Gender Assessment

FP310: Improving Climate Resilience in the Steppe and Dry Forest Areas of the Algerian Green Dam (ICR-AGD)

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Acronyms and Abbreviations

Abbreviation	Definition
AGD	Algerian Green Dam / Algerian Green Dam Steppe Agro ecological Domain
ANADE	National Agency for Support to Employment Development
ANGEM	National Microcredit Management Agency
ANCC	National Climate Change Agency
APC	Communal Popular Assembly
APW	Popular Assembly of Wilaya
ASAL	Algerian Space Agency
BADR	Bank for Agriculture and Rural Development
BNEDER	National Bureau of Rural Development Studies
CNFF	National Council for Family and Women
CRSTRA	Research Centre on Arid Regions
CWW	Climate Wise Women (network)
DGF	General Directorate of Forests
DSA	Departmental Agricultural Services
FAO	Food and Agriculture Organization of the United Nations
GAP	Gender Action Plan
GCF	Green Climate Fund
GHG	Greenhouse Gases
GIS	Geographic Information System
HCDS	High Commission for Steppe Development
INRF	National Institute for Forestry Research
INRAA	National Institute for Agronomic Research of Algeria
MADRPP	Ministry of Agriculture,Rural Development and Fisheries
MSNFCF	Ministry of National Solidarity, Family and the Status of Women
M&E	Monitoring and Evaluation
NDC	Nationally Determined Contribution
NWFP	Non-Timber Forest Products
NWFP	Non-Wood Forest Products
ONM	National Meteorological Office
PFG	Gender Focal Points
PMU	Project Management Unit
SDG	Sustainable Development Goal
ToC	Theory of Change

PART A NATIONAL GENDER ASSESSMENT

1. National Context and Gender Framework

1.1 Overview of the target region

The Algerian Green Dam (AGD) constitutes one of the most ecologically and socio economically significant landscapes in North Africa. Stretching across Algeria's vast steppe and dryland interior, it forms a protective belt between the fertile “Tell” region to the north and the Saharan desert to the south a transition zone of exceptional ecological fragility and strategic importance for national food security, biodiversity conservation, and climate regulation.

The six target wilayas of this project; El Bayadh, Naâma, Djelfa, M'sila, Tébessa, and Khenchela collectively span 175,478 km², representing approximately 7.4% of Algeria's total land area and 11.2% of its national population (population of the 6 wilayas is 4.5 million). They encompass a diverse mosaic of agro ecological systems: high steppe plateaux dominated by alfa and esparto grass communities, degraded rangelands under intense pastoral pressure, dryland cereal cultivation zones, mountain forest areas in the Aurès and Atlas ranges, and pre-Saharan transition zones where sedentary agriculture gives way to mobile pastoralism.

Demographic Profile and Growth Dynamics:
The AGD zone supports a total population of 4,998,825 people as of 2020, up from 3,572,338 in 2008 an increase of approximately 40% over twelve years, driven by a mean annual growth rate of 3.3%. This demographic expansion is, however, profoundly uneven across the zone. The western wilayas of Djelfa and Naâma have recorded the highest growth rates 4.7% and 4.5% annually respectively reflecting both natural populations increase and the concentration of pastoral and agricultural livelihoods that attract internal migration from surrounding areas. By contrast, Tébessa and Khenchela in the east show more moderate growth rates of 1.9% and 2.4% annually, consistent with more stable agro pastoral economies and stronger historical urban anchoring.

Population density across the AGD remains extremely low, particularly in the western wilayas: Naâma records just 10 inhabitants per km² and El Bayadh only 5 inhabitants per km² among the lowest population densities of any inhabited wilaya in Algeria. This geographic dispersion has profound implications for service delivery, institutional reach, and social infrastructure. Health centers, agricultural extension offices, financial service points, and administrative services are concentrated in wilaya and daïra capitals, leaving populations in remote pastoral communes particularly women at significant distances from the support systems nominally available to them.

Gender and Age Structure:
Women comprise 49.2% of the AGD population approximately 2.46 million women distributed unevenly across a landscape where settlement patterns range from dense peri urban communes around wilaya capitals to isolated agro pastoral douars with populations of only a few hundred. The gender ratio is broadly balanced at aggregate level, but masks significant intra wilaya variation: remote pastoral communes tend toward higher male out migration for seasonal labor, leaving women as the de facto household managers and primary resource stewards for extended periods.

The AGD population is notably young: 32.7% of residents are aged 5 19 years and 11.5% are under five years of age a demographic structure reflecting high fertility rates and limited demographic transition in rural areas. The average household size of 6.6 persons is significantly above the national urban average, placing substantial domestic management, childcare, and caregiving responsibilities on women. In the AGD context, where infrastructure deficits mean that water collection, fuelwood gathering, food processing, and household energy management remain largely manual and time intensive activities, this household size translates directly into heavy and largely uncompensated

labour burdens for women burdens that climate change is progressively intensifying as water sources become scarcer and vegetation cover declines.

Livelihoods and Economic Structure
The AGD economy is structured around three interconnected livelihood systems that define the productive landscape across all six wilayas. Agro pastoralism combining cereal cultivation with sheep, goat, and cattle raising constitutes the dominant livelihood system, practiced across the steppe plateaux and transition zones. Sedentary dryland agriculture including olive groves, fruit orchards, and market gardening under irrigation is concentrated in the eastern wilayas of Tébessa and Khenchela, where more favorable topography and water availability support higher value crop production. Forest and NWFP based livelihoods including esparto grass harvesting, medicinal and aromatic plant collection, and cork oak production provide critical supplementary income across the wooded zones of Khenchela, Tébessa, and the Atlas piedmont areas of Djelfa and M'sila.

These livelihood systems are deeply gendered in their structure. Men predominate in formal, land based agricultural activities cereal cultivation, olive grove management, commercial livestock trading while women's productive engagement is concentrated in the less formally recognized but economically vital domains of small ruminant and poultry management, NWFP collection and processing, domestic food transformation, and artisanal production. This gendered division of labor, combined with women's very low formal land tenure and financial services access, defines the structural gender inequality context within which the project intervenes.

Geographic Isolation and Institutional Access
A defining characteristic of the AGD that cuts across all six wilayas that has direct and critical implications for gender equity is the geographic isolation of a significant proportion of the rural population. The combination of extremely low population density, underdeveloped rural road networks, and the concentration of institutional services in urban centers creates a structural access deficit that is experienced most acutely by women. In Naâma and El Bayadh, where pastoral communities may be located dozens of kilometers from the nearest paved road, women's constrained mobility shaped by both physical infrastructure deficits and socio-cultural norms governing women's independent movement means that agricultural extension services, microcredit facilities, health services, and administrative support are effectively inaccessible without targeted community level delivery mechanisms. This geographic reality is a foundational design constraint for the project's gender strategy and directly informs the rationale for the CWW network (GAP 1.2.7) as a community embedded service relay mechanism capable of reaching women where institutional services cannot.

1.2 Climate Stress and its Gendered Dimensions

Against the demographic and geographic backdrop described above, the AGD's six target wilayas are experiencing accelerating climate deterioration that is fundamentally reshaping the productive landscape upon which rural livelihoods depend. Temperatures in El Bayadh have risen by up to +2.53°C, with projections indicating a further increase of +3.77°C by 2061–2080. Rainfall has declined by 20.5% in El Bayadh and 19% in M'sila, with an extended dry season of up to two additional months compared to historical baselines. Cereal yields are projected to fall 6–14% by 2030, water resources to decline by 30–40%, and key vegetation communities including esparto grass and alfa are retreating under combined pressure from drought, overgrazing, and progressive land degradation. These are not distant projections: they are observable, documented changes already eroding the ecological foundations of the AGD economy and the livelihoods of nearly five million people.

Differentiated Vulnerability: Why Climate Change is a Gender Issue in the AGD
These climate impacts, however, are not experienced equally across the population. They interact with pre-existing structures of gender inequality in land tenure, financial access, information, mobility,

and governance to produce differentiated vulnerabilities that fall disproportionately on women. This differentiation is particularly acute in the AGD context for structural reasons that are specific to this landscape and its population.

The region's extremely low population density as low as 5 inhabitants per km² in El Bayadh and 10 inhabitants per km² in Naâma means that women in isolated agro-pastoral households face climate stress with minimal institutional support, distant service delivery, and limited social infrastructure. When a water source dries up, a rangeland degrades, or a harvest fails, there is no nearby extension office, no accessible microcredit facility, and no community support network within practical reach. Women absorb these shocks directly, through increased labor, reduced consumption, and asset depletion, with little access to the compensatory mechanisms' insurance, credit, technical advice, emergency support that could buffer the impact.

The region's young demographic profile with 32.7% of residents aged 5 –19 and an average household size of 6.6 persons concentrate heavy domestic and caregiving responsibilities on women. In a context where water collection, fuelwood gathering, food processing, and household energy management remain largely manual and time-intensive, the additional labor demands generated by climate stress longer walks to water points, scarcer fuelwood requiring extended collection times, more frequent crop failures requiring compensatory food preparation adjustments fall overwhelmingly on women and girls. This time burden directly constrains women's capacity to participate in training, cooperative activities, governance structures, or income-generating work creating a feedback loop in which climate stress deepens poverty, which deepens gender inequality, which reduces adaptive capacity, which increases vulnerability to further climate stress.

Women as Primary Resource Managers:
A defining and paradoxical feature of the AGD's gender-climate nexus is that women are simultaneously the most climate-exposed resource managers and the least institutionally recognized actors in the landscape. Women are:

- The primary collectors of water, responsible for household water security in a context where water resources are projected to decline by 30–40% and where only 34% of women-managed farms have any irrigated area.
- The primary fuelwood gatherers, directly exposed to the progressive retreat of forest cover and the increasing distances required to collect sufficient biomass for household cooking and heating needs.
- The primary managers of small ruminant herds constituting nearly 30% of goat breeders overall and up to 60% in specific pastoral zones in a sector directly threatened by rangeland degradation, reduced fodder availability, and increasing heat stress on livestock.
- The primary custodians of subsistence food production, managing kitchen gardens, small poultry flocks, and agri-food transformation activities that constitute the nutritional safety net for households when market income is disrupted by climate shocks.
- The principal stewards of NWFP-based livelihoods esparto harvesting, medicinal plant collection, aromatic herb processing in sub-sectors whose biological resource base is being directly degraded by the climate-driven retreat of key vegetation communities.

Yet despite this centrality in the AGD's resource management system, women remain structurally absent from the governance bodies water committees, pastoral management associations, forest cooperatives, communal assemblies that make the collective decisions shaping how these resources are managed and how adaptation investments are allocated. Their knowledge is excluded from technical planning processes. Their labor is uncounted in agricultural statistics. Their losses are invisible in damage assessments. And their adaptive strategies including the spontaneous adoption of social media sales channels, the maintenance of traditional water harvesting structures, and the conservation of indigenous livestock breeds go unrecognized and unsupported by formal institutions.

Climate Change as a Multiplier of Existing Inequality

The critical analytical insight that underlies this entire gender assessment is that climate change does not create gender inequality in the AGD it multiplies and accelerates existing inequality. The structural gaps documented throughout this assessment women's 2.9% share of farm management, their 2.5–3.4% share of agricultural credit, their 80% exclusion from extension services, their absence from water and rangeland governance predate climate change. But climate change transforms these gaps from conditions of chronic disadvantage into conditions of acute and escalating vulnerability. Each degree of temperature increase, each reduction in rainfall, each season of rangeland degradation narrows the already-thin margin within which AGD women manage their households, their herds, and their livelihoods.

This dynamic has a direct and important implication for project design: addressing gender inequality is not merely a social equity objective alongside the climate adaptation objective it is a precondition for achieving the climate adaptation objective. A rangeland rehabilitation program that excludes women goat farmers from governance and technical training will fail to reach most small ruminant managers in the target zone. A water infrastructure investment that sites boreholes without women's input will miss the locations women use. A value chain development program that does not address women's exclusion from cooperative membership will leave the primary NWFP collectors outside the economic benefit structure. Gender mainstreaming, in the AGD context, is therefore an instrument of technical effectiveness as much as it is a commitment to equity and it is on this dual foundation that the Gender Action Plan presented in Part B of this document is constructed.

The project's response to this gender-climate nexus operates across three integrated levels. At the governance level, it institutionalizes women's voice in climate decision-making through the binding 30% representation mandate in all Wilaya Climate Adaptation Committees and the National AGD Advisory Committee (GAP-1.1.4). At the resource management level, it integrates women as primary beneficiaries and active technical participants in rangeland rehabilitation, reforestation, water infrastructure, and NWFP value chain development across Component 2. At the livelihood and economic resilience level, it addresses the financial, informational, and market access barriers that prevent women from investing in climate-adaptive technologies and practices through the integrated package of Component 3 interventions. Underpinning all three levels is the CWW network (GAP-1.2.7) thirteen community-embedded Climate Wise Women agents deployed across the Green Dam wilayas which serves as the primary mechanism for translating institutional commitments into community-level reach, ensuring that the women most exposed to climate stress are also the women most effectively reached by the project's adaptive support.

1.3 Gender Responsive Policy and Planning Framework

1.3.1 Constitutional and Legislative Framework

Algeria's constitutional and legal framework formally recognizes gender equality providing an overarching foundation for gender responsiveness programming. Key legal instruments include:

- Organic Law No. 03 12 (January 12, 2012): Establishes a minimum 30% quota for women candidates in legislative and local elections, constituting a binding measure for political representation.
- CEDAW ratification (1996): Algeria ratified the Convention on Elimination of All Forms of Discrimination Against Woman with reservations on Articles 2 and 16
- Ordinance No. 01 05 (2005): equality in transmission of Algerian nationality.
- Penal Code amendments (2005/2006 and 2015): criminalization of workplace harassment and strengthened protections against gender-based violence.
- Law No. 01 15 (January 4, 2015): Establishes alimony fund for divorced women with custody of minor children.

- Family Code (2005 amendment): Introduction of 'Khol' procedure, enabling woman to initiate divorce without requiring the husband’s consent to divorce.

1.3.2 Institutional Architecture for Gender Equality

Algeria has progressively constructed a multi-level institutional architecture dedicated to advancing gender equality with mandate including policy formulation, coordination, protection (SEAH):

- Ministry of National Solidarity, Family and the Status of Women (MSNFCF): The central government body responsible for national gender strategies and intersectoral coordination; The ministry oversees the green number 1026 helpline for women victims of violence and the 'Himayati' digital platform (launched September 2025).
- National Council for Family and Women (CNFF): 50-member consultative body; re installed December 2024.
- National Centre for Studies, Information and Documentation (CNEIDFFE): created 2010.
- Gender Focal Points (PFG): created 2010 across key ministries.
- Reception Canters for Women Victims of Violence: operational in Tipaza, Mostaganem and Annaba.

1.3.3 Programmes for Rural Women's Empowerment

Several national programs are directly relevant to the gender responsiveness programme design and activities that would enforce its implementation within the AGD zone

- MADRP Vision 2035 and 2020 2024 Sectoral Roadmap: The Ministry of Agriculture, Rural Development and Fisheries strategic framework including a dedicated component for steppe territories development incorporating a transversal human capacity development relevant to rural and agricultural woman livelihood alleviation
- Intersectoral Action Plan for the Promotion of Rural Women: A coordinated government initiative addressing economic empowerment, access to services, agricultural training, and micro entrepreneurship for rural woman lunched in March 2025. New Economic Empowerment Guide launched March 2025; ANGEM financed 50% of projects to rural women in 2024.
- National Microcredit management Agency (ANGEM): since 2004, it has financed over 1 million projects, creating more than 2 million jobs nationwide; 50% of projects financed in 2024 benefited women.
- National Intersectoral ¨Programme for the participation of Homemaker woman in National Production: lunched in 2021 and led by the Ministry of National Solidarity, Family Affairs and th status of Woman support economic empowerment of homemakers especially in rural areas.
- Rural Woman’s Literacy programme: led by the National office for literacy and learning for adults, it has been implementing modern literacy programme for rural woman reducing illiteracy among the targeted group from 85% in 1962 to 7,96% in 2021.

2. Gender Mainstreaming in Agricultural Policy and Institutions

2.1 Institutional Mandates and Coordination

The Ministry of Agriculture, Rural Development and Fisheries is the implementing agency for this project, operating throughout its network of agencies and dependant institutions as is developed by the Stakeholders Engagement Plan[1] .

The gender action plan would be inherently implemented by a network of Rural woman officer within the Departmental Agricultural Services (DSA) at wilaya level. Each DSA maintains a Rural Women Officer (Chargée de la cellule Femme Rurale) position.

While Rural woman officers are pointed by administrative directives within each DSA, the absence of a formal legal mandate, dual reporting obligations, administrative overload, and funding that is entirely dependent on ad hoc project cycles. As a result, gender mainstreaming within MADRP's operational structures has remained fragmented, insufficiently resourced, and unable to generate the systematic, sustained change required to address deeply entrenched structural inequalities in Algeria's agricultural sector.

The project directly intervenes to transform this institutional baseline as the GAP is designed to strengthen the DSA gender architecture from within.
The Climate Wise Women (CWW) network constituted of 13 rural women officers within DSA structures across all 13 Green Dam wilayas, provides a structured, consistently resourced, and technically supported gender mobilization function that operates in direct coordination with and complements the existing Rural Women Officer mandate.

The project creates a replicable model MADRP that MADRPP can adopt and sustain beyond the project period and the project zone as the model would be replicable nationally. CWW agents will be formally trained, assigned clear mandates, equipped with digital tools and technical content, and linked to the project's broader M&E accountability framework establishing a standard for what a functional DSA gender function should look like at each wilaya level.

2.2 Budget Allocations and Accountability

National agricultural investment programs do not systematically allocate dedicated gender budgets.
The project introduces a direct and a clear rupture with conventional norms.
The designation of a full time PMU Gender Specialist funded for the full seven-year project duration represents a systematic deployment of dedicated gender technical expertise within an MADRP led investment program operating in the Green Dam zone. The establishment of a dedicated gender budget, anchored by the USD 40,000 CWW network budget and the integrated gender cost components embedded across all three project components, creates a documented model for gender responsive budgeting within Algerian agricultural investment programming.

The project is designed to spend gender budgets effectively and demonstrate how gender budget accountability works in practice. The PMU Gender Specialist will produce semi-annual gender progress reports, report against gender tagged indicators in all GCF annual performance submissions, and flag non-compliance where activities fail to meet sex disaggregated reporting standards. This accountability architecture transparent, documented, and externally reported to the GCF is designed to generate an evidence base that the MADRP and other national stakeholders can use to justify mainstreaming gender budget requirements into future agricultural investment programs.

2.3 Sex Disaggregated Data

[1] Refer to the project's SEP plan

Current wilaya level DSA monitoring systems are structured around farm level data collection rather than individual operators, meaning that the gender, age, livelihood profile, and decision-making role of the actual people managing agricultural resources are systematically invisible in official data. In a context where only 2.9% of formal farm managers are women, yet women constitute the dominant labour force in small ruminant farming, NWFP collection, nursery production, and subsistence food management, this data gap profoundly distorts the policy evidence base and perpetuates investment designs that exclude women by default.

This project makes the correction of this foundational data deficit a non-negotiable design requirement. The digital M&E System developed under Activity 1.2.2 will embed mandatory sex and age disaggregation fields in all beneficiary tracking from Year 1, with a dedicated gender dashboard module ensuring real time visibility of progress against all GAP targets. One hundred percent of project indicators must be sex disaggregated; any activity failing to report in this format will be formally flagged as non-compliant and subject to corrective action. This is not a reporting add on, but it is a structural feature of the M&E system architecture that will enhance gender responsive decision making

Beyond the project's own data systems, the GAP 1.2.5 gender capitalization study and the GAP 1.2.1 integration of sex disaggregated data into all observatory socio economic monitoring surveys represent deliberate investments in building the evidence infrastructure that Algerian agricultural institutions need for sustained gender responsive planning. By producing, validating, and publicly reporting sex disaggregated data on women's climate vulnerabilities, livelihood contributions, and adaptive practices across six wilayas, this project will generate the highest quality, most comprehensive gender evidence base ever produced for the AGD zone. This evidence base is designed to outlast the project informing DSA planning cycles, MADRP policy reviews, MSNFCF programme design, and future GCF or other donor funded investments in Algeria's drylands.

3. Sectoral Gender Analysis (Evidence Based Assessment)

3.1 Sampling Methodology and Statistical Framework

The sampling architecture for the BNEDER household survey is the technical core of the assessment's quantitative dimension. It was constructed to achieve two simultaneous objectives: statistical representativeness of the Green Dam household population within each wilaya; and operational feasibility given the exceptional geographic dispersion and access constraints of the AGD zone.

The total survey sample of 623 questionnaires was allocated across the six target wilayas using a population-proportional stratification method anchored in GPC data[i]. Each wilaya's share of the total sample reflects its proportional weight in the aggregate Green Dam zone population of 3,814,293 persons across the six wilayas.

Table 1: Population- proportional stratification method

Wilaya	BV Population	% of Total BV Pop.	Proportional Sample (n)	Rounded Sample
Djelfa	1,148,508	30.11%	187.59	188
M'sila	1,084,384	28.43%	177.12	177
Tébessa	671,081	17.59%	109.61	110
El Bayadh	278,100	7.29%	45.42	45
Khenchela	406,690	10.66%	66.43	66
Naâma	225,530	5.91%	36.84	37
TOTAL	3,814,293	100%	623.06	623

This proportional allocation ensures that Djelfa and M'sila the most populous wilayas in the Green Dam zone, accounting jointly for 58.5% of the zone's population contribute proportionally to the survey evidence base, while smaller wilayas such as Naâma and El Bayadh, despite their ecological significance and extreme population sparsity, are represented at levels consistent with their demographic weight.

The operational translation of sample targets into fieldwork deployment plans followed a standardized productivity norm of 10 questionnaires per enumerator per day, establishing a transparent and reproducible basis for team sizing and mission duration estimation:

The deployment of paired teams rather than individual enumerators was not merely a deliberate methodological decision: in the AGD's socio-cultural context, female respondents are significantly more likely to participate fully and openly in interviews when at least one enumerator is a woman. Fieldwork teams were therefore included at least one female enumerator per pair, thus ensuring that women's responses to sensitive topics including land tenure, financial decision-making, and gender-based constraints of the household questionnaires completed across the six target wilayas, 50 were administered directly to women respondents, representing 9.4% of the total sample (M'sila: 11; Djelfa: 10; Khenchela: 10; Tébessa: 8; Naâma: 6; El Bayadh: 5). While modest in absolute terms, this share is significant considering the socio-cultural context of the AGD zone, where household survey responses are conventionally captured by male household heads; the deployment of mixed

enumerator pairs including at least one woman was instrumental in securing women's direct participation. The profile of the women reached is itself informative: five were leaders of local associations, eight were livestock breeders engaged in pastoral activities, and 21 of the 50 (42%) declared themselves responsible for their household's main income confirming the presence, within the sample, of de facto women-headed and women-managed households whose perspectives on land tenure, water access, credit, and climate-related constraints directly inform the gender gap analysis presented in this assessment. Beyond the women interviewed directly, sex-disaggregated household composition data (adult men and women, boys' and girls' schooling) was collected for all surveyed households, extending the survey's gender evidence base well beyond the respondent pool itself.

Alongside the quantitative sampling framework, the gender assessment deployed a set of qualitative methods designed to capture the lived realities, structural constraints, and adaptive strategies of women in the AGD that statistical data cannot reach. These methods were designed to be mutually reinforcing focus group findings were used to validate and contextualize survey data; workshop outputs were used to refine the gender gap taxonomy; and key informant interviews provided institutional and policy-level triangulation.

Participatory Consultation Workshops
Six participatory consultation workshops were organized one per target wilaya as part of the project's feasibility study process. The workshops in El Bayadh (6–7 June 2022, attended by over 60 participants) exemplify the format applied consistently across all six wilayas: a structured two-day programme combining technical presentations (feasibility study findings, project design proposals, agrometeorological data), plenary debate, and targeted working group sessions organized around thematic priorities including gender and rural women's participation.

The workshops were jointly organized by BNEDER, the Direction Générale des Forêts (DGF), and FAO Algeria. Invitations were issued through wilaya-level Conservation des Forêts structures, with explicit instructions to prioritize the participation of civil society, with particular emphasis on rural women's associations and youth groups a deliberate design feature responding to the historical pattern in which Green Dam consultation processes have been dominated by male institutional representatives. Each workshop generated structured outputs: signed attendance sheets providing a documented record of participant composition by sector and gender; technical fiches documenting proposed project activities; and formal recommendation statements validated by participants. These outputs were systematically analysed to extract gender-specific findings and to document the expressed priorities and constraints articulated by women participants.

Key informant interviews were conducted with representatives of the primary institutional stakeholders relevant to gender and agriculture in the AGD: DSA Rural Women Officers (Chargées de la cellule Femme Rurale) in each wilaya; ANGEM wilaya representatives; HCDS steppe management officers; and local APC elected officials. These interviews provided institutional triangulation for survey and focus group findings and enabled the assessment of the functional capacity and resource constraints of the gender mainstreaming architecture within MADRP's operational structures.

3.2 Access to and Control Over Productive Resources

3.2.1 Land and Tenure Security

The AGD's agricultural census data and Bneder socio economic survey reveal a near-total male monopoly on formal farm management: 97.1% of farm managers in the six target wilayas are men, with women representing only 2.9%. Where women do hold formal farm management status, their farms are overwhelmingly concentrated in the smallest exploitation categories 0.1 to 5 hectares reflecting both the residual nature of land assets that pass to women through inheritance or

PART B GENDER ACTION PLAN (GAP)

7. Gender Action Plan: Overview and Gender Result Statements

The Gender Action Plan (GAP) operationalizes the findings of the Gender Assessment (Part A) into concrete, costed, time bound, and measurable actions integrated across all three project components. It is fully aligned with the GCF Gender Policy, the project's Theory of Change, and the GCF Results Framework requirements for Annex 8.

The GAP recognizes the intersecting vulnerabilities faced by women within pastoralist and agro-pastoral communities, including limited access to land and customary resources, mobility constraints linked to seasonal and remote livelihoods, finance, information, training, equitable benefits, and participation in decision-making processes.
These measures are aligned with ESS8 principles and apply to pastoralist groups with customary natural resource use systems, ensuring culturally appropriate participation and equitable access to project benefits.

Tailored measures include women-only consultations, representation in local governance and land-use planning structures, targeted training and financial/value-chain support, equitable access to project benefits and natural resources, gender-responsive and confidential GRM channels, and sex-disaggregated monitoring.

This is aligned with the SEP proposal on how pastoralist groups have been consulted. The corresponding measures will be implemented as part of the gap activities

Component	Component Level Gender Result Statement
Component 1	Enhanced institutional and knowledge governance frameworks are gender responsive and inclusive of women, men, youth and vulnerable groups enabling meaningful participation, use of disaggregated data and accountability for equitable climate adaptation benefits.
Component 2	Women actively participate as key agents and beneficiaries in ecosystem restoration, with stronger voice in resource governance, equitable access to productive resources and benefits, and recognition of their knowledge in sustainable land and water management.
Component 3	Women's economic resilience is strengthened through diversified, climate resilient livelihood opportunities, improved access to value chains, assets (energy, livestock), and adapted financial services, leading to increased household income, time savings and decision making power.

The CWW Network as Social Mobilization Backbone

The most important structural innovation of this GAP is the Climate Wise Woman (CWW) network established under GAP 1.2.7. The CWW network consists of 13 rural women officers (one per Green Dam wilaya) embedded within existing DSA structures. CWWs serve a dual mandate: (1) delivering climate adaptation awareness; and (2) identifying, registering, and mobilizing eligible women beneficiaries for all Component 2 and Component 3 gender activities.
ToC alignment: The CWW network is operationally linked to Activity 1.2.7 (Deliver Training & Knowledge Transfer Programs) within Output 1.2 of the project's Theory of Change. The CWW network directly supports Co benefit 2: Enhanced Gender Equality as identified in the ToC.

abandonment and the absence of investment capital that would allow women to expand their productive base. These micro-farms are typically insufficient in scale to generate commercially viable surpluses, further limiting women's capacity to demonstrate the income and asset base required for formal credit access.

The most consequential dimension of women's land tenure insecurity is the near absence of individual land titles. Only 14.5% of women-managed farms hold individual land titles meaning that 85.5% of women who do manage farms do so without the formal documentation that Algerian financial institutions require as primary collateral for agricultural credit. This creates what can be described as a collateral trap: women cannot access credit without land title, cannot invest in productivity improvement without credit, and cannot expand or formalize their agricultural enterprise without productive investment a self-reinforcing cycle of exclusion that climate stress progressively tightens as productive assets degrade and replacement costs rise.

The land title deficit has consequences that extend well beyond credit access. Without individual title, women cannot: register as independent agricultural operators with DSA structures; access the government input subsidy programs administered through MADRP; participate as full members of agricultural cooperatives that require proof of land holding; or claim legal standing in disputes over rangeland enclosure or resource access.

Women's low land title rates in the AGD reflect a combination of legal, institutional, and social factors. While Algerian inheritance law formally entitles women to agricultural land through Islamic inheritance provisions, in practice land is frequently registered in male family members' names to preserve the unity of family holdings with women receiving informal use rights rather than formal title. Where women do inherit land formally, social pressure to transfer management to male relatives, combined with the practical difficulties of managing agricultural land independently in a context of geographic isolation and limited institutional support, frequently results in de facto male control of formally female-titled land.

3.2.2 Water, Irrigation, and Natural Resources

Water is the defining resource constraint of the AGD landscape and its intersection with gender inequality produces some of the most acute and immediate vulnerabilities documented in this assessment. In a region where rainfall has already declined by up to 20.5% and water resources are projected to fall by a further 30–40%, access to water is not merely an agricultural productivity issue: it is a survival issue, a labour issue, a health issue, and a governance issue — and it is experienced differently and more severely by women than by men at every level.

The productive water access deficit facing women farmers in the AGD is severe. Only 34% of farms managed by women have any irrigated area meaning that nearly two thirds of women-managed farms are entirely dependent on rainfall for agricultural production, with no buffer against the increasingly frequent and prolonged dry periods that characterize the AGD's changing climate. Even among the minority of women-managed farms with some irrigated area, the coverage is minimal: irrigated land accounts for just 6% of the total agricultural area managed by women, compared to significantly higher proportions in male-managed farms. This means that women's agricultural production is disproportionately exposed to rainfall variability.

Water access was identified as the most urgently cited resource need by survey respondents across the six target wilayas prioritized by 30% of all respondents a finding that reflects not only the productive importance of water for agricultural activities but the centrality of water access to the basic functioning of AGD households.

Water user associations, irrigation management committees, and communal water governance bodies in the AGD are overwhelmingly male dominated, reflecting both formal membership requirements linked to land title and registered farm status which most women lack and social norms that define water governance as a male administrative domain. This exclusion has direct and

measurable consequences for infrastructure quality and equity: water infrastructure sited and designed without women's input systematically misses the locations, designs, and management arrangements that would best serve women's needs. Boreholes and pastoral wells are located based on male herders' route patterns rather than women's collection routes. Irrigation scheme designs prioritize large plot holders predominantly men over the small, fragmented plots that women manage. Water committee meeting times and formats exclude women with domestic and childcare constraints.

3.2.3 Ownership and small-scale production

While livestock farming is a primary economic driver in the region, a clear distinction exists between the management of animals and their formal ownership.

Gendered ownership gap: Large livestock such as cattle are almost exclusively regarded as household assets rather than individual property, with 90.52% of cattle officially owned by the household rather than by women individually. Even in sectors where women perform most of the labour, formal ownership remains concentrated at the household level, typically controlled by male family members, with product sales frequently handled by male intermediaries rather than the women who manage day to day production.

Dominance in "off soil" modules: Women find their strongest economic footing in small scale "off soil" livestock activities, particularly poultry farming and beekeeping. These activities are characterized by lower barriers to entry, minimal capital requirements, and spatial compatibility with women's domestic responsibilities, allowing production within or adjacent to the home. This makes them uniquely suited to women in the AGD context, where geographic isolation and care burdens severely constrain participation in land based agricultural activities.

Low barrier to entry: The preference for small ruminants and poultry is driven by practical economic and spatial constraints. These animals require minimal initial capital compared to larger livestock and can be raised in reduced spaces within or adjacent to the home, allowing women to balance production with their significant domestic and childcare responsibilities. Women constitute nearly 30% of goat breeders overall and up to 60% in specific pastoral zones, confirming their central role in the pastoral economy.

3.3 Women’s Economic Participation and Value Chains Integration

The economic participation of women in the Algerian Green Dam zone is defined by a structural paradox: their actual productive contribution to household and community economies is extensive, daily, and largely indispensable, yet it remains overwhelmingly invisible in the formal statistical, administrative, and institutional systems that determine who receives support, credit, training, and market access. The evidence presented below, drawn from the BNEDER 2022 household survey and national administrative data, documents both the scope of women's economic engagement across employment, artisanal production, and NWFP value chains, and the structural mechanisms through which that engagement is systematically devalued, un-registered, and excluded from the economic recognition.

3.3.1 Women's Employment Patterns

Women's formal employment in the AGD is concentrated in public administration (29.1%) and services (49.4%) primarily health and education while their presence in agriculture (9.2%), industry (7.4%), and construction (6.2%) remains marginal despite extensive daily engagement in livestock management, NWFP collection, and agrifood processing. Female unemployment exceeds 20% versus 8.2% for men, with only one formally active woman for every 6.4 active men a gap reflecting structural exclusion rather than limited economic agency.

This exclusion is illustrated by women's participation rates in enterprise support programs: only 10.9% of ANADE beneficiaries and 8.7% of CNAG beneficiaries are women, compared to 46.5% for ANGEM microcredit. This contrast is analytically critical: where products are adapted to women's realities simplified documentation, group based; lending women participate at near parity. Where they are not, women are effectively excluded. The problem lies in program design, not women's capability.

Women's actual economic contribution in the AGD far exceeds what formal statistics capture. Sales of small livestock products (eggs, meat, wool, honey) occur directly between women at home, bypassing formal markets entirely. This localized informal economy is economically significant for household food security but generates no documentary trail, no price discovery mechanism, and no income records compounding women's exclusion from the formal financial system.

Where products do reach formal markets, male intermediaries capture the commercial margin while women absorb the labour cost a pattern mirrored across NWFP and artisanal value chains. An emerging trend is women's spontaneous use of social media for direct sales, bypassing traders though the digital divide (only 10.8% of rural women with digital access) limits this strategy's reach.

The project responds through Activity 3.1.3 (GAP 3.1.3), delivering adapted legal registration and entrepreneurial coaching at community level with a minimum 50% women beneficiary requirement; Activity 3.1.4 (GAP 3.1.4), securing commitments from BADR, NASDA, and ANGEM to each develop at least one gender adapted financial product by Year 2; and Activity 3.1.1 (GAP 3.1.1), establishing at least one women led cooperative per priority value chain per wilaya. The CWW network (GAP 1.2.7) provides the community level outreach connecting isolated women to all three intervention streams.
The project also addresses informal economy invisibility through Activity 3.1.2 (GAP 3.1.2), embedding 30% women led partnership quotas in all producer-private sector contracts; Activity 3.1.3 (GAP 3.1.3), converting informal production into formally registered activity; and Activity 1.2.2 (GAP 1.2.2), building the first systematic sex disaggregated data infrastructure for women's economic participation in the AGD.

3.3.2 Artisanal Production and NWFP Value Chains

Women in the six AGD wilayas possess a rich and diverse repertoire of traditional artisanal and processing skills that constitute a significant, though largely unrecognized, economic asset. Survey data from the BNEDER 2022 household survey across the target wilayas reveals that the dominant skill areas among craftswomen are: traditional agrifood transformation (58.35%), weaving (13.80%), sewing (7.29%), and pottery (5.35%), alongside widespread engagement in the collection and primary processing of non-wood forest products (NWFPs).

Despite this breadth of skills, most craftswomen 80.24% operate for the most majority as unpaid family helpers, with no formal economic status, no registered enterprise, and no individual income stream. Only 5.26% of craftswomen consider their skills adequately valorised, reflecting a profound gap between the productive contribution women make and the economic recognition they receive. This invisibility is structural, rooted in the absence of cooperative frameworks, the lack of quality certification systems accessible to rural women, and the near total exclusion of women from formal value chain governance.

Non timber forest products represent one of the most significant and yet most neglected dimensions of women's economic engagement in the AGD zone. Women are the primary collectors and processors of a range of high value NWFPs that are directly aligned with the project's six priority value chains: prickly pear (opuntia), olive, rosemary, esparto grass, mint, and wool. These are not marginal activities they constitute the primary source of seasonal cash income for many women headed households in remote pastoral and forest adjacent communes across El Bayadh, Naâma, Djelfa, M'sila, Tébessa, and Khenchela.

However, women's participation in these value chains is currently confined to the lowest value, most labour-intensive segments harvesting and primary sorting while processing, branding, packaging, and market access remain controlled by male traders and intermediaries. The result is a systematic transfer of value away from women producers toward male dominated commercial networks, with women absorbing the labour cost while capturing minimal economic return.

An important and emerging trend documented in the AGD wilayas is the use of social media platforms for direct sales of traditional artisanal products, including handwoven textiles, processed food products, and dried herbs. This represents a spontaneous, self-organized adaptive strategy by women entrepreneurs who have identified digital platforms as a means of bypassing male intermediaries and accessing urban and national markets directly. While this trend remains limited by the AGD's significant digital divide, it signals both the entrepreneurial agency of women in the region and the market demand for authentically produced AGD artisanal goods.

The project directly addresses this gap through Activity 3.1.1 (GAP 3.1.1), which targets the development of six priority value chains using FAO's MAD (Market Access and Development) methodology. The GAP establishes a structured six step program: knowledge documentation, cooperative formation, quality standardization, brand development, market linkage, income monitoring. A binding target requires the establishment of at least one women-led cooperative per value chain per wilaya, with 40% of supported women reporting increased income and 40% adopting climate resilient production practices through CWW network support.

The project incorporates the recognition of women's traditional knowledge as an explicit technical input through coordination with the Ministry of Culture and Arts for the formal intangible heritage recognition of women's artisanal practices. This positions women's knowledge as a legitimate, documented asset that can underpin quality certification, geographic indication processes, and eco-tourism market development. The CWW network (GAP 1.2.7) serves as the primary community level mobilization mechanism, identifying eligible craftswomen, facilitating cooperative registration, and connecting women producers to the digital climate advisory and market information services established under Activity 1.2.6.

3.4 Gender, Food Security and Social Protection

Access to formal financial services is one of the most decisive determinants of women's capacity to invest in climate resilient livelihoods, yet rural women in the AGD face compounding and mutually reinforcing barriers that effectively exclude them from the formal financial system.

The most acute dimension of financial exclusion is women near absence from formal agricultural lending. Women received only 2.5 3.4% of total BADR (Bank for Agriculture and Rural Development) agricultural loans in 2012 2013 a figure that, while dated, reflects structural barriers that remain largely unaddressed: the requirement for formal land title as primary collateral (held by only 14.5% of women managed farms), income verification requirements incompatible with women's informal and seasonal income cycles, and loan products designed around male headed farm enterprise models that bear little resemblance to the diversified, small scale, mixed livelihood systems in which most AGD women operate.

This exclusion is a direct constraint on climate adaptation. Without access to credit, women cannot invest in improved seeds, efficient irrigation equipment, livestock health inputs, or value adding processing technologies. The result is a compounding vulnerability: climate stress degrades livelihoods, but the financial tools needed to adapt remain inaccessible.

ANGEM microcredit represents a meaningful, though insufficient, improvement in women's financial access. With 46.5% of ANGEM beneficiaries being women nationally and 50% of projects financed to women in 2024 ANGEM has demonstrated that women are willing and capable borrowers when products are appropriately designed. Key lessons from ANGEM's experience in the AGD context

confirm that: documentation simplification significantly increases women's uptake; group-based lending models outperform individual loans for women with limited collateral; and business management training markedly improves project viability and repayment rates.

However, ANGEM's ceiling loan amounts are insufficient for the scale of investment required for meaningful climate resilient livelihood diversification particularly for value chain formalization, cooperative infrastructure, or productive asset acquisition such as processing equipment, cold storage, or irrigation systems.

Beyond credit, broader social protection mechanisms remain substantially underutilized by rural women in the AGD for a combination of structural reasons: low financial literacy limiting awareness of eligibility and application procedures; collateral and documentation requirements excluding women without formal land title or registered enterprise status; and geographic distance from service delivery points, which is particularly acute in low density western wilayas such as Naâma (10 inhabitants/km²) and El Bayadh (5 inhabitants/km²) where travel to wilaya administrative centers imposes significant time and transport costs on women already managing heavy domestic and productive workloads.

The project responds through Activity 3.1.4 (GAP 3.1.4), which establishes a formal commitment from BADR, NASDA, and ANGEM to each develop at least one gender adapted financial product by Year 2 incorporating alternative collateral mechanisms, group-based lending structures, and repayment schedules aligned with agro pastoral income seasonality. A target of at least 30 women led enterprises accessing loans is established, with 100% of supported applicants receiving pre application coaching to address financial literacy barrier

Complementarily, Activity 3.1.3 (GAP 3.1.3) provides adapted legal registration support at community level, women centred entrepreneurial coaching, and certification guidance directly addressing the documentation and formalization barriers that currently exclude women from accessing both financial services and value chain opportunities. A minimum of 50% women beneficiaries is required across all micro enterprise support activities, enforced through sex disaggregated quarterly reporting. The CWW network (GAP 1.2.7) provides the community level outreach and referral function that bridges the geographic distance between rural women and formal service delivery institutions.

3.5 Gender and Natural Resource Management

Women in the AGD are active, knowledgeable, and indispensable managers of the ecosystems upon which their households depend. Yet this role has been systematically excluded from the formal governance structures that determine how natural resources are allocated, managed, and restored.

Women's natural resource management engagement in the AGD encompasses four primary domains:

Pastoral management: Women constitute nearly 30% of goat breeders overall and up to 60% in specific pastoral communes, managing herd health, breeding decisions, and fodder sourcing daily. This makes women the de facto custodians of small ruminant genetic diversity including indigenous breeds such as Ouled Djellal, Hamra and primary observers of rangeland condition changes.

NWFP collection and stewardship: Women are the primary collectors of esparto grass, rosemary, mint, medicinal plants, and other NWFPs across the AGD's forest and steppe zones. This collection work provides women with granular, spatially specific knowledge of vegetation condition, species distribution, and seasonal availability that is directly relevant to ecosystem monitoring and restoration planning.

Traditional water management: Women are the primary managers of household water responsible for collection, storage, and allocation across domestic and small-scale productive uses. In many AGD communes, women retain practical knowledge of traditional water harvesting structures, their location, maintenance requirements, and seasonal behaviour

Exclusion from formal governance
Despite this depth of practical knowledge and daily engagement, women are systematically absent from the formal governance structures pastoral management committees, water user associations, forest management cooperatives, and communal land management bodies, that make decisions directly affecting the resources they manage. This exclusion operates through multiple mechanisms: committee meeting times and locations incompatible with women's domestic schedules; formal membership requirements linked to land title or registered enterprise status; and social norms that define resource governance as a male domain.

These roles are shaped by pastoral mobility patterns and customary resource-use systems, which influence women's access to services, participation in governance, and exposure to climate risks.

The project addresses women's NRM roles across multiple activities. GAP 2.1.2 integrates women as primary beneficiaries and active technical participants in the 28,491 ha rangeland rehabilitation program, with a target of 300 women trained in improved pasture management across 12 communes. GAP 2.1.3 ensures that at least 50 women headed households receive NWFP yielding agroforestry plot allocations within the 4,466 ha reforestation program, converting informal collection rights into formally recognized productive allocations. GAP 2.2.3 mandates 100% of water infrastructure units to be sited with documented women's consultation and requires at least 30% women's representation in all water management committees, directly institutionalizing women's traditional water knowledge in formal governance structures. Across all Component 2 activities, the CWW network (GAP 1.2.7) serves as the primary mechanism for identifying, registering, and mobilizing women beneficiaries ensuring that women who lack formal registration documents are not excluded through bureaucratic barriers.

3.6 Gender and Climate Change

3.6.1 Gender Differentiated Climate Vulnerabilities

The AGD region is one of the most climate stressed landscapes in North Africa, with documented temperature increases of up to +2.53°C in El Bayadh, precipitation declines of 20.5% in El Bayadh and 19% in M'sila, and projections of a further +3.77°C increase by 2061 2080 and water resource reductions of 30 40%. These impacts are not gender neutral. They intersect with existing inequalities to produce distinct and compounding vulnerabilities for women across four primary dimensions:

Increased domestic Labor Burdens: As water sources become scarcer and more distant and as fuelwood availability declines with forest cover, the time women and girls spend on water and fuelwood collection increases substantially. In the AGD context where average household size is 6.6 persons and women bear primary responsibility for water management and domestic energy this represents a direct and measurable increase in unpaid labour time, with direct consequences for women's capacity to engage in productive economic activities, attend training, or participate in community governance. Climate change is, in this sense, a direct driver of women's time poverty and economic marginalization.

Exposure of women's labour Intensive sub sectors: Women's livelihood activities in the AGD are disproportionately concentrated in the sub sectors most exposed to climate variability: olive and fig harvesting, which are highly sensitive to late frost events, heat stress during flowering, and irregular precipitation; esparto grass collection, which is directly dependent on the health of esparto

communities that are retreating under combined pressure from overgrazing, drought, and land degradation; and rosemary and medicinal plant harvesting, the productivity of which is highly sensitive to rainfall timing and intensity. Climate change is therefore not an abstract future risk for women in the AGD it is already eroding the biological resource base of their primary livelihood activities.

3.6.2 Barriers to Women's Adaptive Capacity

The capacity of women to adapt to these climate impacts is constrained by five structural barriers that collectively prevent them from accessing the technical, financial, and informational resources needed to adjust their livelihoods and resource management practices.

Resource barriers (Limited productive asset access): Only 34% of farms managed by women have any irrigated area, and irrigated land covers just 6% of the total agricultural area managed by women. This severely limits women's capacity to maintain productivity during drought periods, shift to drought tolerant or irrigated crops, or adopt water efficient technologies. The combination of minimal irrigated area, near total exclusion from formal land tenure (only 14.5% of women managed farms hold individual title), and very small farm sizes (concentrated in the 0.1 5 ha category) means women have an extremely narrow productive asset base from which to mount an adaptive response.
Financial Barriers (limited agricultural credit): With women receiving only 2.5 3.4% of BADR agricultural loans, the formal agricultural credit system provides effectively no support to women's climate adaptation needs. Without credit, women cannot invest in drought resistant varieties, efficient irrigation systems, improved livestock housing, or value adding processing equipment the very investments that would reduce their climate vulnerability. This financial exclusion is not a reflection of creditworthiness but of structural product design failures: collateral requirements linked to individual land title, income verification systems incompatible with mixed and informal livelihood systems, and loan products sized and structured for male headed commercial farms.

Information barriers (Limited access to extension services): 80% of rural women in the AGD lack access to agricultural extension services the primary channel through which climate adaptive technical practices, early warning information, and government support programs are disseminated. This exclusion is driven by multiple factors: extension services are predominantly delivered by male agents who, in the AGD's socio-cultural context, have limited access to women in domestic settings; extension meeting formats, times, and locations are not designed around women's mobility constraints; and extension content is predominantly focused on male headed commercial crop and livestock enterprises rather than the diversified, small-scale systems in which women operate. The result is that women are systematically the last to receive information about climate risks and the first to be excluded from adaptive support programs.

Digital divide (Limited access to digital climate services): Only 10.8% of rural women in the AGD participated in any computer related activity in 2019 a figure that reflects both the infrastructure deficit of the region (limited connectivity in remote pastoral communes) and the socio cultural and economic barriers to women's digital access. As climate information systems, market platforms, and financial service delivery increasingly migrate to digital channels, this divide threatens to compound women's existing information and financial exclusion. Women who cannot access mobile advisory services, early warning systems, or digital market platforms will be systematically disadvantaged relative to male farmers who can, reducing the effectiveness of climate adaptation investments that assume digital access.

Governance absence (Exclusion from Decision Making): Women are absent from the governance structures water committees, pastoral management bodies, forest management cooperatives, communal assemblies that make the collective resource management decisions most consequential for climate adaptation outcomes. This means that adaptation strategies are designed without women's knowledge, implemented without women's participation, and evaluated without data on women's

outcomes. In a context where women are the primary managers of water, fuelwood, and small ruminants, their exclusion from governance is not merely an equity failure it is a technical failure that produces sub optimal, incomplete, and ultimately less effective adaptation outcomes for entire communities.

These constraints are often more pronounced in pastoralist and agro-pastoral contexts due to mobility patterns, geographic isolation, and reliance on communal natural resources.

The project directly addresses all five barriers through an integrated package of interventions: GAP 2.2.3 and GAP 2.2.4 address resource barriers through women's inclusion in water infrastructure governance; GAP 3.1.4 addresses financial barriers through gender adapted product development at BADR, NASDA, and ANGEM; GAP 1.2.6 addresses information barriers through CWW mediated relay of digital climate advisory content to women who cannot access services directly; GAP 1.2.2 establishes the digital M&E infrastructure for sex disaggregated tracking; and GAP 1.1.4 mandates ≥30% women's representation in all Wilaya Climate Adaptation Committees and the National AGD Advisory Committee institutionalizing women's voice in climate governance from Year 1 of implementation.

3.7 Gender-Based Violence: Institutional Response and Surveillance in Algeria

While violence against women remains a sensitive issue in rural contexts, Algeria has established one of the region's most structured institutional responses to gender-based violence, anchored in a permanent, health-system-based surveillance mechanism led by the Institut National de Santé Publique (INSP). Following the first national survey on violence against women (2002–2003), conducted jointly by the INSP and the Ministries of Justice, Youth and Sports, Interior, and National Solidarity in partnership with women's support associations, Algeria adopted a National Strategy to Combat Violence Against Women and instituted a permanent case-notification system, progressively extended from 2012 to additional wilayas. The most recent surveillance cycle (2022–2023), covering hospital services of forensic medicine, genecology and emergency care across five wilayas (Alger, Blida, Oran, Médéa and El Oued), registered 2,229 declared cases in 2022 and 4,004 in 2023[2] an increase that reflects not a deterioration of the situation but a strengthening of detection, declaration and women's confidence in institutions: the proportion of women presenting through spontaneous consultation nearly tripled, from 29% in 2022 to 85% in 2023, and 64% of victims consulted unaccompanied, indicators of growing institutional trust and autonomous help-seeking behavior.

The response chain is fully operational and multi-sectoral: over 80% of declared victims received medical care, medico-legal certificates with assessed incapacity (ITT) were delivered in 88% of cases in 2023, and cases were systematically channelled toward forensic medicine, psychological support, police, gendarmerie and justice services. Case data are collected through a standardized national questionnaire by forensic physicians, gynaecologists, emergency doctors, sociologists and psychologists, centralized and analyzed by the INSP constituting a functioning, sex-disaggregated administrative data system on GBV that few countries in the region possess.

The surveillance data also delineate the profile of risk relevant to this project: the majority of victims are married women of working age, violence is predominantly intra-household (47% committed by the husband, over 60% occurring at the victim's home), and physical violence dominates declarations (96%) confirming that domestic settings, precisely where rural women's economic dependence is greatest, are the primary locus of risk.

For the AGD zone, where health and forensic services are concentrated in wilaya capitals and geographic isolation constrains women's access to this national response architecture, these findings

[2] Institut National de Santé Publique (INSP), Department of Health Protection and Promotion – Women's Health Service, Data Collection System on Women Victims of Violence, hospital-based surveillance data 2022–2023

directly inform the project's safeguard design: the project GRM (Section 10.4), with its gender-responsive and confidential channels and CWW agents serving as first-level, community-embedded referral points, is structured to bridge rural women toward the existing national institutional pathway hospital-based care, medico-legal certification, the MSNFCF 1026 helpline and 'Himayati' platform, and reception centers for women victims of violence rather than to create parallel mechanisms.

4. Stakeholder and Institutional Mapping

4.1 Government Institutions

The implementation of the Gender Action Plan is fully embedded within the broader project implementation architecture detailed in the project's Stakeholder Engagement Plan (Annex 7), which defines the roles, responsibilities, and coordination mechanisms of all government institutions, technical agencies, civil society partners, and financing bodies involved in the project. The GAP activities assigned to each institution in the implementation tables of Section 8 above follow directly from the mandates and operational responsibilities established in that framework. Gender mainstreaming is accordingly not the exclusive responsibility of the PMU Gender Specialist, but a shared obligation distributed across the full institutional network, with each agency accountable for the gender targets embedded within its designated activities.

4.2 FAO Algeria

FAO Algeria serves as the key technical and gender implementation partner across all three project components, bringing a comprehensive portfolio of methodological expertise, operational experience, and institutional knowledge directly relevant to the AGD's gender-climate context. FAO's engagement spans: value chain development using the MAD (Market Access and Development) methodology; gender-responsive agricultural extension; financial inclusion approaches; carbon accounting; and participatory rangeland management. FAO's KHIBRA Platform and REINVEST NENA Programme provide additional knowledge resources and regional peer learning infrastructure that the project will actively leverage.

FAO Algeria's role is grounded in, and operationally guided by, a robust framework of global FAO normative instruments and regional policy commitments that collectively define the standard of gender-responsive agricultural development to which this project is held.

4.3 Civil Society and Community Organizations

Women's cooperatives and associations serve as primary civil society partners. Documented examples include women's associations in Birine commune (Djelfa), El Abiodh Sidi Cheikh and Boualem (El Bayadh), and Bir El Ater and Cheria (Tébessa). Pastoralist associations, local councils (APCs/APWs), and community leaders are key partners for community engagement.

4.4 Coordination Mechanisms

The Multi Stakeholder Climate Governance Platform (Activity 1.1.4) with its binding 30% women's representation mandate represents a structural opportunity to institutionalize gender inclusive governance. The CWW Network (via DSAs) serves as the primary community mobilization mechanism for all GAP activities.

5. Review of National Agricultural Investment Programmes

5.1 MADRP's 2020 2024 Sectoral Roadmap

The sectoral roadmap approved in July 2020 lacks explicit gender responsive programming, dedicated gender budgets, or sex disaggregated monitoring frameworks. These gaps confirm the

need for this project to establish gender data infrastructure and institutional practices that can be sustained beyond the project period.

5.2 ANGEM Microcredit Programs

Between 2005 and 2018, nearly 168,000 micro projects for rural women were financed through ANGEM. Key lessons: micro credit programs succeed when documentation requirements are simplified; group-based lending works better for women than individual loans; and training in business management significantly improves project viability.

5.3 Past Green Dam Investments and Gender Integration

Gender considerations have not been systematically integrated into past Green Dam reforestation, or rangeland management programs. Women's roles in nursery production, NWFP collection, and small ruminant farming have been largely invisible in investment program design.

6. Conclusions and Strategic Recommendations

6.1 Key Gender Gaps

The Gender Assessment identifies eight structural gender gaps that must be systematically addressed:

Gender Gap	Description
Barriers to Women's Effective Land Use	Only 2.9% of farm managers in the AGD are women; only 14.5% hold individual land titles. Very low formal tenure prevents access to credit, technical programs, and governance structures.
Constraints to access formal credit	Women received only 2.5 3.4% of BADR agricultural loans in 2012 2013. Financial products are not adapted to women's income cycles, collateral constraints, or risk profiles.
Water governance low representation	Women are the primary water users but are absent from water governance structures.
Low value chain incorporation	Women are concentrated in unpaid, low value segments; income from sales is frequently managed by male intermediaries.
System Information barriers	80% of rural women lack access to technical agricultural information; only 10.8% have digital access.
Governance underrepresentation	Women are underrepresented at all levels of decision making relevant to climate adaptation.
Limited digital access	Rural women's digital access limits use of climate advisory services, market platforms, and financial applications.
Uncompensated labor	Intensifying climate stress is increasing women's unpaid labor with no compensatory mechanisms.

6.2 Strategic Entry Points

The project creates eight strategic entry points for gender transformative action:

- Governance reform (Activity 1.1.4): institutionalize 30% women's representation in climate governance.
- Women led artisanal and NWFP value chains: six priority value chains (opuntia, olive, rosemary, wool, esparto, mint) aligned with women's existing production knowledge.
- Small scale off soil livestock modules: poultry and beekeeping modules chosen as 'off soil' activities compatible with women's domestic management realities, with conservation of indigenous breeds (Ouled Djellal, Hamra, Makatia) explicitly recognizing women's traditional husbandry knowledge.
- Hydroponic forage systems: reducing dependence on degraded rangelands through hydroponic barley chambers.

- Solar energy kits: direct reduction of fuelwood collection burden for isolated women headed households.
- Nursery management employment: women's cooperative management of nurseries creates formal, paid employment in ecosystem restoration.
- CWW network: institutionalized social mobilization mechanism embedded in DSA structures.

Redesigning BADR, NASDA, and ANGEM products under Activity 3.1.4 to accommodate women's collateral constraints and seasonal income cycles through group-based lending, alternative collateral, and flexible repayment aligned with agro pastoral income.

6.3 Policy Reform Priorities

Based on the Gender Assessment findings:

- Mandate sex disaggregated data collection in all MADRP, DGF, and HCDS monitoring systems.
- Develop gender adapted financial products within BADR, NASDA, and ANGEM (Activity 3.1.4).
- Establish a formal monitoring framework for the MSNFCF Intersectoral Action Plan for Rural Women.

8. GAP Implementation Tables by Component

8.1 COMPONENT 1: Enabling Governance Framework & Climate Information

Expected Gender Result: Enhanced institutional and knowledge governance frameworks are gender responsive and inclusive of women, men, youth and vulnerable groups enabling meaningful participation, use of disaggregated data and accountability for equitable climate adaptation benefits.

Output 1.1: Regulatory, Financial & Institutional Framework Strengthened

Project Activity	GAP Ref.	Description	Indicator	Baseline	Target	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Responsible	Budget (USD)
1.1.4. Establish Multi Stakeholder Climate Governance Platform dedicated to the Green Dam	GAP 1.1.4	Establish and enforce binding women's representation targets (≥30%) across all six Wilaya Climate Adaptation Committees and the National AGD Advisory Committee.	% women in each Wilaya Climate Adaptation Committee; % National AGD Advisory Committee; % committees with documented women's leadership and decision making	0	≥30% women in all six Wilaya Committees and National Committee with documented participation	X							DGF / ANCC / PMU Gender Specialist	0 (Institutional)

Output 1.2: Science Based Climate Information Systems Established and Operational

Project Activity	GAP Ref.	Description	Indicator	Baseline	Target	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Responsible	Budget (USD)
1.2.1. Establish a Climate & Ecological Observation Network at AGD territory level	GAP 1.2.1	Integrate sex and age disaggregated data collection into all observatory socio economic monitoring surveys.	Number of observatory survey tools with mandatory sex/age disaggregation; number of annual gender analysis outputs	0	100% survey tools sex disaggregated; ≥1 gender analysis output produced annually	X	X						PMU Gender Specialist / CRSTRA	0 (Integrated)
1.2.2. Develop & Deploy a	GAP 1.2.2	Include a gender module in the system design requirements. All beneficiary tracking fields include	Gender module operational; % relevant activities reporting	0	1 operational dashboard; 100% of relevant activities	X							CRSTRA / PMU Gender Specialist	0 (Integrated)