptive Strategy Examined	Economic Resilience Outcomes
Dev & Manalo (2023)	Global review	Women, youth	Mixed livelihoods	Drought, variability	Capacity-building, diversification	Adaptive capacity, stability
Haque et al. (2023)	Global agriculture	Women farmers	Crop farming	Rainfall variability	Farm-level adjustments	Perceived resilience
Goli et al. (2023)	Global review	Women	Mixed	Multiple shocks	Gendered adaptation choices	Uneven benefits
Moayed et al. (2023)	Rural settings	Rural women	Agriculture, water	Water scarcity	Water-saving practices	Coping capacity
Ayub et al. (2023)	Uganda	Women, households	Agro-pastoralism	Drought	Role reallocation	Labor burden shifts
Gebre et al. (2023)	Kenya	Smallholders	Agriculture	Climate variability	Farm adaptations	Food security
FAO (2024)	Global SSA	Women, youth	Mixed	Multiple shocks	Social protection, diversification	Poverty, buffers
Bryan et al. (2024)	Global food systems	Women	Agri-food	Climate shocks	Empowerment strategies	Income, assets
Huyer et al. (2024)	Global agriculture	Women	Agriculture	Climate stress	Gender-responsive adaptation	Adaptive outcomes
Niemann et al. (2024)	Global review	Women	Mixed	Multiple	Policy and practice	Resilience patterns

Segnon et al. (2024)	Mali (semi-arid)	Women	Farming	Drought	Climate information use	Vulnerability reduction
Musa et al. (2024)	Malawi	Women	Mixed	Climate shocks	Asset-based strategies	Asset resilience
Mukete et al. (2024)	Zambia	Rural women	Farming	Climate variability	Livelihood diversification	Food security
Luca et al. (2024)	West Africa	Women households	Water-linked	Water insecurity	Coping strategies	Workload impacts
Lombe et al. (2024)	Sub-Saharan Africa	Communities	Mixed	Drought	Adaptive responses	Livelihood stress
Schrieke et al. (2025)	Kenya	Farmers	Agriculture	Drought	Support preferences	Risk reduction
Maybom & Funder (2025)	Kenya	Women	Mixed	Environmental stress	Project-based adaptation	Agency, control
Sibiya & Simatele (2025)	South Africa	Women	Rural livelihoods	Climate change	Local adaptation	Income stability
Mohammed (2025)	Global agrifood	Women	Agri-food systems	Climate stress	Governance reforms	Participation
Mudege et al. (2025)	Nigeria	Women	Mixed	Climate shocks	Norm navigation	Economic resilience
Mbunda & Ndunguru (2025)	Tanzania	Women farmers	Maize farming	Climate variability	Farm adaptation	Yield, income
Kitole et al. (2025)	Africa	Women	Agriculture	Climate change	Adaptation practices	Livelihood security
Mhembwe (2025)	Zimbabwe	Rural women	Mixed	Climate stress	Coping mechanisms	Poverty feminization
Baylie (2025)	Global	Smallholders	Agriculture	Climate change	Differential adaptation	Asset gaps
Zecca et al. (2025)	Horn of Africa	Pastoral women	Pastoralism	Drought	Mobility strategies	Food security

Findings Theme 1: Climate stressors and livelihood pressures

Climate stressors identified in the reviewed papers always reduced the livelihood access to the young women and amplified the exposure to economic and social vulnerability. (FAO, 2024) Drought, rainfall variability, and water scarcity decreased agricultural productivity and food access and stabilized households towards uncertain returns coping strategies. In semi-arid settings, water stress had the direct impact of augmenting time

constraints in gathering and domestic administration, which is a direct constraint to the engagement of young women in income-producing endeavors (Lombe et al., 2024; Gebre et al., 2023). Heat stress and environmental degradation also limited pastoral and agro-pastoral livelihoods, which increased the chances of losing assets and livelihoods. (Zecca et al., 2025; Niemann et al., 2024)

Markets and institutions also interacted with climate shocks and increased vulnerability as opposed to acting independently. The impacts of environmental stressors were compounded by food price volatility, poor levels of extension services, and insufficiency of climate information, especially in young female populations whose resources are limited in access of support systems. Investigations revealed that a repeated shock lowered the viability of long-term planning, further promoting short-term coping that enhanced exposure to debt and unstable employment (Segnon et al., 2024; Huyer et al., 2024). Consequently, the outcome of past climate stressors was not only limited to the livelihood but also to the extent of the strategies that the young women deemed as realistic or safe to adopt. (Dev & Manalo, 2023; Goli et al., 2023)

Effects of climate stressors and livelihood.

Context	Key Stressor	Livelihood Impact
Semi-arid rural	Drought	Crop failure, food insecurity
Agro-pastoral	Rainfall variability	Livestock loss, income instability
Water-scarce	Water insecurity	Time poverty, reduced enterprise
Pastoral	Heat and drought	Asset erosion, mobility pressure

Findings Theme 2: Adaptation strategies and livelihood pathways

The results indicated that the young women employed several adaptation mechanisms at the same time instead of taking one path. Livelihood diversification was the most widespread response, which consisted of farming, casual labor, petty trade and services to diversify the risk amongst activities. Climate-sensitive farming, such as crop modification and water-efficient methods, were found where land and area of extension was available (Mukete et al., 2024; Dev & Manalo, 2023). Microenterprise and value-addition became the alternative ways of production, but the returns were very different across the board (Haque et al., 2023; Moayedi et al., 2023). (Bryan et al., 2024; Baylie, 2025)

The decision making was influenced by ability to make choices and not preference as it portrayed limitations in terms of ownership of lands, money, time, and security. As a buffer to the lack of formal credit, savings groups and informal finance served as the places where access to funds, despite control over them, was frequently challenged (Niemann et al., 2024). The practice of mobility and migration was strategically applied in certain situations, but the norms and safety hazards restricted the participation of young women or minimized advantageous effects. Advisory services and social protection affected the strategies that could be maintained and contributed to the institutional influence on the choice of pathways. (Segnon et al., 2024; Mohammed, 2025)

Table 4.3 Adaptation strategy typology

Strategy	Enabling Conditions	Trade-offs
Diversification	Market access	Time poverty
Climate-smart farming	Land, extension	Input costs
Microenterprise	Capital, time	Income volatility

Savings groups	Social networks	Limited scale
Migration	Mobility rights	Safety risks

Theme 4: Revenues Findings

The results of economic resilience were significantly different in terms of settings and approaches and yielded improvement, stagnation, or deterioration. (Gebre et al., 2023) Food security increased in a few environments in which adaptation practices brought stability in production or income, but gains were skewed and unstable to frequent shocks. Asset accumulation and savings have the effect of increasing resilience when strategies produced surplus, although most households reported an erosion in their assets as a result of distress sales or an increase in debt (FAO, 2024; Niemann et al., 2024). Income stability (Musa et al., 2024; Mhembwe, 2025) was usually short-lived, and it was based on low-income-earning or informal work. (Baylie, 2025; Goli et al., 2023).

The difference in results was attributed to disparity in access of resources, institutional support, and gendered control of benefits. Where there was no power among women to make decisions, the adaptation gains were not translated into resilience in the long run (Dev & Manalo, 2023). Measurement inconsistency between studies also added to the confusion on effectiveness. (Niemann et al., 2024)

Table 4.4: Results of economic resilience.

Indicator	Direction	Notes
Food security	Mixed	Context dependent
Assets	Mixed/Worsened	Distress sales common
Income	Mixed	Informal dominance
Debt	Worsened	Coping finance
Decision power	Limited change	Rarely measured

Feminist reading: Authority, restrictions, and ability

Power relations mediating agency and constraint were identified to be influenced by a feminist interpretation showing that the outcomes of adaptation were mediated by power. The impact of climate stress on care burdens was a shorter amount of time and energy to engage in paid labor and education (Huyer et al., 2024). The gender restrictions did not allow access to land, finances, and movement, and reduced the viable strategies in situations where knowledge was available (Luca et al., 2024; Ayub et al., 2023). The existence of safety risks also limited the migration and involvement of young females in enterprise (Niemann et al., 2024; Mbunda and Ndunguru, 2025). (FAO, 2024; Mudege et al., 2025)

Agency was evident in day to day navigation of projects and markets but it was limited through institutions and government structures. (Maybom & Funder, 2025) Involvement in the decision making spaces was not very high, undermining the process of adaptation into sustained resilience. Feminist political ecology and feminist economics collectively identified the reason why different contexts produced unequal results despite the presence of similar strategies. (Dev & Manalo, 2023; Huyer et al., 2024)

Table 4.5: Gendered mechanisms

Constraint/Enabler	Mechanism	Effect on Outcomes
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Care burden	Time loss	Lower income gains
Land access	Resource control	Strategy feasibility
Finance	Capital limits	Scale of enterprise
Mobility	Safety norms	Restricted options
Voice	Governance access	Uneven benefits

Chapter 5: Conclusions, Key Findings, and Recommendations

Conclusion of the key findings

The result of the synthesis was the establishment that climate stressors such as drought, variability of rainfall and water scarcity had a consistent predisposition to decrease livelihood choice of young women and predispose them to economic risks. Contra (FAO, 2024; Lombe et al., 2024) These market and institutional stressors were co-existing in an interactive sense whereby they generated the compound pressures and not the separate pressures. Therefore, young women were more likely to consider the short-term coping than the long-term one, placing them at a risk of debt and asset loss (Niemann et al., 2024; Gebre et al., 2023). (Musa et al., 2024; Mhembwe, 2025)

The second outcome was that there were also adaptation strategies, which were not equally viable. The most common ones were diversification, climate-based activities, microenterprise, and savings groups, but they were subject to land, financial, time, and safety factors. Where such a situation was not in place, the workload was raised without equal returns on the strategies (Haque et al., 2023; Moayedil et al., 2023). (Goli et al., 2023; Luca et al., 2024)

Third, the findings of economic resilience differed in contexts. Among the settings, which boosted food security and assets and income stability, were frail since it remained prone to repeated shocks (Gebre et al., 2023). According to (FAO, 2024; Baylie, 2025), gains were frequently ruined by asset erosion and rising debt. (Musa et al., 2024; Mhembwe, 2025)

Fourth, in the feminist analysis, the power relations were noted to have more than just a strategy choice influence. Care burdens and norms impeded agency and returns as well as the power to make decisions (Huyer et al., 2024). Ayub et al., 2023 Mbunda, Mbunda & Ndunguru, Ndunguru 2025 If adaptation is translated in resilience is governed and designed in service. (Segnon et al., 2024; Mohammed, 2025)

CONCLUSIONS

Overall, the synthesis showed that climate-resilient livelihoods among young women are not defined by the manifestations of adaptation strategies alone, but the conditions of their implementation are what did. The climate stressors always re-organized risk conditions, yet the consequences of resilience depended on the access to assets, services and power to generate decisions (Niemann et al., 2024). It was proved that gender dimension of adaptation was not much gender neutral in such a way that identical strategies could produce various returns because of structural constraints (FAO, 2024; Dev & Manalo, 2023). (Goli et al., 2023; Huyer et al., 2024)

The other dimension that has been determined during the review was the multidimensional and vulnerable economic resilience. There was no long term stability because of increase in income without asset recourses and saving cushions (Musa et al., 2024). The short-term coping was often circumscribed with the resilience in the situations when the trade-offs such as the time poverty, the debt, and the risks in safety were not considered. (FAO, 2024; Luca et al., 2024)

The article has shown that power, care work and institutional design explained variation in outcomes best compared to awareness or motivation using feminist political ecology and feminist economics. Findings consequently gave rise to the conclusion that, in order to make young women climate-resilient, both gendered limitations and technical adjustment would have to be addressed (Mbunda & Ndunguru, 2025; Maybom and Funder, 2025). The absence of such alignment means that risk taking adaptation will exert risks of reproduction, as opposed to reduction, on vulnerability (Bryan et al., 2024; Mohammed, 2025). (Niemann et al., 2024; Mhembwe, 2025)

RECOMMENDATIONS

The priority of the policy interventions should be gender responsive climate finance, social protection and access to land and credit. Financial instruments will have to be designed in a manner that they reach young women at the extreme end by the obstacles of collateral and mobility. Social protection as relation between climatic shocks and unpaid care burdens, cushion pathways do not turn on their heads. In order to come up with long lasting returns, land and credit reforms play a crucial role in supporting adaptation strategies. Therefore, the authors indicate that it is crucial to devote increased attention to the research about the illness to be able to effectively deal with the problem, especially in older people (Mbunda and Ndunguru, 2025).

The program level practice should not just end in training but address the issue of feasibility and risk. The mitigation of time poverty should be introduced into livelihood programs because they should include protection, adaptable schedules, and childcare considerations (Huyer et al., 2024). The components of asset-building aimed at preventing the periods of debts are to include enterprise and diversification programs (Luca et al., 2024). Climate information services should be accessible, relevant and believable to young women. (Musa et al., 2024; Mhembwe, 2025) (Segnon et al., 2024; Schrieke et al., 2025)

The transformation in the system should improve the information, accountability, and territorial framework. The need is disaggregated information in terms of age and gender to keep track of the beneficiaries of adaptation (Niemann et al., 2024). Participatory governance can increase a more appropriate alignment of the policy goal and realities. (FAO, 2024; Bryan et al., 2024) They require large local institutions to transform the resources in equitable results of resilience (Mohammed, 2025; Maybom and Funder, 2025). (Huyer et al., 2024; Mbunda & Ndunguru, 2025)

Limitations and future research

Only secondary data was utilized in this research and this minimized the capacity to cause and compare across settings. This could be because of the publication bias of successful interventions that could have caused the bias to underestimate failures and risks (Niemann et al., 2024). There were variations in the measures of empowerment and resilience, which restricted synthesis. The future research must be prioritized as longitudinal, with the focus on the resilience measurement as a separate variable, and the focus on the example of young women as a particular segment of the population (Musa et al., 2024). (Bryan et al., 2024; Mudege et al., 2025)

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