HelpAge India | Fighting isolation, poverty, neglect

Climate Resilient Ageing:

Ensuring Care, Dignity & Agency

A HelpAge India Report 2026

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LIST OF ABBREVIATIONS

Abbreviation	Full Form
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
CBDRR	Community-Based Disaster Risk Reduction
CAPI	Computer-Assisted Personal Interviewing
CPP	Cyclone Preparedness Programme
CRI	Composite Resilience Index
DDMA	District Disaster Management Authority
DRR	Disaster Risk Reduction
FAO	Food and Agriculture Organization
FGD	Focus Group Discussion
IFRC	International Federation of Red Cross and Red Crescent Societies
IGNOAPS	Indira Gandhi National Old Age Pension Scheme
IPCC	Intergovernmental Panel on Climate Change
IPP	Intersectional Place Perspective
KII	Key Informant Interview
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
NDMA	National Disaster Management Authority
NGO	Non-Governmental Organisation
NPHCE	National Programme for Health Care of the Elderly
OSDMA	Odisha State Disaster Management Authority

PM-JAY	Pradhan Mantri Jan Arogya Yojana
PMAY-G	Pradhan Mantri Awas Yojana – Gramin
PMVVY	Pradhan Mantri Vaya Vandana Yojana
SDMA	State Disaster Management Authority
SEC	Socio-Economic Classification
SHG	Self-Help Group
UNDP	United Nations Development Programme
UNDRR	United Nations Office for Disaster Risk Reduction
WHO	World Health Organization

GLOSSARY OF KEY TERMS

Adaptive Capacity
The ability of individuals, households, communities, or institutions to adjust to climate-related risks, respond effectively to shocks, and take actions that reduce future vulnerability.

Age-Inclusive Disaster Risk Reduction
Approaches to disaster preparedness, response, recovery, and adaptation that recognise the specific needs, capacities, and contributions of older persons.

At-Risk Factors
Characteristics or circumstances that increase the likelihood of an individual experiencing adverse impacts from climate-related hazards. These may include poor health, impairment, poverty, social isolation, or unsafe housing.

Care Ecosystem
The network of formal and informal actors, services, institutions, and relationships that provide care and support to older persons, including families, communities, health systems, and government programmes.

Climate Adaptation
Actions taken to adjust to actual or expected climate change and its impacts in order to reduce harm and strengthen resilience.

Climate Change
Long-term changes in temperature, rainfall, weather patterns, and environmental conditions primarily driven by human activities, particularly greenhouse gas emissions.

Climate Resilience
The ability of individuals, households, communities, and systems to anticipate, withstand, recover from, and adapt to climate-related shocks and stresses.

Climate Shock
A sudden climate-related event such as flooding, cyclones, storms, heatwaves, or droughts that disrupts normal living conditions and livelihoods.

Composite Resilience Index (CRI)
A multidimensional measure developed for this study to assess resilience across physical, economic, social, health, institutional, and environmental dimensions.

Coping Mechanisms
Short-term actions undertaken by individuals or households to manage the immediate impacts of climate-related events and environmental stressors.

Disaster Risk Reduction (DRR)
Policies, strategies, and practices aimed at reducing exposure to hazards, lowering vulnerability, and strengthening preparedness and resilience.

Early Warning System
A mechanism for providing timely information about impending hazards to enable individuals and communities to take protective action before an event occurs.

Environmental Stressors
Ongoing environmental conditions that adversely affect wellbeing, such as extreme heat, water scarcity, dampness, poor ventilation, pollution, or coastal erosion.

Exposure
The extent to which people, assets, or communities come into contact with climate-related hazards.

Geographic Context
The environmental, climatic, physical, and locational characteristics of a place that influence people's experiences of climate risks and resilience.

Health Resilience
The ability of individuals and health systems to prevent, manage, and recover from health impacts associated with climate-related events and environmental stressors.

Household Vulnerability
The degree to which household conditions increase susceptibility to climate-related impacts due to factors such as poor housing, poverty, social isolation, or limited resources.

Impairment
A long-term physical, sensory, cognitive, or mental condition that affects an individual's ability to perform daily activities.

Institutional Resilience
The capacity of public institutions, community organisations, and service providers to prepare for, respond to, and support recovery from climate-related events.

Intersectionality
The recognition that individuals experience overlapping social identities and disadvantages, such as age, gender, impairment, poverty, or social status, which shape their experiences and outcomes.

Intersectional Place Perspective (IPP)
The analytical framework used in this study that examines how social identities and place-based environmental conditions interact to influence climate-related risks, resilience, and wellbeing among older persons.

Livelihood Security
The extent to which individuals or households can sustain income, resources, and means of living in the face of economic or environmental shocks.

Low-Intensity Disasters
Climate-related events that may not attract large-scale emergency responses but create cumulative and recurring impacts on livelihoods, health, housing, and wellbeing over time.

Older Persons
Individuals aged 60 years and above, consistent with the definition adopted in this study and in many policy frameworks in India.

Preparedness
Actions taken before a disaster or climatic event to reduce risk, improve response capacity, and minimise potential impacts.

Recovery
The process through which individuals, households, and communities restore or improve their living conditions following a disaster or climatic event.

Resilience
The capacity to anticipate, withstand, adapt to, and recover from shocks and stresses while maintaining or improving wellbeing.

Risk Communication
The process of sharing information about hazards, risks, preparedness measures, and protective actions with affected populations.

Slow-Onset Hazards
Climate-related processes that develop gradually over time, such as drought, coastal erosion, water scarcity, salinisation, and increasing temperatures.

Social Protection
Public policies and programmes designed to reduce poverty, vulnerability, and social exclusion through measures such as pensions, healthcare, food support, and welfare schemes.

Social Support Networks
Relationships with family members, neighbours, friends, community groups, and organisations that provide emotional, practical, informational, or financial assistance.

Vulnerability
The extent to which individuals or groups are susceptible to harm from climate-related hazards due to social, economic, health, environmental, or institutional factors.

Wellbeing

The overall quality of life experienced by an individual, encompassing physical health, mental health, social connectedness, security, and life satisfaction.

EXECUTIVE SUMMARY

Introduction and Study Context

India is undergoing a rapid demographic transition at a time when climate change is intensifying the frequency and impact of environmental stresses such as heatwaves, droughts, flooding, coastal erosion and water scarcity. Older persons are particularly at risk because climate risks interact with age-related health conditions, reduced mobility, economic insecurity, social isolation and dependence on care systems. Being at risk is not shaped by age alone but by the intersection of multiple factors including gender, impairment, poverty, living arrangements and geographic location. Understanding these layered and place-based realities is therefore critical for strengthening resilience, improving preparedness, and ensuring that climate adaptation, disaster risk reduction and social protection systems are inclusive of the needs of older persons. The study adopts an Intersectional Place Perspective (IPP) to examine how these interacting social and environmental factors influence risk factors, coping capacity and resilience among older populations in rural India.

Study Design and Methodology

A robust mixed-methods research design was adopted to examine how low-intensity and slow-onset climate hazards affect older persons across diverse rural contexts in India. Covering 10 states and 20 districts, the study combined a large-scale survey of older persons with Focus Group Discussions, Key Informant Interviews, life histories, and case studies to capture both measurable outcomes and lived experiences. Guided by the Intersectional Place Perspective (IPP) framework, the methodology explored how age, gender, impairment, socio-economic status, living arrangements, and geographic context interact to shape being at risk and resilience. Quantitative and qualitative findings were integrated through triangulation, while a Composite Resilience Index was developed to assess resilience across physical, economic, social, health, institutional, and environmental dimensions. This approach provides a comprehensive evidence base for understanding climate-related risks, coping mechanisms, care systems, and resilience pathways among older persons, and for informing more inclusive and climate-responsive policies and programmes.

Key Findings

The analysis is based on 2,224 older persons across 10 states — Andhra Pradesh, Bihar, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Tamil Nadu, and Uttarakhand — including 36% aged 60–69 years, 35% aged 70–79 years and 28% aged 80 years and above; 63% were women, 33% were widowed, and 13% were living alone.

Profile of Older Persons, Household and Place Contexts

- Household composition: Most older persons live within family settings, with 73% residing with children or family members, while only 13% live alone. Dependence on children increases steadily with age, particularly among widowed older persons.
- Education profile: Educational deprivation is widespread, with 59% having no formal education and nearly 70% of women lacking any schooling. Functional illiteracy remains extremely high, with 97% of those without formal education unable to read or write.
- Impairment and mobility constraints: Nearly 46% report at least one long-term impairment affecting daily activities, most commonly mobility difficulties (32%) and vision impairment (24%). Dependence on others is particularly high for transportation (67%), managing money (64%) and phone use (61%).
- Economic dependency: Almost 48% are financially dependent on others to some extent, while 92% have a personal monthly income below ₹10,000. Women, widows and the oldest-old experience the highest levels of economic insecurity.
- Housing conditions: Housing risk factors are substantial, with 65% living in kutcha or semi-pucca houses, 60% not considering their homes fully safe, and 69% reporting at least one major housing problem such as dampness, poor ventilation or structural weakness.
- Geographic and environmental exposure: Climate-related hazards are widespread, affecting 78% of respondents in the last three years. Heatwaves (45%), flooding (27%) and drought (20%) are the most commonly experienced hazards, while 37% of exposed older persons reported moderate or severe impacts.
- Ventilation and indoor thermal conditions: 40% of respondents report poor ventilation or excessive indoor heat, rising to 55% among Scheduled Tribe households. Older persons with impairments are disproportionately concentrated in these thermally stressful living environments.
- Indoor heat and health impacts: Among those affected by heatwaves, 90% stayed indoors and 81% increased water intake or cooling measures. Despite these actions, 74% reported increased illness, 44% worsening of existing health conditions, and 33% difficulty accessing healthcare services.
- Water stress: 20% of respondents experienced drought or water scarcity. Key coping mechanisms included reducing water use (73%), storing water (58%), changing livelihood activities (42%), and purchasing water from external sources (32%).
- Dampness and humidity: 41% of respondents report water leakage and damp walls, increasing to 51% among those living alone. These conditions contribute to poor living environments and heightened health risks among at risk older persons.
- Composite at risk profile: The groups facing the greatest compounded risk factors include older persons living alone (13%), widows (33%), oldest-old aged 80+ (28%),

Scheduled Tribe older persons (17%), never-married older persons (6%), and those with cognitive, communication or mental health difficulties (12%), all of whom experience overlapping economic, social, health and environmental disadvantages.

Care Needs, Dependency and Support

- The analysis is based on 1,869 older persons with reported care needs drawn from the overall sample of 2,224 older persons across 10 states
- Nature of care needs: Dependency levels are substantial, with 30% requiring assistance with getting in and out of bed, 27% needing support with bathing and personal hygiene, and 27% requiring help with mobility within the home. Instrumental dependency is even higher, with 67% needing assistance with transportation, 64% with managing money, 63% with shopping, and 61% with phone use.
- Care providers: Care remains overwhelmingly family-based, with 94% receiving care from family members. The most common caregivers are sons (31%), spouses (30%), and daughters-in-law (17%), together accounting for the majority of older persons' care provision.
- Gendered caregiving patterns: Nearly 49% of older men are cared for by their spouse, whereas older women rely primarily on sons (32%) and daughters-in-law (24%), reflecting the impact of widowhood and gendered caregiving norms.
- Care after widowhood and advanced age: Among widowed older persons, 43% rely on sons and 27% on daughters-in-law for care. As age increases, reliance on spouses declines from 37% among those aged 60–69 to 21% among those aged 80+, while dependence on daughters-in-law rises substantially.
- Care among those living alone: Care arrangements are particularly fragile among older persons living alone. Among those needing care, 38% depend on neighbours or community members, 20% on family members living elsewhere, and 16% receive no care at all, representing the most acute unmet care need in the study.
- Frequency of care: Care provision is generally intensive, with 79% receiving care daily and 90% receiving care at least a few times each week. However, only 28% of those living alone receive daily care, compared to 84% of those living with family.
- Adequacy of care: Overall care adequacy is high, with 65% reporting their care needs are fully met and 30% saying they are mostly met. However, among those living alone, 23% report their needs are mostly or entirely unmet, compared with only 1–2% among those living with family or a spouse.
- Challenges in receiving care: Despite generally positive care outcomes, 69% report at least one challenge in receiving care. The most common issue is caregiver unavailability when needed (40%), followed by lack of caregiver time (17%), high cost of care (15%), distance from family (13%), and neglect or lack of attention (10%).
- Care challenges among at risk groups: Older persons with cognitive or mental health difficulties face the greatest barriers, with 52% reporting caregiver unavailability and

17% reporting neglect. Those aged 80+ also face increasing caregiver time constraints and higher levels of neglect.

- Respect, care and fair treatment: Most respondents report positive family relationships, with 60% never feeling disrespected or neglected and 30% experiencing such treatment only rarely. However, 10% report experiencing disrespect sometimes or often, indicating a significant minority facing mistreatment within the household.
- Disrespect and social isolation: Experiences of disrespect are highest among those living alone, where 26% report feeling disrespected sometimes or often, compared with 8–9% among those living with family or a spouse. Single never-married older persons and Scheduled Tribe respondents also report poorer treatment outcomes.
- Changes in treatment over time: Perceptions of family treatment have generally improved, with 66% reporting improved respect, care and fairness over the past three years, while only 5% report deterioration. Nevertheless, those living alone and Scheduled Tribe respondents report weaker improvements and higher levels of worsening treatment.
- Intersectional risk factors in care: The findings show that care risk factors are concentrated among older persons living alone, the oldest-old, widowed and never-married older persons, and those with physical, cognitive or mental health impairments, where multiple disadvantages combine to increase dependency and reduce care adequacy.

Livelihoods, Income and Financial Security

- Occupation/income profile: 49% receiving pensions, while a substantial proportion continue to work through self-cultivation (25%), agricultural wage labour (13%) and non-agricultural wage labour (12%). At the same time, 16% report no work and no income source, highlighting significant economic risk factors.
- Work and financial independence: Financial independence is highest among those engaged in small businesses (70%), self-cultivation (65%) and livestock activities (63%), while pension recipients continue to experience dependency, with 45% relying partly or fully on others despite receiving pensions.
- Age-related livelihood decline: As age increases, active participation in farming and wage labour declines, while the proportion with no work and no income rises from 11% among those aged 60–69 to 21% among those aged 80+, increasing economic risk in later life.
- Work patterns: Among the 1,178 older persons still working, 46% report seasonal work, 13% irregular work, and only 40% have year-round employment, making livelihoods highly sensitive to climate and seasonal disruptions.
- Duration and intensity of work: Among seasonal workers, 70% work for six months or less each year, while most working older persons continue to work 4–8 hours per day, reflecting continued economic necessity rather than retirement.

- Land ownership and farming: A majority (55%) have no agricultural land, while only 37% own land. Among those with access to land, 50% farm primarily for household consumption and only 3% farm mainly for commercial purposes, indicating limited market-linked livelihoods.
- Risk factors linked to landlessness: older persons living alone, widowed older persons and financially dependent households show lower land ownership, reducing their access to productive assets and increasing financial insecurity.
- New livelihood opportunities: A majority (58%) identified at least one new earning opportunity during the last three years, mainly in agriculture (26%), non-agricultural wage work (18%), and government employment schemes (15%). However, 35% reported no new opportunities, particularly among those with impairments.
- Migration for work: 18% of households reported migration for employment, with sons accounting for 76% of migrants. Migration is more common in households facing impairment-related economic pressures and increases with the severity of climate-related impacts.
- Nature of migrant work: Migrants are mainly engaged in factory or industrial work (45%) and construction/non-agricultural labour (26%). Lower-income households are more likely to migrate into insecure and physically demanding forms of work.
- MGNREGS (VB-G RAM G) awareness and participation: While 64% are aware of the scheme, only 20% report household participation. Participation falls sharply through the implementation funnel, with only 5.5% receiving more than 50 days of work and less than 1% receiving the full 100-day entitlement.
- Income sources: Government pensions remain the dominant income source, supporting 77% of respondents, followed by family financial support (25%). Older women depend more heavily on family transfers, while income-generating sources decline steadily with age.
- Income adequacy: Despite generally low incomes, 56% consider their income fully or mostly sufficient for daily needs. However, perceptions of adequacy are significantly lower among older persons living alone, those who are fully financially dependent, and those with no personal income.
- Financial autonomy: Nearly 46% make financial decisions independently, but autonomy declines with age. Among those aged 80+, only 38% retain full financial control, while 11% report that others make decisions entirely on their behalf.
- Financial hardships: Financial hardship is widespread, with 77% experiencing at least one difficulty in the past year. The most common challenges are inability to afford medicines (52%), borrowing money (41%), and inability to afford sufficient food (29%). These hardships are particularly severe among older persons with impairments and mental health conditions.
- Financial security and banking access: While 71% feel financially secure to some degree, confidence is lower among those living alone and among persons with mental

health conditions. Formal financial inclusion is high, with 95% having a bank or post office account, but only 50% operate their accounts independently, with dependence on others increasing sharply with age and lower education levels.

- Intersectional risk factors: The groups most at risk of livelihood and financial insecurity include older persons living alone, widowed and never-married older persons, women, persons with impairments, those with cognitive or mental health conditions, and landless households, where multiple economic and social disadvantages converge.

Health Status, Healthcare Access and Barriers to Care

- Self-rated health: Just over half (53%) rate their health as good or very good, while 32% describe it as average and 15% as poor or very poor, indicating that nearly half do not perceive themselves to be in good health.
- Health risk factors among older persons: Health perceptions decline significantly with age and impairment. Older persons aged 80+ report poorer health than younger age groups, while those with cognitive, communication and mental health difficulties record the lowest health scores of all groups.
- Income and health: Better financial circumstances are strongly associated with better health. Older persons with no income report the poorest health, while health ratings improve steadily across income levels, highlighting the close link between economic security and wellbeing.
- Chronic conditions: Among those reporting average, poor or very poor health, the most common conditions are chronic pain (52%), mobility difficulties (52%), vision problems (38%) and high blood pressure (36%). Other concerns include diabetes (18%), hearing loss (17%), memory issues (13%) and respiratory problems (12%).
- Age-related health decline: Mobility difficulties increase from 49% among those aged 60–69 to 56% among those aged 80+, while vision, hearing, memory and mental health concerns also rise steadily with age.
- Health and financial dependency: Older persons who are financially dependent experience a heavier burden of chronic illness, including higher rates of mobility difficulties (61%), hearing loss (21%), memory issues (17%) and heart-related conditions (15%) compared to financially independent respondents.
- Depression and loneliness: While 7% report depression or loneliness, rates are much higher among those with no personal income (12%), those living alone (13%), and those dependent on caregivers or institutions (21%), demonstrating how social isolation and economic insecurity combine as important risk factors.
- Healthcare accessibility: Although 88% report at least some access to healthcare, only 35% say they can always access healthcare when needed. Nearly two-thirds experience inconsistent access, creating challenges for managing chronic health conditions.

- Groups facing the greatest access challenges: Poor healthcare access is highest among those with poor health (25%), those living alone (16%), and respondents with no formal education (13%), showing the interaction of health, social support and educational disadvantage.
- Healthcare facilities used: Government facilities remain the backbone of healthcare provision, with Primary Health Centres (51%) and government hospitals (49%) being the most commonly accessed services. Private doctors or clinics (41%) and ASHA workers (25%) also play important roles.
- Living alone and healthcare access: Older persons living alone rely more heavily on PHCs (56%) and community health workers, but have lower access to private doctors (34%) and pharmacies, narrowing their healthcare choices and increasing dependence on public services.
- Healthcare support received: Nearly half (48%) receive regular health check-ups, 32% receive subsidised medicines, 27% receive family support for medical expenses, and 24% have health insurance or pension-linked coverage. However, 21% receive no healthcare support at all.
- Healthcare financing gaps: Support declines among the oldest-old (80+), who receive lower levels of both family financial support and insurance coverage despite having the highest healthcare needs.
- Barriers to medical care: The most common barriers are difficulty travelling to facilities (49%), high treatment costs (41%), health facilities being far away (38%), and long waiting times (37%). These barriers often occur simultaneously, compounding difficulties in accessing care.
- Most at-risk groups: Single older persons, those living alone, older persons with poor health, those with impairments, and those facing financial hardship report the highest levels of healthcare barriers, particularly relating to travel, treatment costs and lack of someone to accompany them.
- Intersectional risk factors: The groups facing the greatest health-related risks include older persons living alone, the oldest-old, persons with cognitive, communication or mental health difficulties, financially dependent older persons, and those living in poor housing conditions, where multiple disadvantages combine to weaken health resilience.

Family Support and Social Connectedness

- Primary sources of support: Family remains the foundation of support, with spouses (35%) and sons (31%) being the most relied-upon persons. Together with daughters-in-law (11%), they form the core support system for most older persons. However, 9% report having no family support or no family at all.
- Support patterns change with age and widowhood: Reliance on spouses declines from 40% among those aged 60–69 to 26% among those aged 80+, while reliance on

daughters-in-law increases. Widowed older persons depend primarily on sons (35%) and daughters-in-law (15%) for support.

- At-risk groups: Single never-married older persons face the weakest family support systems, with nearly 70% reporting either no family or no family member they can rely upon.
- Family interaction: Family contact remains strong for most, with 79% interacting with family members daily and another 12% several times a week. However, among older persons living alone, daily interaction falls sharply to 23%, while 25% report rare or no family interaction.
- Interaction and impairment: Older persons with cognitive, communication and mental health difficulties report the highest levels of daily family interaction (84–89%), reflecting greater care needs rather than stronger social connectedness.
- Nature of family relationships: The most common forms of interaction are talking and spending time together (84%), emotional support (64%), sharing meals (58%), and help with daily activities (49%). Financial support is reported by 34%.
- **L**iving alone and social isolation: Every dimension of family interaction is substantially lower among older persons living alone. Only 37% report regularly talking with family, 32% receive emotional support, and 16% share meals with family members, indicating a significant erosion of social connectedness.
- Feeling heard and included: Most older persons feel listened to by family members, with 59% always feeling heard. However, only 46% always feel included in family decisions, showing that being heard does not necessarily translate into participation.
- At-risk groups for exclusion: older persons living alone record the lowest levels of inclusion and participation in family decision-making. Inclusion is also lower among those with hearing, communication and cognitive difficulties.
- Loneliness and emotional wellbeing: While 42% never feel lonely, 12% feel lonely often or always. Loneliness is highest among older persons living alone, those with communication difficulties, and those with sensory impairments, demonstrating that social connection matters more than physical presence alone.
- Respect within the family: Most respondents report respectful treatment, with 58% always feeling respected by family members. However, 12% feel respected rarely or never, and perceptions of respect decline steadily with age.
- Changes in family interaction: Family relationships remain broadly stable, with 54% reporting no change and 30% reporting increased interaction over the past three years. However, 15% report reduced or no interaction, particularly among those living alone and never-married older persons.
- Support during emergencies: Family support remains strong overall, with 55% reporting that family is always available in emergencies. However, among older persons living alone, only 24% report family always being available, while 37% say family is rarely or never available when urgently needed.

- Community participation: Participation in organised community life is limited, with 73% belonging to no community group or organisation. Membership is highest in self-help groups (11%), women's groups (7%), religious groups (7%), and older persons' groups (6%).
- Community participation declines with age: non-participation increases from 65% among those aged 60–69 to 82% among those aged 80+, while widowed and less educated older persons are also less likely to participate in community activities.
- Community support: Only 33% report that community support is always available when needed, while 25% say support is rarely or never available. Community support is weakest among older persons living alone and single older persons.
- Most valued forms of community support: The support considered most helpful includes assistance during illness (61%), emotional support (58%), financial help (39%), and companionship or social interaction (35%).
- Intersectional risk factors: The groups most at risk of social isolation include older persons living alone, widowed and never-married older persons, those with communication, cognitive or mental health difficulties, the oldest-old, and those with low levels of education and community participation.

Government Schemes and Institutional Support

- Awareness of government schemes: Awareness is highest for the Public Distribution System (93%), followed by old-age pensions or financial support (71%), free or subsidised healthcare (67%), and housing support schemes (62%). Awareness is much lower for NPHCE (20%), digital training for older persons (17%), and older persons' helplines (11%).
- Awareness gap among at-risk groups: Awareness increases significantly with education. Older persons with graduate-level education know an average of 7.7 schemes, compared with only 4.2–4.9 schemes among those with primary or no formal education, indicating that those most likely to need support are often the least aware of available benefits.
- Health-related awareness disparities: Older persons reporting good health are aware of more schemes (5.3 on average) than those with poor health (3.9). Awareness of NPHCE falls from 26% among those in good health to only 12% among those in poor health, demonstrating a significant information gap among those with greater health needs.
- Housing-related awareness disparities: Older persons living in highly at risk housing conditions know an average of only 3.5 schemes, compared with 5.5 schemes among those with lower at risk housing. Awareness of housing and welfare support schemes is also substantially lower among those most likely to need them.
- Access to benefits: Major welfare schemes such as state old-age pensions, IGNOAPS and PDS are generally received on a regular monthly basis by most beneficiaries, while

housing and insurance-related schemes follow different benefit cycles aligned to their design.

- Nature of support received: Pension schemes primarily provide regular cash support, while programmes such as PDS and Ayushman Bharat–PMJAY are delivered largely through food security and healthcare services, highlighting the complementary role of cash and in-kind benefits.
- Ease of accessing schemes: Nearly 65% of beneficiaries describe accessing schemes as easy, while 20% report difficulty. Overall perceptions are positive, but one in five older persons still experiences significant access challenges.
- Groups facing the greatest access difficulties: Difficulties are highest among those with poor health (30%), those severely affected by climate-related shocks (30%), persons with no formal education (22%), and those in lower socio-economic groups (22%).
- Key barriers to accessing schemes: The most frequently reported barriers are lack of awareness about schemes (57%), complex procedures and documentation (53%), difficulty understanding eligibility requirements (45%), and mobility or travel constraints (33%).
- Administrative and digital barriers: Additional challenges include long waiting times and delays (25%), digital access difficulties (15%), and lack of support during the application process (10%), highlighting the need for more age-friendly service delivery.
- Perceived usefulness of schemes: Government welfare programmes are viewed positively, with 90% of respondents considering schemes useful, including 28% who rate them as very useful. Only 9% regard schemes as having limited or no usefulness.
- Institutional support across climate hazards: Welfare schemes are perceived as most useful among those exposed to cyclones and severe storms, while usefulness ratings are lower among those affected by heatwaves, flooding and coastal or riverbank erosion, suggesting that support systems are less responsive to slow-onset climate stresses.
- Intersectional risk factors: The groups most at risk of exclusion from institutional support include older persons with low education, poor health, high at risk housing, lower socio-economic status, and those severely affected by climate-related hazards, where multiple disadvantages combine to reduce awareness and access.

Climate Risk Factors, Resilience and Recovery

- Climate exposure is widespread, with 78% of older persons experiencing at least one climate-related hazard during the previous three years. Heatwaves (45%), flooding (27%) and drought (20%) were the most common hazards, while many respondents experienced repeated events, increasing pressure on recovery and adaptation capacities.
- Climate impacts extend well beyond immediate exposure, affecting health, livelihoods, housing, care arrangements, social relationships and overall wellbeing. Among those

exposed to hazards, 37% experienced moderate or severe impacts, with the highest impacts reported among older persons living alone and those with impairments.

- Older persons demonstrate considerable adaptive capacity, with many adopting practical coping strategies such as drawing on family support, using personal savings, relying on community networks, modifying daily routines and accessing government assistance during climate-related events.
- Family support remains the primary pillar of resilience, followed by personal savings, community support and government assistance. Older persons living alone are significantly less able to rely on family networks and therefore face greater resilience challenges during and after disasters.
- Financial constraints are the single largest barrier to resilience, reported by 69% of respondents, followed by health limitations, inadequate information, weak institutional support and community-level challenges. These barriers are particularly severe among those with poor health, housing risk factors and repeated disaster exposure.
- Health, social connectedness and economic security are the strongest drivers of resilience. Older persons with good health, financial independence, stable livelihoods, stronger family support and secure housing consistently report better preparedness, adaptive capacity and recovery outcomes.
- Key risk factors reducing resilience include living alone, impairment, poor physical or mental health, advanced age, poverty, financial dependence, weak institutional support and residence in hazard-prone locations. These factors often combine to create multiple and overlapping disadvantages.
- The Composite Resilience Index (CRI) shows an overall resilience score of 57.1 out of 100, indicating a moderate-to-high level of resilience. Overall, 75% of respondents fall within the Moderate-to-High Resilience category, while only 1% exhibit Very Low Resilience.
- Significant differences in resilience are observed across population groups. Resilience is consistently lower among older persons living alone, those with poor health, cognitive or mental health difficulties, financial dependency, housing risk factors, and low incomes, confirming that resilience is shaped by social and economic circumstances as much as by hazard exposure itself.
- Viewed through the Intersectional Place Perspective (IPP), resilience emerges as the product of interactions between individual characteristics, household resources, social relationships, institutional support and environmental conditions. Climate resilience is therefore not determined by hazards alone but by the resources and support systems available to older persons before, during and after climate shocks.

Policy, Service Delivery, Inclusion Gaps and Perceived at Risk factors

- Most older persons view government schemes and disaster-related services positively, with 62% considering available support sufficient during climate-related events. However, satisfaction declines sharply among those with poor health, insecure housing, financial dependence, social isolation and severe disaster impacts, indicating that the most at risk groups remain least satisfied with existing support systems.
- Among those who perceive support as inadequate, the most significant gaps relate to healthcare services during climate shocks (62%), financial assistance and social protection (51%), emergency response (41%), and disaster preparedness and early warning systems (38%). These gaps are particularly pronounced among older persons facing repeated climate exposure, chronic health conditions and economic insecurity.
- Nearly one-quarter of respondents (23%) report having been excluded from a government scheme or support programme for which they were eligible. Exclusion is highest among those affected by coastal erosion, heavy rainfall, severe disaster impacts, physical impairments, depression or loneliness, and housing risk factors.
- The leading reasons for exclusion are lack of awareness (64%), difficult application procedures (51%), documentation barriers (50%), lack of transparency in beneficiary selection (37%), and delays in approvals or benefit delivery (31%). These findings suggest that administrative and information barriers often prevent at risk older persons from accessing available support.
- Perceptions of disaster relief inclusiveness are generally favourable, with 63% considering relief efforts inclusive of older persons. Nevertheless, perceptions are substantially weaker among those with poor health, depression or loneliness, severe housing risk factors, low income and severe disaster exposure, indicating that relief systems are not reaching all at risk groups equally.
- Older persons identify poor health or impairment (50%), living alone (48%), and poverty or low income (46%) as the principal factors that increase risk factors during climate-related disasters. Risk factor perceptions rise significantly among those exposed to severe and repeated hazards, particularly coastal erosion, flooding and heavy rainfall.
- A strong majority (76%) believe that some groups of older persons face greater disaster-related challenges than others. The groups most frequently identified are the oldest-old (80+ years), older persons living alone, those with impairments or chronic illness, older women, poor older persons and those lacking family support.
- Respondents attribute heightened ‘at risk’ factors primarily to economic insecurity, poor health, social isolation, dependence on others, and limited family support, reinforcing the view that climate risk factors arise from multiple overlapping disadvantages rather than age alone.
- Viewed through the Intersectional Place Perspective (IPP), the findings demonstrate that climate resilience is shaped by the interaction of health, income, housing conditions, social support and environmental exposure. Older persons experiencing

multiple risk factors simultaneously consistently report poorer access to services, greater exclusion and higher disaster-related risks.

Good Practices and Pathways for Strengthening Climate Resilience

- Household preparedness forms the first line of resilience, with the most common coping practices being storing food in advance (55%), storing water (54%), housing or shelter improvements (31%), financial planning or savings (27%), and advance disaster planning (25%). These findings show that older persons primarily rely on practical self-preparedness measures to reduce climate risks.
- Climate experience drives preparedness. Older persons exposed to coastal erosion, floods, droughts and severe storms report significantly higher adoption of preparedness measures, including food and water storage, shelter improvements, livelihood diversification and advance planning.
- Family support remains the strongest community resilience mechanism, cited by 56% of respondents, followed by priority access to relief and services (32%), community monitoring or check-ins (24%), and community shelter or relocation support (21%). However, 22% report no community support mechanisms, indicating important local gaps.
- Community resilience is strongest in areas facing repeated climate risks, particularly coastal erosion and flood-prone locations, where community monitoring, volunteer support, shelter assistance and priority relief systems are more developed.
- Financial assistance emerges as the most valued government intervention, identified by 50% of respondents, followed by food and relief distribution (36%), accessible healthcare services (29%), early warning systems (22%), and shelter or relocation support (20%).
- At-risk older persons often benefit least from existing interventions. Those with poor health, depression or loneliness, social isolation and severe at risk housing are more likely to report that effective support initiatives do not exist in their area.
- Looking ahead, respondents identify greater financial support (72%) and improved healthcare access (51%) as the two most important priorities for strengthening resilience. Other key needs include stronger community support systems (40%), improved housing (37%), support for older persons living alone (36%), and livelihood support (35%).
- Support needs become significantly greater among older persons with poor health, those living alone, widowed older persons, persons with impairments, those living in at risk housing, and those experiencing repeated or severe climate impacts, highlighting the cumulative nature of climate risk.
- The study identifies five key models for replication:
    - Household Preparedness and Self-Reliance,
    - Family and Community Care Networks,

- Integrated Health and Social Protection,
- Age-Inclusive Preparedness and Early Warning Systems, and
- Targeted Support for High-Risk Older Persons.

Together, these provide a practical framework for strengthening resilience across diverse hazard contexts.

- Viewed through the Intersectional Place Perspective (IPP), the findings show that resilience is strongest when household preparedness, family support, community solidarity, healthcare access, financial protection and age-responsive institutional systems work together. Older persons facing multiple risk factors require integrated rather than stand-alone interventions.

Beyond the Numbers – Qualitative Study Insights from Older Persons, Communities and Key Stakeholders

- The qualitative component comprised **100 interactions across 10 states**, including **30 Key Informant Interviews (KIIs), 60 Focus Group Discussions (FGDs) and 10 Life Stories/Appreciative Inquiry Case Studies**, providing insights from older persons, caregivers, community stakeholders and government functionaries.
- Older persons consistently reported that **climate change is no longer experienced as isolated disasters but as a continuous erosion of livelihoods, health, care systems and everyday wellbeing**, driven by rising temperatures, changing rainfall patterns, water scarcity, flooding, droughts and environmental degradation.
- The findings strongly validate the **Intersectional Place Perspective (IPP)**, demonstrating that climate risks are shaped by the interaction of **age, gender, widowhood, impairment, poverty, living arrangements and local environmental conditions**, rather than by hazard exposure alone.
- **Health emerged as the most significant pathway through which climate change affects older persons**, with participants describing worsening chronic illnesses, heat-related stress, respiratory problems, reduced mobility, mental distress and disruptions in access to medicines and healthcare services during climatic events.
- **Family remains the primary source of support and resilience**, with spouses, children and extended family members providing care, financial assistance, evacuation support and emotional support during crises. However, migration, changing family structures and economic pressures are weakening traditional support systems in many areas.
- **Social isolation emerged as a major concern**, particularly among widows, older persons living alone, persons with impairments and the oldest-old, who often reported loneliness, reduced social participation and greater difficulty accessing support during emergencies.
- Participants highlighted that **community solidarity, neighbour support, volunteer networks and informal caregiving arrangements** frequently serve as the first line of

assistance during climatic shocks, often filling gaps where formal institutional support is limited.

- Older persons have developed a range of **local coping and adaptation strategies**, including food and water storage, livelihood diversification, traditional environmental knowledge, housing modifications, emergency savings and mutual support arrangements.
- Government interventions such as **pensions, ration support, healthcare services, relief assistance and ASHA outreach** were widely valued and often viewed as essential for survival and recovery. However, awareness, access and adequacy remain uneven, particularly among those facing multiple risk factors.
- Stakeholders identified important gaps in **early warning dissemination, disaster preparedness, age-sensitive evacuation systems, healthcare outreach, social protection delivery and local-level institutional coordination**, particularly for older persons living alone and persons with impairments.
- Across all qualitative groups, **widows, persons with impairments, older persons aged 80+, those living alone, poorer households and those residing in climate-exposed locations** were consistently identified as the groups facing the highest levels of risk and exclusion.
- The qualitative findings highlight that the most effective resilience pathways combine **household preparedness, family and community support, financial security, accessible healthcare, social protection and age-responsive institutional systems**, reinforcing the need for integrated and people-centred climate resilience strategies for older persons.

Conclusions

The study demonstrates that climate resilience among older persons extends far beyond exposure to climate hazards and is fundamentally shaped by the interaction of health, care, social protection, housing, livelihoods, social connectedness and environmental conditions. While many older persons have developed strong coping and adaptation mechanisms, resilience remains unevenly distributed, with the greatest risks concentrated among those facing multiple and overlapping risk factors, including poor health, impairment, widowhood, living alone, financial insecurity and residence in climate-exposed locations. The findings validate the Intersectional–Place Perspective (IPP), showing that climate risks and resilience outcomes are influenced as much by social and structural inequalities as by hazard exposure itself. Family support, community cohesion, financial security, healthcare access and institutional support emerge as the strongest drivers of resilience, highlighting the need for a more integrated and age-inclusive approach to climate adaptation and disaster risk reduction.

Recommendations

The study calls for a shift from hazard-centred responses towards people-centred and age-responsive resilience systems that address the underlying drivers of risk faced by older persons. Priority actions include strengthening climate-resilient healthcare and older persons' care systems, expanding social protection and livelihood support, improving disaster preparedness and early warning systems, promoting climate-resilient housing and environmental health interventions, and strengthening community-based care networks. Policies and programmes should adopt a differentiated and targeted approach that prioritises older persons facing multiple risk factors, particularly those living alone, widows, persons with impairments, the oldest-old and financially insecure households. Over the longer term, stronger institutional coordination, age-disaggregated data systems, integrated planning and dedicated resilience frameworks for older persons will be essential for ensuring that climate adaptation, healthy ageing, social protection and disaster risk reduction efforts work together to build sustainable, inclusive and climate-resilient communities.

1. INTRODUCTION AND STUDY CONTEXT

1.1 Background

Population ageing and climate change are two of the most significant transformations shaping contemporary societies. Globally, the population aged 60 years and above is projected to increase from 1.1 billion in 2022 to 2.1 billion by 2050. India is also experiencing a rapid demographic transition, with the older persons' population expected to rise from approximately 149 million in 2022 to 347 million by 2050, accounting for over one-fifth of the country's population. This demographic shift has major implications for health systems, social protection, care arrangements and community resilience.

At the same time, climate change is increasingly affecting the daily lives of older persons through rising temperatures, erratic rainfall, droughts, flooding, coastal erosion, water scarcity and other environmental stressors. While major disasters often attract policy attention, many older persons are more frequently affected by slow-onset and low-intensity hazards that gradually erode health, livelihoods, mobility, housing conditions and social support systems. These impacts are particularly significant in rural areas where dependence on natural resources, limited infrastructure and weaker access to services increase exposure to climate-related risks.

1.2 Climate Change, Ageing and Risk

Older persons are disproportionately affected by climate change because ageing is often associated with declining mobility, chronic illnesses, sensory impairments, reduced adaptive capacity and greater dependence on care systems. Environmental stressors such as prolonged heat exposure, water scarcity, drought and coastal salinity can intensify existing health conditions and create additional barriers to daily living. Unlike sudden disasters, many climate-related risks accumulate gradually, creating persistent pressures on health, nutrition, livelihoods and wellbeing.

The impacts of climate change are also increasingly visible within everyday living environments. Rising temperatures, poor ventilation, indoor heat stress, water insecurity, dampness and environmental degradation affect physical comfort, mental wellbeing and quality of life. For older persons, these conditions can contribute to fatigue, respiratory difficulties, sleep disruption, reduced mobility and increased care needs. Climate resilience therefore extends beyond disaster response and includes the ability to maintain health, dignity, independence and wellbeing under changing environmental conditions.

1.3 The Intersectional Place Perspective (IPP) Framework

This study is guided by the Intersectional Place Perspective (IPP) framework, which recognises that climate-related risks are shaped by the interaction of social identities and place-based conditions. Rather than treating older persons as a homogeneous group, the framework examines how age intersects with gender, impairment, widowhood, socio-economic status, living arrangements and local environmental conditions to influence vulnerability and resilience.

The IPP framework highlights five interconnected dimensions:

Intersectionality – how multiple social identities combine to influence risk.

Place-Based Risk Factors – how geography, infrastructure and environmental conditions shape exposure.

Layered Disadvantage – how multiple forms of deprivation accumulate over time.

Structural Inequalities – how unequal access to resources, services and opportunities affects resilience.

Care Ecosystems – the role of family, community and institutional support systems in sustaining wellbeing and adaptation.

The framework therefore provides a comprehensive lens for understanding why some older persons experience significantly higher risks than others even when exposed to similar environmental hazards.

1.4 Study Rationale

Despite growing recognition of climate change and population ageing, limited evidence exists on how slow-onset and low-intensity climate stressors affect older persons in rural India. Existing research and policy responses have largely focused on major disasters, often overlooking the cumulative impacts of everyday environmental stress, declining livelihoods, health challenges and weakening care systems. There is also limited understanding of how climate risks vary across different groups of older persons and geographic settings.

This study seeks to address these gaps by examining how climate-related risks, resilience and access to support systems are shaped by the interaction of social and environmental factors. The findings aim to inform more inclusive, age-responsive approaches to climate adaptation, disaster risk reduction, social protection and healthy ageing.

1.5 Study Objectives and Research Questions

The primary objective of the study is to assess the impacts of slow-onset climate and environmental stressors on older persons through an IPP framework. Specifically, the study seeks to:

- Examine how age, gender, impairment, socio-economic status, living arrangements and place-based conditions influence climate-related risk and resilience.
- Assess the effects of climate stressors on health, livelihoods, care systems, housing and wellbeing.
- Identify resilience capacities at individual, household, community and institutional levels.
- Develop a multidimensional understanding of resilience through quantitative and qualitative evidence.
- Generate actionable recommendations for strengthening climate resilience among older persons.

The study is guided by questions relating to how climate stressors affect older persons, which groups face the greatest risks, how place-based factors shape resilience, what coping strategies are used, and how existing policies and support systems can be strengthened.

1.6 Analytical Approach

The study adopts a mixed-methods design combining quantitative surveys, qualitative interviews, focus group discussions and life histories. Quantitative analysis provides evidence on demographic characteristics, health, livelihoods, housing conditions, climate exposure and resilience outcomes, while qualitative methods capture lived experiences, perceptions, coping strategies and recovery pathways. The integration of these approaches enables a comprehensive understanding of both measurable outcomes and lived realities.

1.7 Conclusion

Climate change and population ageing are increasingly interconnected challenges that require integrated policy responses. The evidence reviewed in this chapter highlights that climate-related risks among older persons are shaped not only by hazard exposure but also by health status, socio-economic conditions, care systems, gender, impairment and local environmental contexts. The IPP framework provides a valuable lens for understanding these layered and interconnected risks while also recognising the resilience capacities of older persons, families and communities. The chapters that

follow build on this framework to examine the experiences, vulnerabilities, coping mechanisms and resilience pathways of older persons across diverse climatic and geographic settings in rural India.

2. LITERATURE REVIEW, POLICY LANDSCAPE, AND CONCEPTUAL FRAMEWORK

Climate change and population ageing are increasingly recognised as interconnected global challenges. Older persons are disproportionately affected by climate-related shocks and environmental stressors because of age-related changes in health, mobility, economic security and social support systems. Understanding climate resilience among older persons therefore requires a broader examination of ageing, vulnerability, resilience, disaster risk reduction, care systems and social protection. This chapter reviews the key conceptual and policy frameworks that inform the study and identifies the evidence gaps addressed through the Intersectional Place Perspective (IPP) framework.[1]

2.1 Understanding Risk Factors and Resilience

Contemporary disaster and climate literature emphasises that risk factors are not determined solely by exposure to hazards but are shaped by broader social, economic, political and environmental inequalities. Research on social vulnerability demonstrates that age, gender, health status, impairment, socio-economic position and access to services influence the ability of individuals and communities to prepare for, respond to and recover from environmental shocks.[2] [3] Older persons often face heightened risks because of declining mobility, chronic health conditions, dependency on care systems and social isolation.[4]

Recent resilience frameworks increasingly view resilience as a dynamic process encompassing absorptive, adaptive and transformative capacities. Rather than simply returning to pre-disaster conditions, resilience involves the ability to anticipate, adapt and recover while addressing underlying structural inequalities.[5] This perspective is particularly relevant for older persons whose resilience depends not only on individual coping strategies but also on family support, community networks, public services and institutional systems.

2.2 Ageing and Climate Change

The convergence of population ageing and climate change has emerged as a major concern within global development and public policy discourse. Research consistently demonstrates that older persons are more susceptible to both sudden disasters and slow-onset environmental stressors because of physiological, social and economic

[1] UN DESA (2023); WHO (2023)
[2] Blaikie et al. (1994) *At Risk*
[3] Cutter et al. (2003) Social Vulnerability Framework
[4] HelpAge International (2021)
[5] IPCC Sixth Assessment Report (2023)

factors associated with ageing.[6] Exposure to extreme heat, drought, flooding, water scarcity and environmental degradation can worsen chronic illnesses, increase mortality risks and reduce quality of life among older populations.[7]

Beyond physical health impacts, climate stress can also undermine livelihoods, social support systems and care arrangements. Environmental change often accelerates migration of younger family members, weakening traditional intergenerational support structures and increasing the risk of social isolation among older persons.[8] Consequently, climate adaptation for ageing populations is increasingly viewed as a matter of health, care, social protection and human rights rather than environmental management alone.

2.3 Older Persons and Disaster Risk Reduction

Historically, older persons have received limited attention within Disaster Risk Reduction (DRR) frameworks. Traditional approaches often viewed them primarily as vulnerable populations requiring assistance. However, more recent research highlights that older persons possess valuable experience, local knowledge and social memory that contribute significantly to community resilience.[9] Studies following major disasters have demonstrated that older persons play important roles in caregiving, community mobilisation, knowledge transmission and social support.[10]

International frameworks such as the Sendai Framework for Disaster Risk Reduction increasingly advocate age-inclusive approaches that integrate older persons into preparedness planning, risk communication, healthcare continuity and local resilience-building initiatives.[11] These approaches recognise older persons not only as beneficiaries of support but also as active contributors to resilience.

2.4 Intersectionality and Place-Based Risk

A growing body of literature highlights the importance of intersectionality in understanding ageing and climate risk. Intersectionality recognises that older persons are not a homogeneous group and that age interacts with other social identities such as gender, impairment, widowhood, poverty and social exclusion.[12] These overlapping disadvantages can significantly influence exposure, coping capacity and recovery outcomes.

[6] UN World Population Ageing (2023)
[7] WHO Climate Change and Health (2023)
[8] HelpAge International (2021); UNFPA (2023)
[9] WHO (2008) Older Persons in Emergencies
[10] UNDRR (2022)
[11] Sendai Framework for Disaster Risk Reduction 2015–2030
[12] Crenshaw (1989)

Complementing this perspective, place-based approaches emphasise that risk is shaped by geography, environmental conditions, infrastructure and service access.[13] Factors such as drought-prone locations, flood-prone settlements, poor housing, inadequate healthcare and geographic isolation can significantly influence resilience outcomes. Together, these perspectives provide the foundation for the IPP framework adopted in this study.

2.5 Everyday Environmental Stress, Care Systems and Social Protection

Recent literature increasingly recognises that climate change affects older persons not only through major disasters but also through everyday environmental stressors. Heat stress, poor ventilation, water scarcity, dampness, indoor air pollution and environmental degradation can create cumulative impacts on health, wellbeing and quality of life.[14] These chronic stressors often remain invisible within conventional disaster frameworks despite their substantial effects on ageing populations.

The literature also highlights the central role of care systems and social protection in supporting resilience. Family members continue to provide the majority of care in India, but migration, urbanisation and changing family structures are placing increasing pressure on traditional care arrangements.[15] At the same time, social protection mechanisms such as pensions, healthcare programmes and food security schemes provide essential support during periods of environmental and economic stress.[16] Strengthening care ecosystems and social protection systems is therefore increasingly viewed as a critical component of climate resilience for older persons.

2.6 Policy Landscape

India has established a range of policies and programmes that indirectly support climate resilience among older persons. These include social protection programmes such as the Indira Gandhi National Old Age Pension Scheme (IGNOAPS), healthcare initiatives including Ayushman Bharat–PMJAY, housing programmes such as PMAY-G, and disaster management frameworks operating at national, state and district levels.[17] While these programmes provide important support, existing evidence suggests that integration between ageing, climate adaptation and disaster risk reduction remains limited.[18]

[13] Cresswell (2015) *Place: An Introduction*
[14] WHO (2023); IPCC (2023)
[15] UNFPA India Ageing Reports; HelpAge India Studies
[16] ILO World Social Protection Report; HelpAge International
[17] Government of India Scheme Guidelines (IGNOAPS, PM-JAY, PMAY-G)
[18] NITI Aayog; HelpAge International Policy Reviews

2.7 Research Gaps and Conceptual Framework

Despite growing research on ageing and climate change, important evidence gaps remain. Existing studies often lack age-disaggregated analysis, provide limited understanding of the experiences of the oldest-old, inadequately examine interactions between age and other social identities, and rarely explore the role of place-based environmental conditions.[19] There is also limited evidence on the impacts of slow-onset environmental stressors, climate-responsive social protection systems, changing care arrangements and the lived experiences of older persons in rural India.

To address these gaps, this study adopts the Intersectional Place Perspective (IPP) framework. The framework integrates social identities, environmental conditions, structural inequalities and care ecosystems to examine how risk factors and resilience are produced through the interaction of people and place.[20] It provides a holistic lens for understanding climate resilience among older persons and forms the analytical foundation for the study.

[19] IPCC (2023); HelpAge International (2022)
[20] Crenshaw (1989); Cutter et al. (2003); Cresswell (2015)

3. STUDY DESIGN, METHODOLOGY, AND ANALYTICAL APPROACH

This chapter outlines the methodological framework adopted to assess the impacts of low-intensity and slow-onset climate hazards on older persons through an Intersectional Place Perspective (IPP) lens. It describes the study design, sampling framework, study geography, data collection methods, analytical approaches and development of the Composite Resilience Index (CRI). The methodology was designed to capture both measurable patterns and lived experiences of climate-related risks among older persons across diverse rural contexts in India.

3.1 Research Design

The study adopted a mixed-methods explanatory design, combining quantitative and qualitative approaches to understand how climate-related risks, resilience and adaptive capacities vary across different groups of older persons. The IPP framework guided the research design by examining how social identities—including age, gender, impairment status, widowhood and socio-economic position—interact with place-based environmental conditions and hazard exposure to influence resilience outcomes.

Table 1: Research Design Components

Component	Description
Research Approach	Mixed-methods explanatory design
Conceptual Framework	Intersectional Place Perspective (IPP)
Geographic Coverage	10 states, 20 districts
Quantitative Sample	2,000 older persons (60+ years)
Sampling Method	Multi-stage stratified sampling
Qualitative Methods	FGDs, KIIs, Life Histories, Appreciative Inquiry
Key Themes	Being at risk, resilience, coping mechanisms, disaster exposure
Analytical Framework	Triangulation and composite Resilience Index

The mixed-methods design enabled triangulation between quantitative evidence and qualitative narratives, providing a comprehensive understanding of both the scale and lived realities of climate-related risks.

3.2 Study Geography

The study was conducted across 10 states and 20 districts, representing India's major geographical regions and climate vulnerability profiles. The selected districts included coastal areas, inland dry regions, tribal and hill districts, and Himalayan districts, thereby ensuring representation of diverse environmental and hazard contexts. The

states covered Andhra Pradesh, Bihar, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Tamil Nadu and Uttarakhand.

Table 2: Selected States and Districts and their Broad Topography

States	Vulnerability Category of the State	Geographical Region	Districts	Selected districts broad topography[21]
Andhra Pradesh	Moderate vulnerability	South East	Krishna	Coastal district
			Anantapur	Inland dry district
Bihar	High vulnerability	East	Sitamarhi Madhubani	Inland dry districts[22]
Gujarat	Moderate vulnerability	West	Rajkot	Inland dry district
			The Dangs	High rainfall tribal/hill district
Karnataka	Moderate vulnerability	South West	Kolar Yadgir	Inland dry districts
Keralam	Low vulnerability	South West	Kollam	Coastal district
			Wayanad	High rainfall tribal/ hill district
Madhya Pradesh	Moderate vulnerability	Central	Guna Ratlam	Inland dry districts
Maharashtra	Low vulnerability	West	Nandurbar	High rainfall tribal/hill district
			Yavatmal	Inland dry district
Odisha	High vulnerability	East	Gajapati	High rainfall tribal/ hill district
			Bolangir	Inland dry district
Tamil Nadu	Low vulnerability	South East	Ramanathapuram	Coastal district
			Namakkal	High rainfall tribal/hill district
Uttarakhand	Low vulnerability	North	Uttarkashi Rudraprayag	Himalayan districts

[21] These are broad classifications as per secondary sources.
[22] With some flood prone areas also.

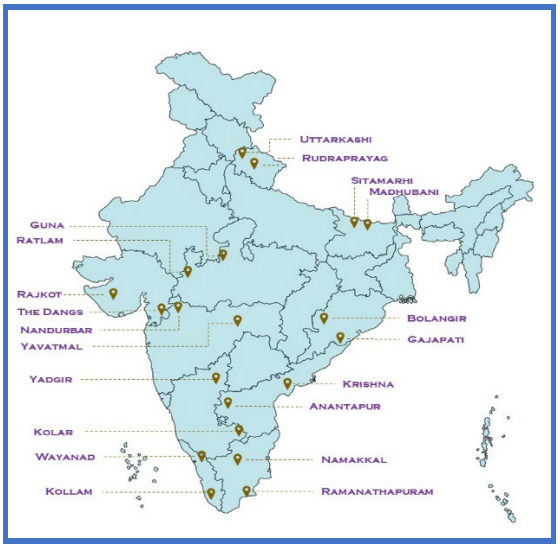

Figure 1: Study Districts

The selected locations provided variation in exposure to drought, flooding, heat stress, coastal erosion, water scarcity and other environmental stressors, enabling comparative analysis across hazard geographies.

3.3 Sampling Framework

The quantitative component comprised a survey of 2,000 older persons aged 60 years and above. A multi-stage stratified sampling design was employed involving selection of states, districts, villages and households. Five villages were selected in each district, resulting in coverage of 100 villages across the study area. The sample was designed to ensure adequate representation across age cohorts (60–69, 70–79 and 80+ years), gender, socio-economic categories, impairment status and living arrangements.

The qualitative component consisted of 60 Focus Group Discussions (FGDs), 30 stakeholder Key Informant Interviews (KIIs) and 10 Life Histories/Appreciative Inquiry case studies. The qualitative sample was purposively selected to capture diverse experiences among older persons, caregivers, widows, persons with impairments and key institutional stakeholders.

3.4 Quantitative and Qualitative Research Components

Quantitative Survey

The structured survey collected information across a range of thematic areas, including demographic characteristics, care needs, health, housing conditions, livelihoods, social protection, climate exposure, coping mechanisms, community support systems and institutional preparedness. The survey focused on understanding how climate stressors affect different dimensions of wellbeing and resilience among older persons.

Qualitative Research

The qualitative component was designed to complement survey findings by exploring lived experiences, coping pathways, institutional challenges and resilience processes.

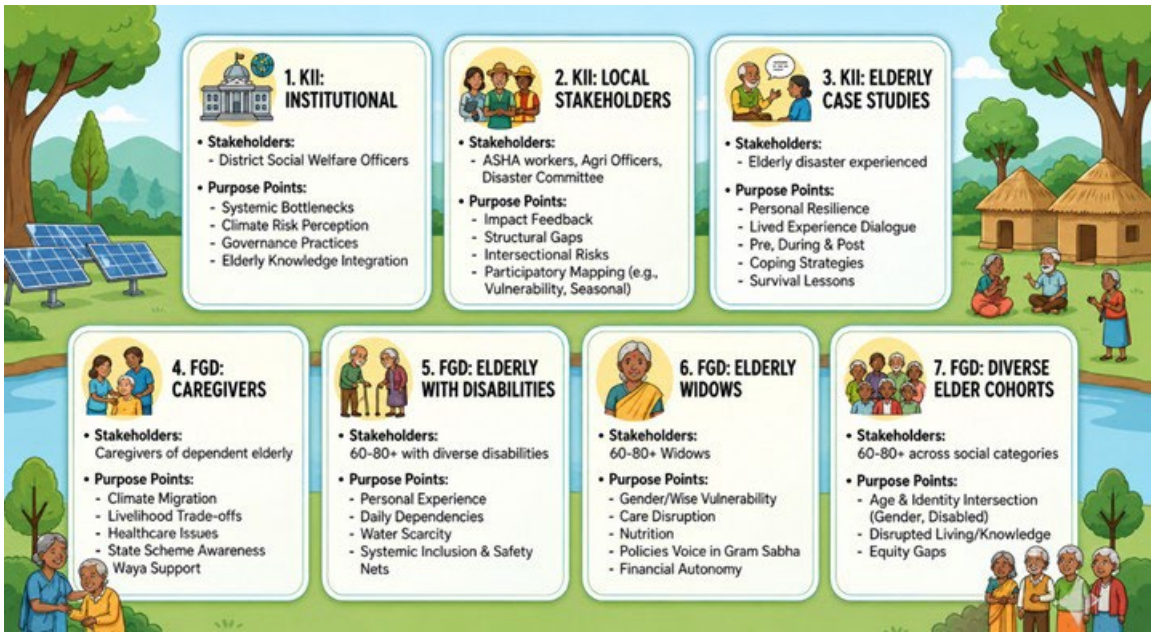

Figure 2: Qualitative Study Framework

FGDs captured community perspectives and group experiences, KIIs provided institutional and service delivery insights, while life histories documented detailed individual resilience journeys. Together, these methods helped explain the underlying factors shaping quantitative patterns observed in the survey data.

3.5 Data Collection Systems and Quality Assurance

Data collection was conducted using Computer-Assisted Personal Interviewing (CAPI) for the quantitative survey and structured discussion guides for qualitative interviews. The CAPI system incorporated built-in validation checks, automated skip patterns, consistency checks and real-time data quality controls to improve accuracy and reduce data entry errors.

Quality assurance measures included field supervision, accompanied interviews, back-checks, daily debriefings, real-time monitoring, GPS tagging, time stamping and routine data quality reviews. Audio recordings were maintained for qualitative interviews (with consent) to support transcription, translation and analysis.

3.6 Analytical Framework

Quantitative Analysis

The quantitative analysis utilised descriptive statistics, cross-tabulations, subgroup comparisons and index construction techniques to examine patterns of vulnerability and resilience across different demographic and geographic groups. Particular attention was given to differences by age, gender, impairment status, living arrangements, socio-economic position and hazard exposure.

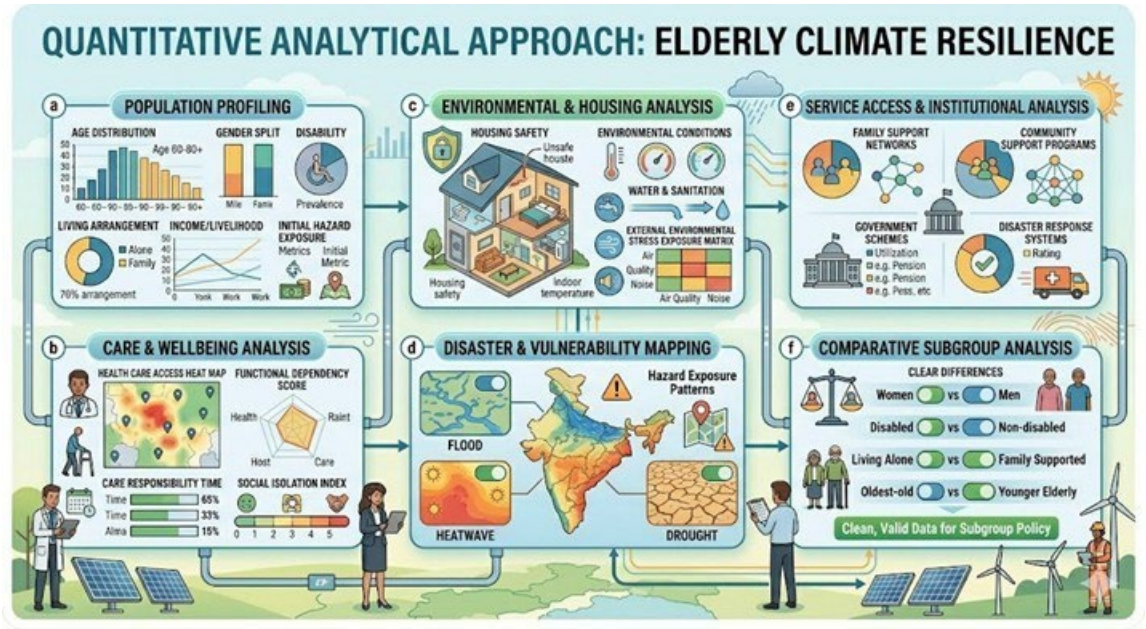

Figure 3: Quantitative Analytic Approach

Qualitative Analysis

Qualitative data were analysed using a Reflexive Thematic Analysis approach. Interview transcripts were coded across major domains including care needs, climate experiences, service disruptions, social isolation, coping strategies, institutional responses and resilience pathways. The analysis focused on identifying both recurring themes and context-specific experiences emerging from the narratives of older persons and stakeholders.

3.7 Operationalisation of the IPP Lens

The IPP framework was embedded throughout the study design, data collection and analytical processes. Survey tools and qualitative instruments were designed to capture both social identities and place-based conditions, including environmental exposure,

infrastructure quality, service access and care ecosystems. During analysis, quantitative findings were examined through extensive subgroup comparisons and subsequently triangulated with qualitative evidence to identify patterns of layered risk factors, resilience pathways and intersectional inequalities.

3.8 Composite Resilience Index (CRI)

To assess resilience among older persons, the study developed a Composite Resilience Index (CRI) based on six dimensions:

- Physical Resilience
- Economic Resilience
- Social Resilience
- Health Resilience
- Institutional Resilience
- Environmental Resilience

Indicators within each dimension were normalised using Min-Max scaling and aggregated to generate both dimension-specific and overall resilience scores. The CRI enabled comparison of resilience levels across different social groups, hazard contexts and geographic locations and was used to identify populations facing elevated climate-related risks.

3.9 Study Limitations

As with all large-scale field studies, certain limitations should be noted. While the study provides broad geographic representation across multiple climatic and socio-economic contexts, findings cannot be statistically generalised to all districts in India. The survey also relied on respondent recall for selected climate-related experiences, which may introduce recall bias. Furthermore, qualitative findings are intended to provide depth and contextual understanding rather than population-level estimates.

3.10 Conclusion

The methodology combined large-scale quantitative evidence with rich qualitative insights to provide a comprehensive understanding of climate-related risks and resilience among older persons. The integration of the IPP framework, mixed-methods design and Composite Resilience Index enabled the study to examine how social identities, environmental conditions, care ecosystems and institutional systems interact to shape vulnerability and resilience. Together, these approaches provide a robust foundation for the findings and recommendations presented in the subsequent chapters.

4. PROFILE OF OLDER PERSONS, HOUSEHOLDS, AND PLACE CONTEXTS

This chapter establishes the foundational profile of the 2,224 older persons who participated in the study. It examines who they are, how they live, the resources available to them, and the household and environmental conditions that shape their everyday lives. Together, these dimensions provide the context within which subsequent findings on care, livelihoods, health, climate exposure and resilience should be understood.

The findings show that older persons are far from a homogeneous population. While many continue to live within family settings and maintain varying degrees of independence, important differences emerge across age, gender, widowhood status, living arrangements, impairment, socio-economic status and environmental exposure. These differences create distinct patterns of risk and resilience that influence how older persons experience climate-related stress and environmental change.

4.1 Demographic Profile

Table 3: Study Sample Profile

Study Sample Profile: Target vs Achieved

Total achieved sample: n = 2,224

Category	Target	Achieved	Achievement	Share of Sample
AGE				
60–69 years	660	**807**	122.3%	36.3%
70–79 years	720	**786**	109.2%	35.3%
Above 80 years	620	**631**	101.8%	28.4%
AGE TOTAL	**2,000**	**2,224**		
SEC				
SEC B	500	**581**	116.2%	26.1%
SEC C	760	**809**	106.4%	36.4%
SEC D	740	**834**	112.7%	37.5%
SEC TOTAL	**2,000**	**2,224**		
GENDER				
Male	720	**830**	115.3%	37.3%
Female	1,280	**1,394**	108.9%	62.7%
GENDER TOTAL	**2,000**	**2,224**		
SPECIAL GROUPS				Overlapping categories — no total shown
Seniors Living With Others	1,020	**1,934**	189.6%	87.0%
Seniors Living Alone	170	**290**	170.6%	13.0%
Widowed (Female)	320	**633**	197.8%	28.5%
Seniors with Disability	490	**1,017**	207.6%	45.7%

Note: Achievement (%) = Sample Achieved / Sample Target. Share of sample is calculated on n = 2,224. Special groups are overlapping categories; therefore, no total is shown.

The study sample includes older persons across all major age groups, with 36% aged 60–69 years, 35% aged 70–79 years and 28% aged 80 years and above. The substantial representation of the oldest-old is particularly important because this group typically

faces the highest levels of functional limitation, dependency and climate-related risk. Women constitute 63% of the sample, reflecting both the study design and the demographic reality of female longevity in later life.

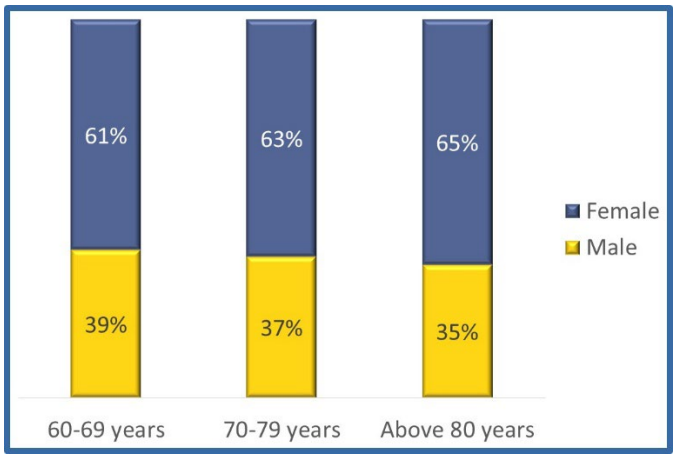

Figure 4: Gender Distribution by Age Group (Base: 2224)

Widowhood emerges as a major demographic characteristic. Nearly one-third of respondents are widowed, with widowhood being substantially more common among women than men. Among women aged 80 years and above, more than half are widowed. This feminisation of widowhood has important implications for financial security, social support and care arrangements.

Among widowed respondents, living arrangements reveal a shift toward dependence on children and family members as age advances. While some widowed older persons continue to live independently, many move into children's households as functional limitations increase and care needs grow. The demographic profile therefore reveals the convergence of advanced age, widowhood and dependency among a significant proportion of respondents.

4.2 Household Composition and Living Arrangements

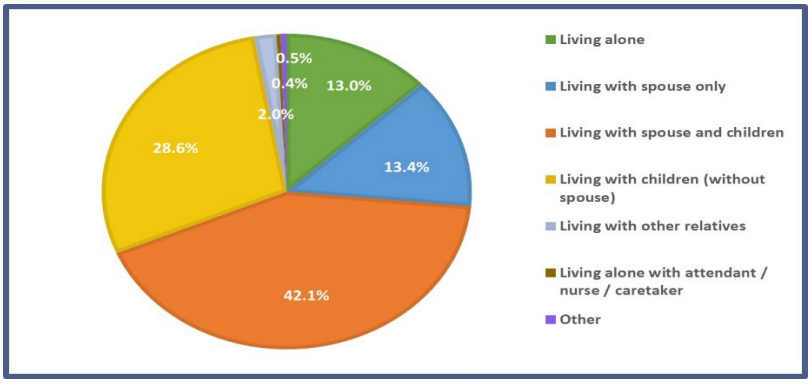

Figure 5: Current Living Arrangement (Base: 2224)

Family-based living arrangements continue to dominate. Nearly three-quarters of respondents live with children or other family members, while a smaller proportion live only with a spouse. Approximately 13% live alone, representing a group with potentially greater exposure to social isolation and reduced support during emergencies.

The findings indicate that co-residence with children increases steadily with age. As spouses are lost and care needs increase, older persons become progressively more dependent on family support systems. Women are more likely than men to live alone or to reside with children following widowhood, reflecting gendered patterns of ageing and family support. Household structures remain predominantly joint or extended in nature, highlighting the continuing importance of family-based care systems for older persons in rural India.

4.3 Education and Literacy

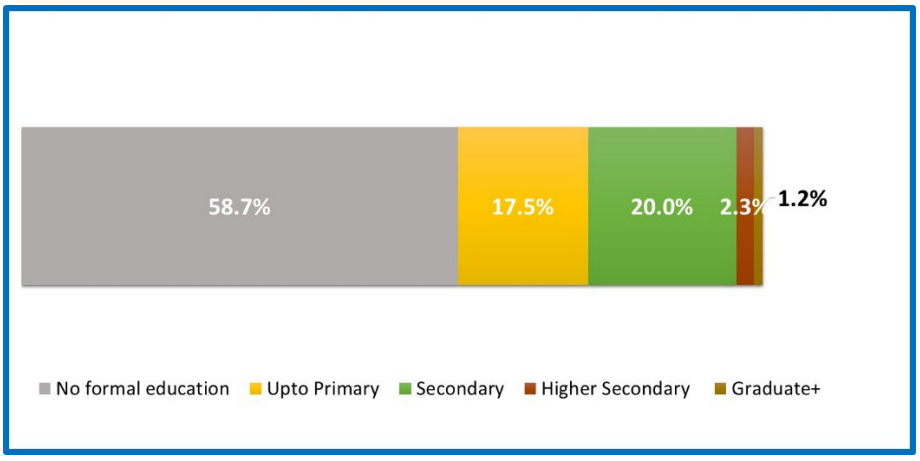

Figure 6: Overall Education Profile of Elders (Base: 2224)

Educational attainment among respondents is low. Nearly 59% have never received formal education, while only a very small proportion have completed higher secondary or tertiary education. Educational disadvantage is particularly pronounced among women, widowed respondents, those living alone and the oldest-old.

Low levels of literacy have important implications for climate resilience. Qualitative discussions revealed that many older persons, especially women, depend on family members or intermediaries to access information, complete documentation and navigate government systems. Participants frequently linked limited education with reduced awareness of welfare schemes, difficulties accessing services and challenges understanding disaster warnings. Educational disadvantage therefore extends beyond literacy itself and influences broader access to information, support systems and adaptive capacity.

4.4 Impairment and Functional Dependency

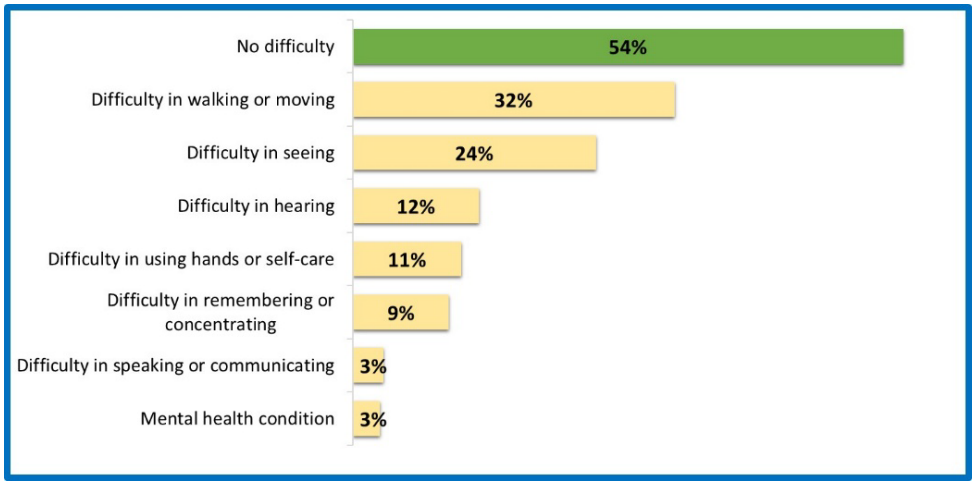

Figure 7: Percentage of respondents suffering from long term impairment that limits their daily activity (Base: 2224)

Nearly 46% of respondents report at least one long-term impairment that limits daily activities. Mobility difficulties are the most common impairment, followed by vision, hearing and cognitive difficulties. Impairment prevalence increases consistently with age, reinforcing the heightened risks faced by the oldest-old.

Qualitative findings reinforce the extent of these limitations. Many older persons described difficulties walking, travelling to health facilities, obtaining essential goods and managing daily activities. Participants repeatedly highlighted the absence of specialised support for mobility-impaired and visually impaired older persons, particularly during periods of environmental stress or disaster.

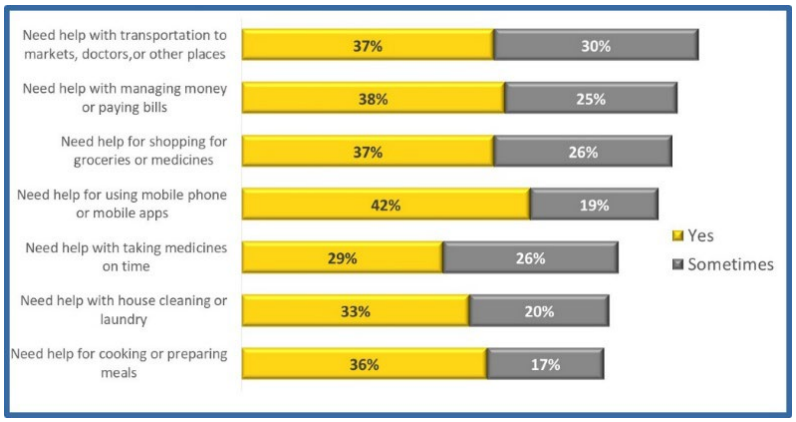

Figure 8: Dependence for IADL (Base: 2224)

Functional dependency is particularly evident in instrumental activities of daily living. Large proportions of respondents require assistance with transportation, managing money, shopping and using phones or digital applications. These forms of dependency are especially important because they directly affect access to information, healthcare, emergency warnings and relief services during disasters. Dependency increases substantially with age and is highest among persons with mobility, cognitive and communication difficulties.

4.5 Economic Profile

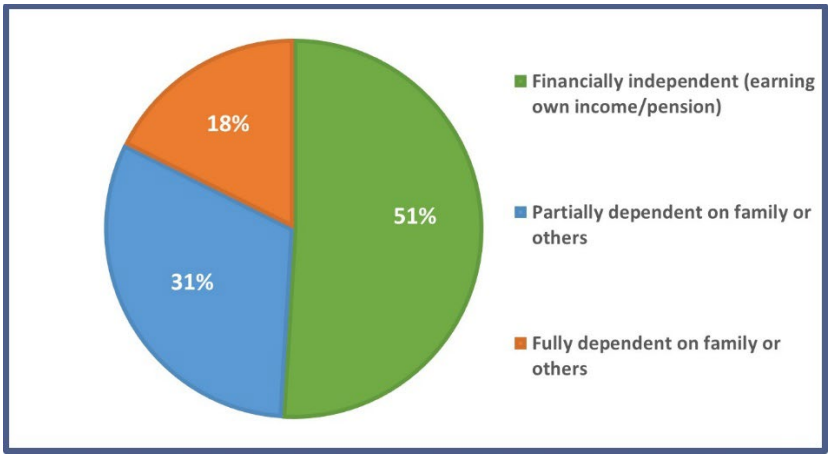

Figure 9: Financial status of Elders (Base: 2224)

The economic profile reveals widespread financial insecurity. While around half of respondents describe themselves as financially independent, the remainder are partially or fully dependent on family members or others for financial support. Financial dependency is particularly pronounced among women, widows and the oldest-old.

Personal income levels are low. More than nine in ten respondents report monthly personal incomes below ₹10,000, and average personal income remains modest. Household income patterns reveal similar constraints. Qualitative findings indicate that many older persons continue to engage in casual labour, agricultural work or other income-generating activities despite advancing age, often because pensions and family support are insufficient to meet basic needs. These economic constraints limit the capacity of households to absorb climate-related shocks and recover from losses.

Table 4: Household income comparison with Household size, across Living arrangements of Elders

	Living alone	Living with Spouse only	Living with children/family
Average Household Income (Rs)	4,912	11,482	15,989
Average number of Family members	1.0	2.4	5.4
Average per capita Income (Rs)	4,912	4,845	2,939

The economic position of older persons living alone requires particular attention. Although some maintain a degree of financial independence, they lack the household-level support systems available to those living with family members and therefore face greater exposure when livelihoods are disrupted or unexpected expenses arise.

4.6 Housing Conditions

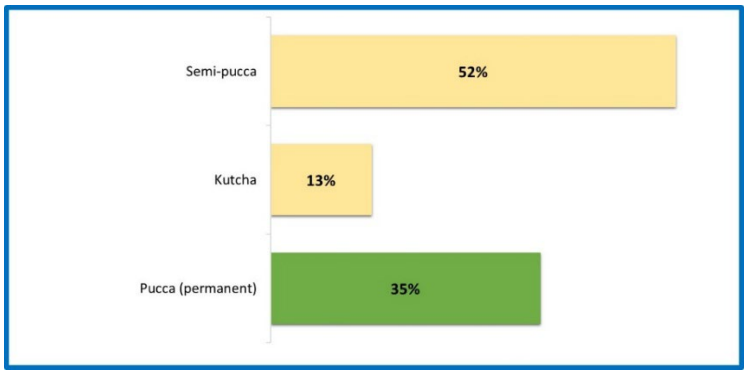

Figure 10: Type of house in which Elders live (Base: 2224)

Housing conditions represent one of the most important pathways through which climate risks affect older persons. Nearly two-thirds of respondents live in kutcha or semi-pucca structures, while only around one-third live in fully pucca housing. Older persons living alone and those belonging to socially disadvantaged groups are more likely to reside in structurally fragile housing.

Housing inadequacies are widespread. Water leakage, damp walls, poor ventilation, excessive indoor heat, weak structures and inadequate sanitation facilities are common. Only around 40% of respondents consider their homes fully safe for everyday living. Women, widowed respondents, persons living alone and Scheduled Tribe households report particularly high levels of housing-related risk.

Qualitative narratives highlight the practical consequences of these conditions. Many older persons described homes damaged by storms, flooding or other environmental events, often without adequate resources for repairs. Participants frequently expressed concerns regarding roof stability, heat exposure, inadequate water supply and the inability to undertake housing improvements without external support.

4.7 Climate Exposure and Everyday Environmental Conditions

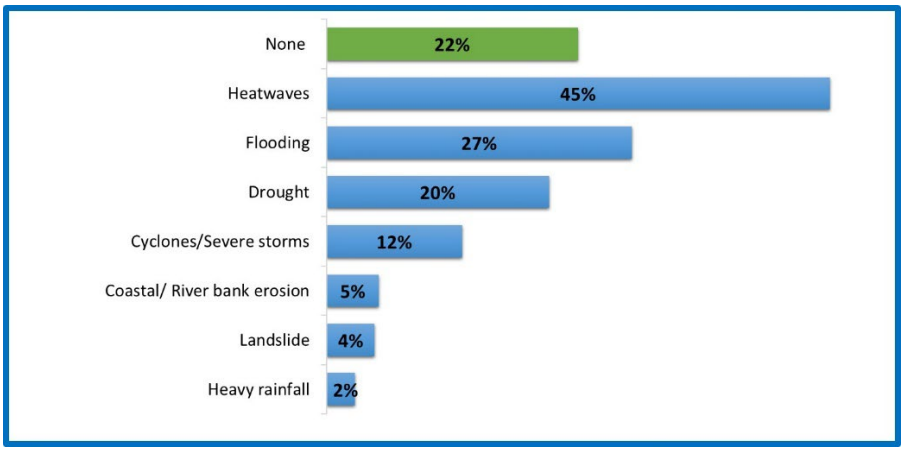

Figure 11: Climate Change Stressors experienced in the past 3 years (Multiple response) (Base: 2224)

Climate-related hazards form a routine part of life for most respondents. Nearly 78% experienced at least one climate-related hazard during the previous three years. Heatwaves are the most commonly reported hazard, followed by flooding, drought, cyclones and coastal erosion. Hazard exposure is not limited to isolated events; many respondents reported repeated exposure over the study period.

Qualitative evidence suggests that environmental changes are increasingly visible in daily life. Participants described rising temperatures, declining rainfall predictability, increasing water scarcity, more frequent extreme weather events and growing uncertainty regarding agricultural livelihoods. These changes are often experienced as cumulative pressures rather than single disaster events.

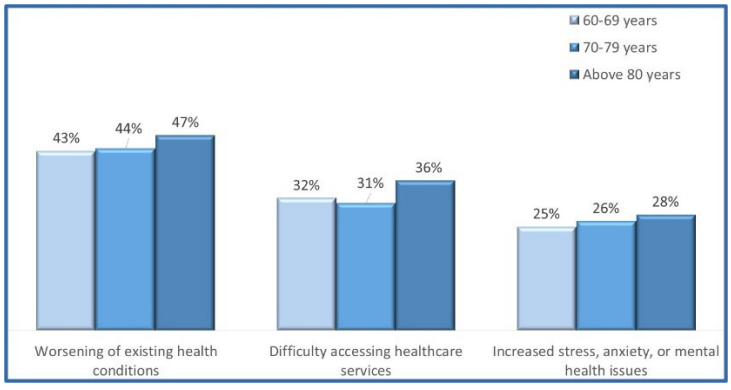

Figure 12: Age group wise health issues that occur because of disasters

Environmental stress extends beyond major disasters. Poor ventilation, excessive indoor heat, dampness, humidity and water stress affect a large proportion of households. These conditions interact closely with age, impairment and housing quality, creating

chronic environmental stressors that influence health and wellbeing. Among those exposed to climate hazards, increased illness, worsening of existing health conditions, reduced ability to perform daily activities and difficulty accessing healthcare services are commonly reported outcomes.

The findings demonstrate that climate-related risks are experienced not only through floods, droughts or storms, but also through everyday environmental conditions that gradually undermine health, comfort and resilience.

4.8 Composite Risk Profile of Older Persons

The analysis highlights several groups facing multiple and intersecting risk factors simultaneously:

- Older persons living alone
- Widowed older persons
- The oldest-old (80 years and above)
- Never-married older persons
- Scheduled Tribe households
- Persons with cognitive, communication or mental health difficulties

These groups consistently experience overlapping disadvantages across income, housing, health, functional capacity, environmental exposure and social support systems. Their challenges are not isolated but cumulative, with multiple risk factors reinforcing one another and reducing resilience capacity.

4.9 Conclusion

This chapter demonstrates that climate-related risks among older persons are shaped by the interaction of demographic, economic, social, environmental and functional factors rather than by age alone. While many older persons continue to benefit from family support systems and maintain a degree of independence, substantial inequalities persist across gender, widowhood status, living arrangements, impairment, social category and housing conditions. The findings establish that climate resilience is strongly influenced by the combined effects of income security, health status, family support, housing quality and environmental exposure. These baseline conditions provide the foundation for understanding the care needs, health outcomes, livelihood challenges and resilience pathways explored in the subsequent chapters.

5. CARE NEEDS, DEPENDENCY AND SUPPORT

Care needs and caregiving arrangements are critical determinants of the health, independence and well-being of older persons. This chapter examines the extent of care dependency among respondents, identifies the primary sources of care, assesses the adequacy of support received, and explores the challenges older persons face in accessing care. It also examines perceptions of respect, fairness and treatment within families, providing insights into the quality of caregiving relationships and the broader care environment. The analysis focuses on respondents reporting care needs and highlights how care experiences vary across different groups of older persons.

5.1 Nature of Care Needs

The detailed analysis of Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL) was presented in Chapter 4. The findings showed substantial levels of both personal care and instrumental dependency, with dependency increasing sharply with age. Nearly one-third of respondents require support with basic activities such as mobility, bathing and transfers, while significantly larger proportions require assistance with transportation, shopping, managing money and using mobile phones.

Dependency is particularly pronounced among the oldest-old and among persons with impairments. Even older persons living alone continue to report notable support needs, especially for financial management and communication. These findings underline the central importance of caregiving systems in maintaining the independence and well-being of older persons, particularly during periods of environmental stress and climate-related emergencies.

5.2 Care Providers and Frequency of Care

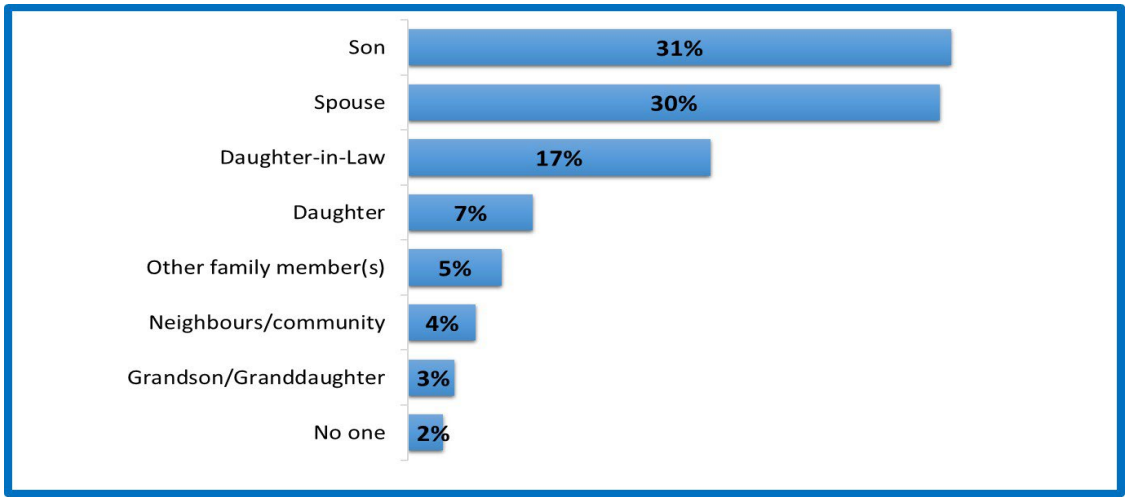

Figure 13: Overall distribution of primary care providers of older persons (Base: 1869)

The care ecosystem remains overwhelmingly family-based. Among respondents requiring assistance, 94% receive care from family members, with sons and spouses together accounting for the majority of primary caregivers. Daughters-in-law also play a substantial role, particularly among the oldest-old and widowed respondents. Formal caregivers, community-based providers and institutional support systems contribute only marginally to the care landscape.

The findings reveal important gender and life-course patterns. Men are most commonly cared for by their spouses, while women, particularly widows, rely more heavily on sons and daughters-in-law. As age advances and spouses become unavailable due to death or frailty, caregiving responsibility increasingly shifts to adult children and their spouses. Qualitative findings suggest that daughters-in-law often provide intensive and sustained care, yet their contribution remains largely unrecognised within formal care systems.

Older persons living alone face a very different care reality. Many depend on neighbours, relatives living elsewhere or intermittent family support, while a significant minority report having no regular caregiver at all. This group represents the most fragile segment of the care ecosystem.

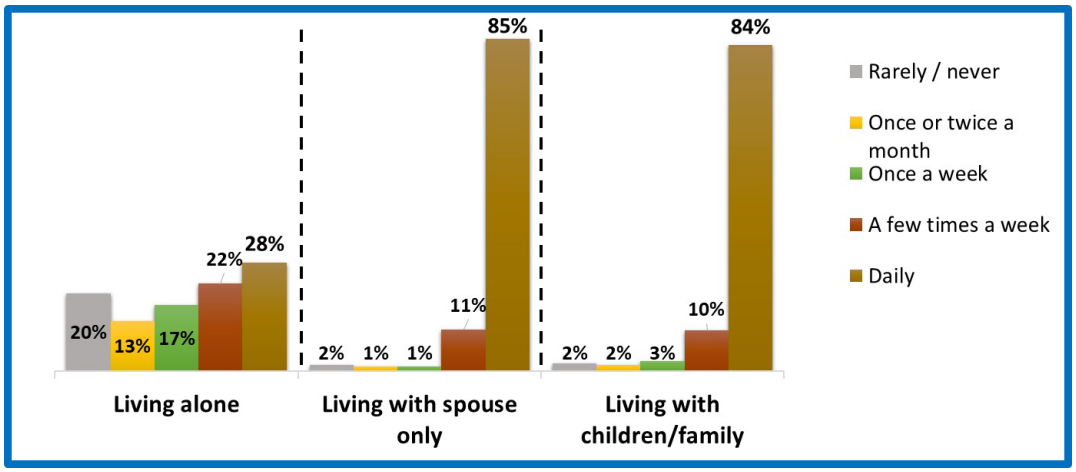

Figure 14: Care frequency by living arrangement (Base: 1869)

Care provision is generally intensive. Nearly four-fifths of respondents receiving care report receiving it daily, while a further proportion receive care several times a week. However, frequency varies considerably by living arrangement. Those living with family typically receive daily care, whereas daily support is substantially less common among older persons living alone. Care intensity also increases with age and with the severity of functional dependency.

5.3 Adequacy of Care and Challenges in Receiving Support

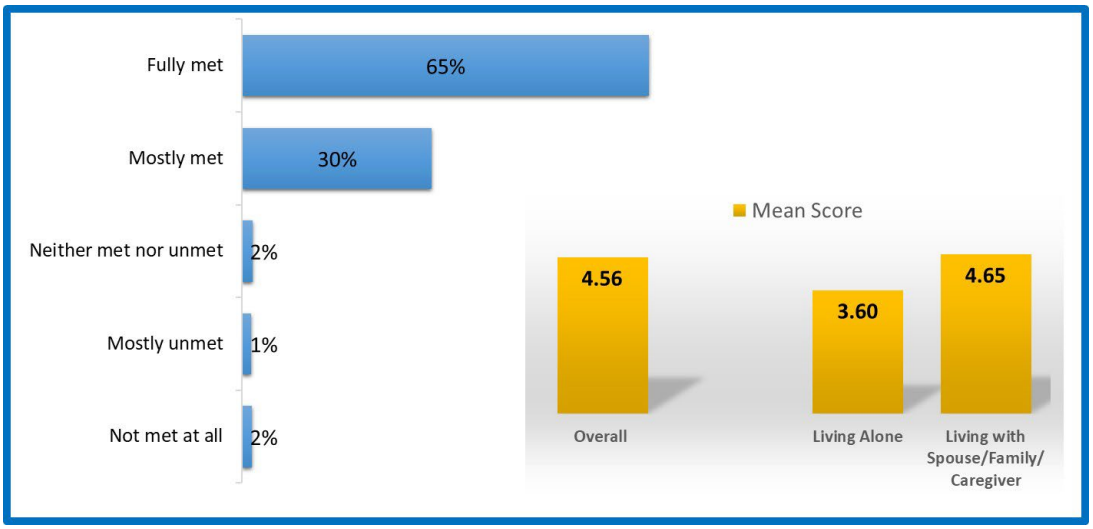

Figure 15: Care adequacy overall and by Living arrangement (Base: 1869)

Overall perceptions of care adequacy are positive. Most respondents report that their care needs are fully or mostly met, reflecting the continuing strength of family-based care arrangements. However, important gaps remain. The most significant inadequacies are concentrated among older persons living alone and among never-married respondents, both of whom report substantially lower levels of care adequacy than those living with family members.

Across most other demographic groups, perceptions of care adequacy remain relatively stable. Interestingly, respondents with cognitive or mental health difficulties often report relatively high levels of care adequacy, likely reflecting the intensive support provided by caregivers in response to greater dependency needs. Households with two older persons also tend to report better care outcomes, suggesting that mutual support between spouses remains an important protective factor.

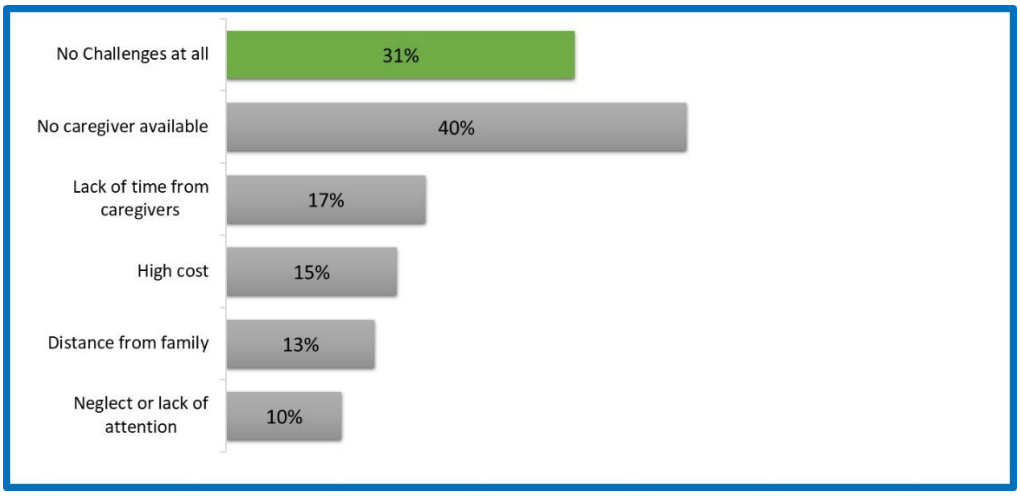

Figure 16: Care Challenges (Base: 1869)

Despite generally positive perceptions of care adequacy, many respondents continue to face challenges in accessing support. The most frequently reported challenge is the unavailability of a caregiver when needed. Other common concerns include lack of caregiver time, high care costs, distance from family members and experiences of neglect or inadequate attention.

The nature of these challenges varies across groups. Among those living with family, caregiver unavailability often reflects competing work and livelihood pressures. Among those living alone, challenges are more fundamental, including absence of nearby support, distance from family and limited access to regular assistance. Respondents with cognitive, communication and severe physical impairments report particularly high levels of unmet support needs and caregiver-related challenges.

5.4 Respect, Care and Fair Treatment within Families

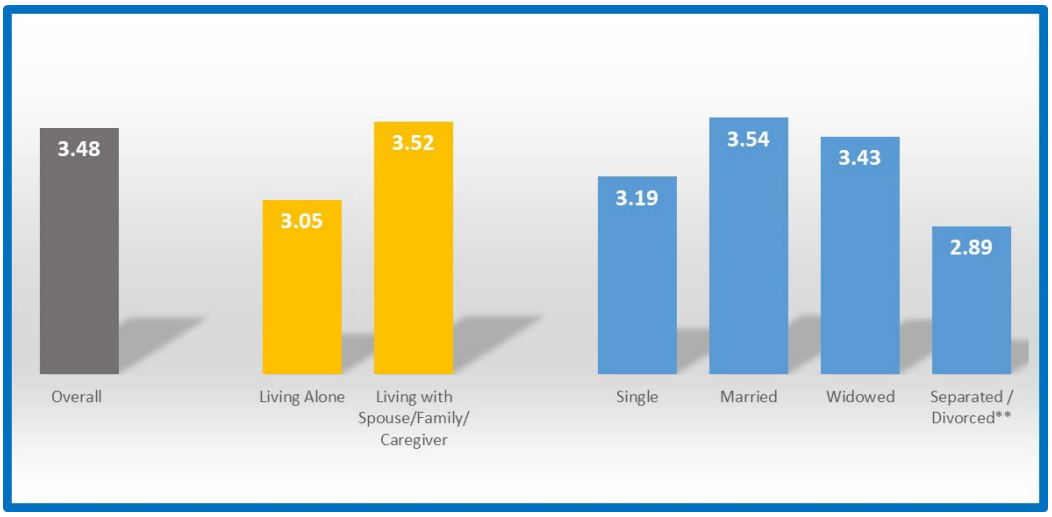

Figure 17: Frequency of feeling disrespected, neglected, or treated unfairly (Base: 1869)

Most older persons report positive treatment within their households. The majority indicate that they never or only rarely experience disrespect, neglect or unfair treatment. Nevertheless, approximately one in ten respondents report experiencing such treatment sometimes or often, highlighting the continued presence of neglect and mistreatment within some family environments.

The strongest predictor of negative experiences is living arrangement. Older persons living alone report considerably higher levels of disrespect and neglect than those living with spouses or family members. Higher rates are also observed among never-married respondents, the oldest-old, persons with impairments and some socially disadvantaged groups. These findings suggest that social isolation, dependency and weakened support systems can increase exposure to neglect and exclusion.

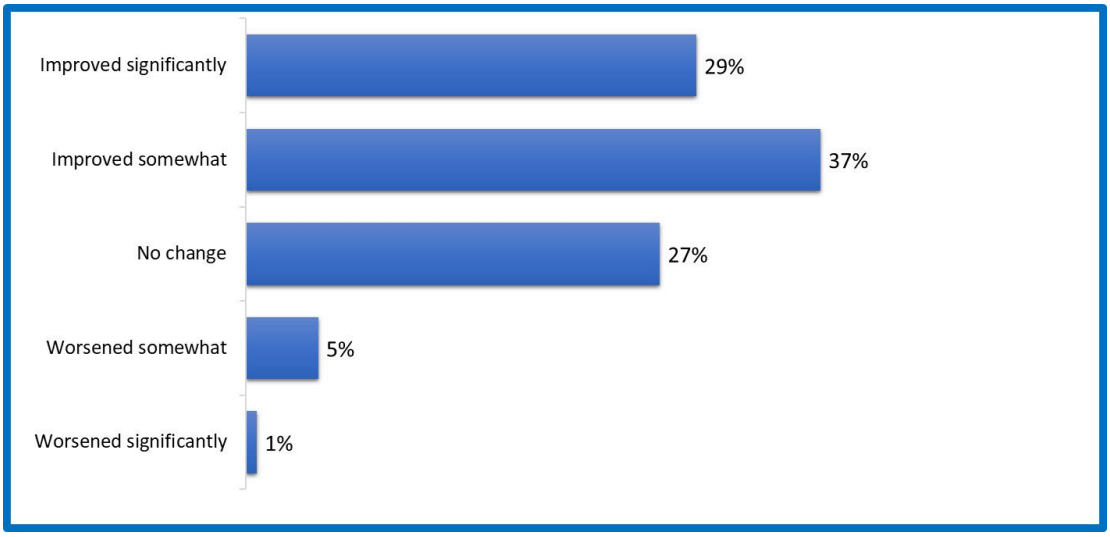

Figure 18: Perceived change in treatment with respect, care, and fairness (Base: 1869)

Encouragingly, perceptions of treatment have improved for most respondents over the past three years. A majority report improvements in the respect, care and fairness they receive from family members, while only a small minority perceive deterioration. However, improvements are less evident among older persons living alone, some socially disadvantaged groups and respondents with severe impairments or mental health conditions. These findings suggest that while family support systems remain resilient overall, important pockets of exclusion and vulnerability continue to persist.

5.5 Care Needs, Dependency and Support through the IPP Lens

The findings strongly reinforce the value of the Intersectional Place Perspective (IPP) framework. Care dependency is shaped not simply by age, but by the interaction of multiple factors including living arrangements, marital status, impairment, economic circumstances and social support networks. Older persons living alone, the oldest-old, never-married respondents and those with cognitive or physical impairments consistently experience greater risks of inadequate care and support.

The chapter also highlights the importance of place-based care ecosystems. Family members remain the primary providers of care, but where family support is absent, neighbours and community networks become critical. The adequacy of care therefore depends not only on individual need but also on the availability of household, community and institutional support systems. These findings underline the need for care policies that recognise the diversity of older persons' circumstances and strengthen community-based support structures alongside family care arrangements.

5.6 Conclusion

The findings demonstrate that care for older persons in rural India remains overwhelmingly dependent on family support, with spouses, sons and daughters-in-law serving as the principal caregivers. While most respondents report that their care needs are adequately met, important gaps persist among older persons living alone, never-married individuals, the oldest-old and those with physical or cognitive impairments. High levels of dependency, combined with caregiver shortages and limited formal support systems, place increasing pressure on families and create risks of unmet need, particularly during periods of crisis or environmental stress.

Viewed through the IPP lens, care outcomes are shaped by the interaction of age, health status, living arrangements, social relationships and place-based support systems. The findings highlight the need to strengthen community-based care models, support family caregivers and develop more inclusive care systems capable of responding to the diverse and intersecting needs of older persons.

6. LIVELIHOODS, INCOME, AND FINANCIAL SECURITY

This chapter examines the livelihoods, income sources and financial security of older persons. It explores occupational patterns, land ownership, livelihood opportunities, migration, participation in public employment programmes, income sources, financial hardship and access to financial services. Together, these findings provide important insights into the economic resilience of older persons and their ability to cope with climate-related shocks and livelihood disruptions.

6.1 Occupation Profile and Work Patterns

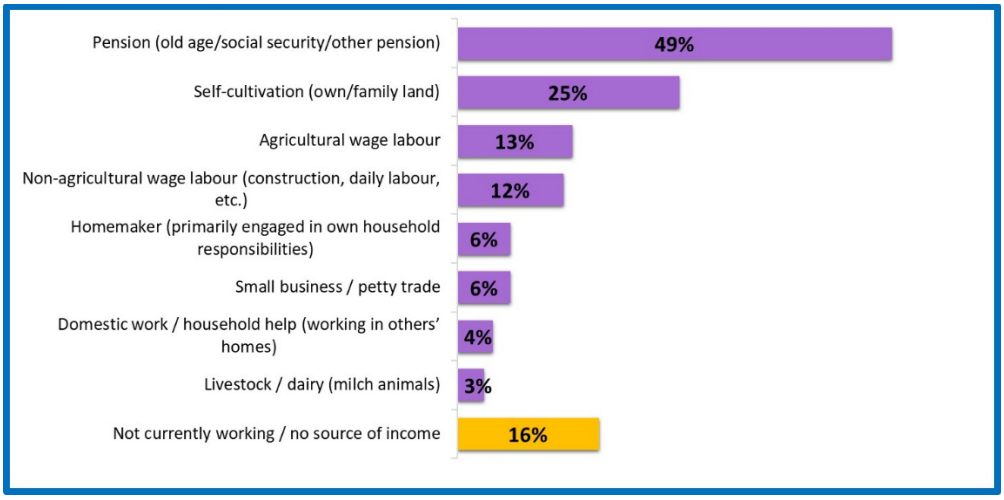

Figure 19: Primary occupation distribution overall (all categories), ordered by frequency (Base: 2224)

The occupational profile reveals a population that is only partially retired. Nearly half of respondents depend primarily on pensions, while a substantial proportion continue to work in agriculture, wage labour and small-scale self-employment. Agricultural activities remain the dominant source of economic engagement, reflecting the continued importance of farming and informal rural livelihoods in later life.

A notable finding is that many older persons continue to work out of economic necessity rather than choice. Even among pension recipients, a significant proportion remain economically active because pension income alone is insufficient to meet household needs. Women are more likely to be engaged in unpaid homemaking activities, while men are more frequently involved in cultivation and small businesses. Across all occupations, financial independence remains limited, highlighting the fragile economic position of many older persons.

Employment patterns are also characterised by instability. Among working respondents, the majority rely on seasonal or irregular work rather than regular year-round employment. Many work only during agricultural seasons, making their incomes highly

sensitive to climatic conditions such as droughts, floods and irregular rainfall. Despite advancing age, working older persons continue to contribute substantial labour, typically working between four and eight hours per day when employment is available.

6.2 Land Ownership, Agriculture and Livelihood Opportunities

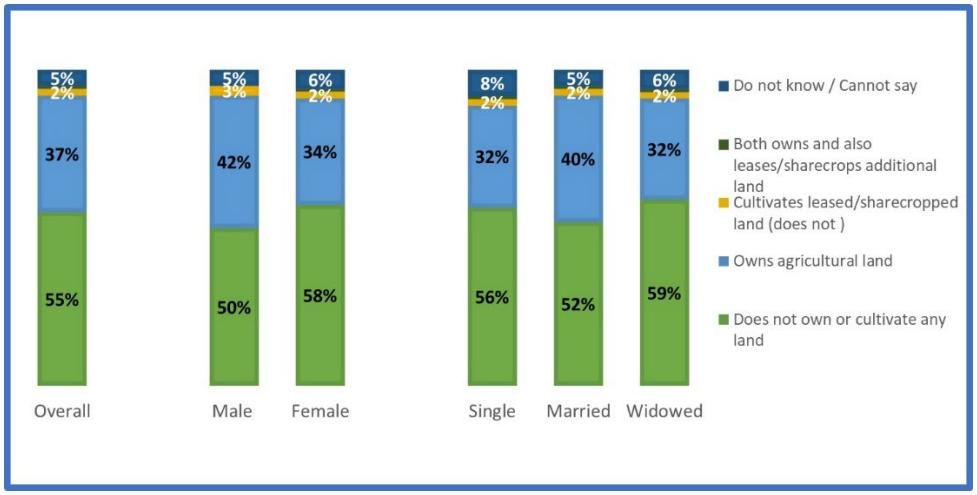

Figure 20: Land ownership status (no land, owned, leased, both) – Overall, by Gender and Marital status (Base: 2224)

Land remains an important economic asset, yet more than half of respondents do not own or cultivate agricultural land. Land ownership is lower among women, widowed respondents and older persons living alone, contributing to greater economic vulnerability within these groups. Ownership is strongly associated with financial independence, while landlessness is concentrated among those who are partially or fully dependent on others.

Among those with access to land, farming is primarily undertaken for household consumption rather than commercial sale. Subsistence and mixed farming dominate, while purely commercial agriculture is rare. Qualitative evidence suggests that small landholdings, climate uncertainty and limited market access constrain the ability of older persons to generate meaningful income from agriculture. Respondents with impairments are particularly likely to engage only in subsistence farming, reflecting reduced capacity to participate in market-oriented activities.

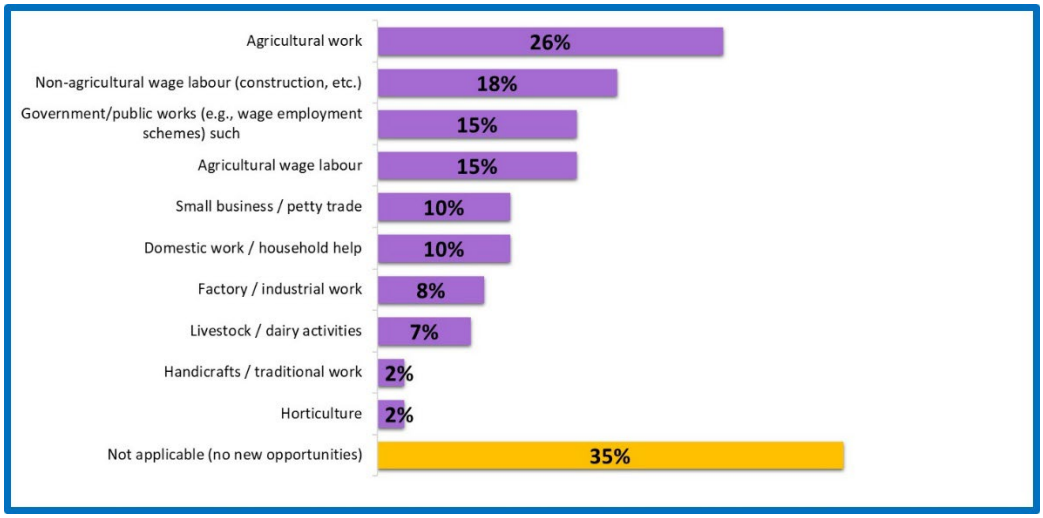

Figure 21: New opportunities for work or earning over the last 3 years (Percentage: Multiple Response) (Base: 2224)

A majority of respondents identified at least one new livelihood opportunity during the previous three years. However, these opportunities remain concentrated in agriculture, wage labour and government-supported employment rather than new or diversified economic sectors. Women, persons with impairments and some socially disadvantaged groups report fewer opportunities than others. The findings suggest that livelihood diversification remains limited and that most older persons continue to depend on climate-sensitive and low-paying forms of work.

6.3 Migration and Participation in Public Employment Schemes

Household migration forms an important livelihood strategy for a minority of respondents. Nearly one-fifth report that a household member migrated for work during the previous three years. Migration is primarily undertaken by adult children, particularly sons, and is concentrated in factory employment, construction work and other forms of informal urban labour. Long-term migration is common, often resulting in the prolonged absence of key family members who would otherwise provide economic support or caregiving assistance.

Migration is more common in households affected by impairment, poverty and severe climate impacts, suggesting that it functions as an economic coping strategy when local livelihood opportunities are insufficient. While migration can generate additional income, it may also weaken family support systems and increase social isolation for older persons remaining in rural communities.

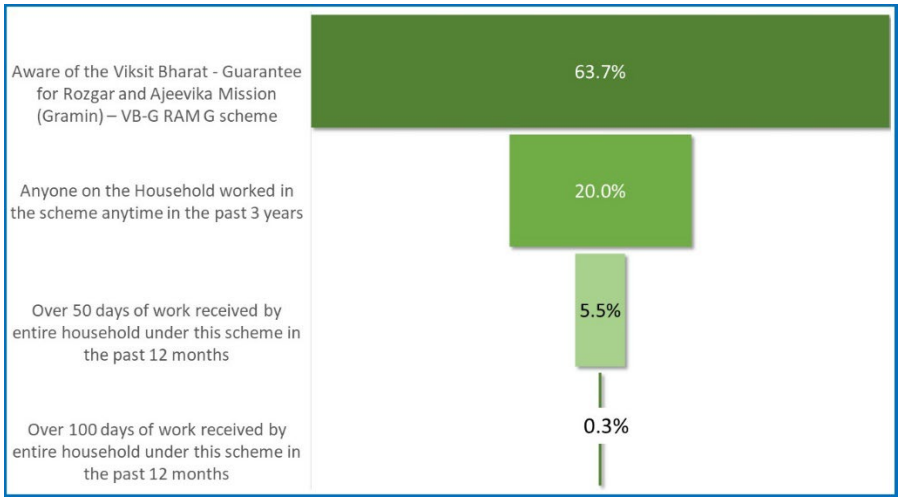

Figure 22: VB-G RAM G (MGNREG) Scheme awareness and actual utilisation by households with Older Persons (Base: 2224)

Awareness of the VB-G RAM G scheme is relatively widespread, with nearly two-thirds of respondents aware of the programme. However, participation is considerably lower, and only a small proportion of households receive the full employment entitlement. The findings reveal a substantial gap between awareness, registration and actual receipt of work. Older persons living alone and those with impairments report lower participation despite potentially greater need. Public employment schemes therefore remain an important but underutilised component of livelihood security.

6.4 Income Sources, Financial Security and Economic Hardship

Government pensions constitute the most important source of income for older persons, supplemented by family support, self-employment, wages and small business activities. However, the income base remains narrow. Most respondents rely on only one or two income sources, leaving them vulnerable to economic shocks and disruptions. As age increases, income sources become progressively more limited, while dependence on pensions and family support grows.

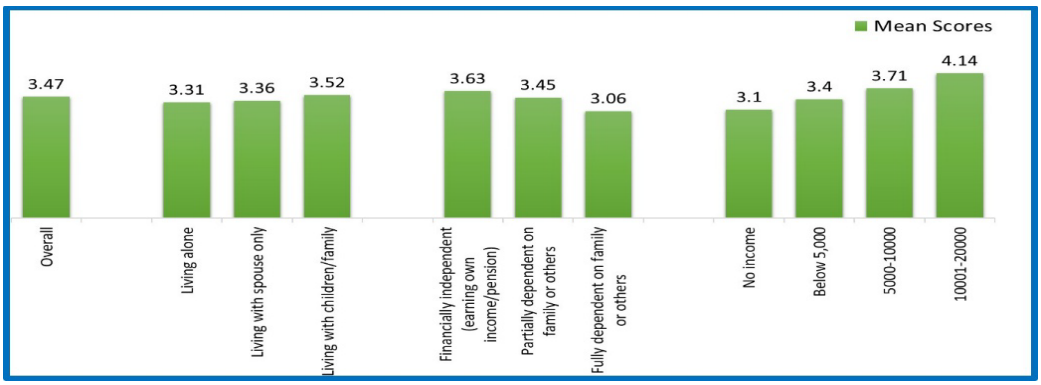

Figure 23: Mean scores on the sufficiency of money or support received, by living arrangement, financial dependency and personal income (Base: 2224)

Despite low absolute income levels, many respondents report that their available resources are broadly sufficient for daily needs. Nevertheless, important differences emerge across groups. Older persons living alone, those who are fully financially dependent and those without personal income report the lowest levels of perceived sufficiency. Family support and shared household resources appear to play an important role in improving perceptions of financial security.

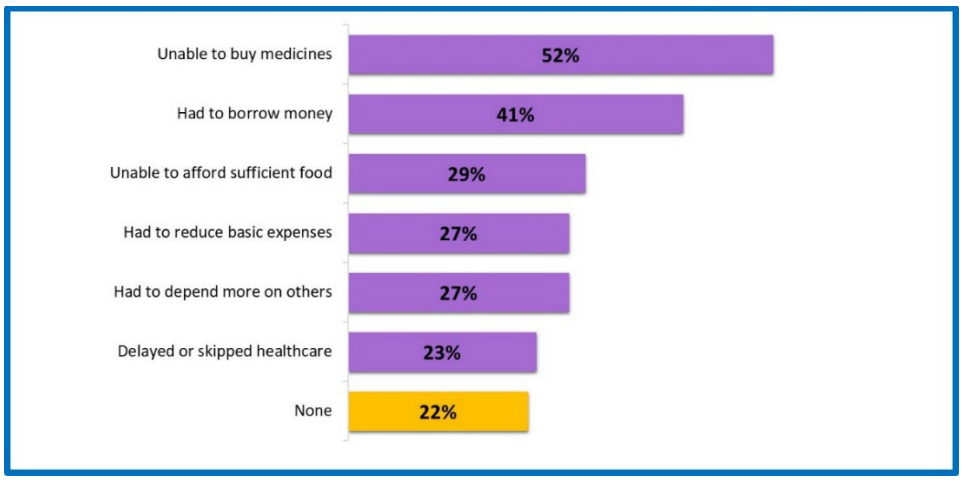

Figure 24: Financial hardship types faced in the last 12 months (Base: 2224)

Financial hardship remains widespread. More than three-quarters of respondents report at least one financial difficulty during the previous year. The most common challenge is the inability to afford medicines, followed by borrowing money, difficulties meeting food needs and postponing healthcare. These hardships are particularly pronounced among older persons with impairments, mental health conditions and limited income sources.

An important finding is that financial independence does not necessarily equate to financial resilience. Even respondents who describe themselves as financially independent frequently report borrowing money and difficulty meeting healthcare costs. This highlights the fragility of many livelihood systems and the limited financial buffers available to older persons.

6.5 Financial Inclusion and Banking Access

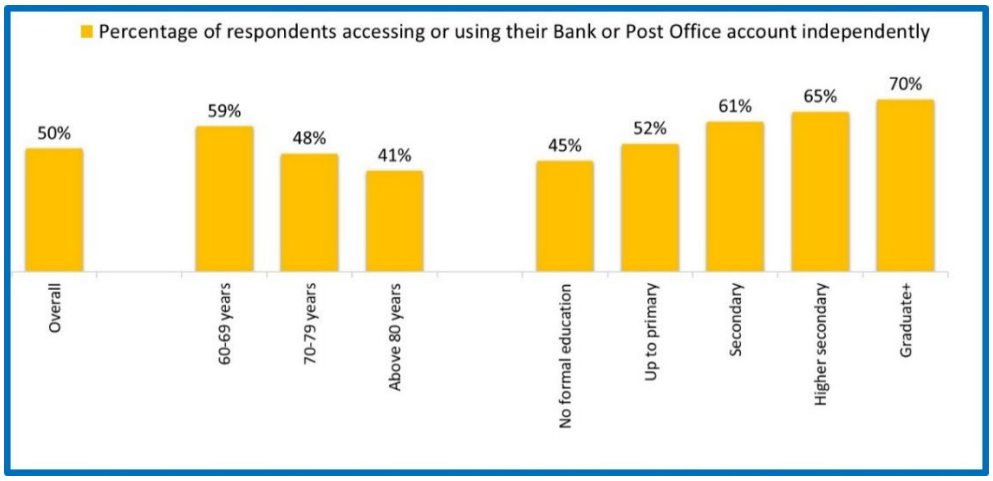

Figure 25: Respondents independently accessing bank or post office account by age group and by education level (Base: 2224)

Financial inclusion has expanded considerably, with almost all respondents reporting access to a bank or post office account. However, independent use of these accounts remains far less common. Nearly half require assistance from family members or others to access and manage their accounts, while a small proportion rely entirely on others to operate them on their behalf.

Independent access declines sharply with age and is lower among respondents with limited education, mobility difficulties and cognitive impairments. These findings suggest that financial inclusion should be understood not simply in terms of account ownership but also in terms of the ability to independently access and control financial resources.

6.6 Livelihoods and Financial Security through the IPP Lens

The findings strongly support the relevance of the Intersectional Place Perspective (IPP) framework. Economic security is shaped not by age alone but through the interaction of gender, health status, impairment, education, land ownership, household composition and local livelihood opportunities. Older persons living alone, women, widowed and never-married respondents, persons with impairments and those lacking productive assets consistently emerge as more economically at risk.

The chapter also highlights the importance of place. Livelihood opportunities remain strongly influenced by local agricultural systems, migration networks, labour markets and access to government programmes. Economic resilience is greatest where productive assets, social protection and family support reinforce one another, while economic risk factors accumulate where multiple disadvantages coexist.

6.7 Conclusion

The findings demonstrate that the livelihoods and financial security of older persons continue to depend on a fragile combination of pensions, informal work, agriculture and family support. While many remain economically active well into old age, low incomes, seasonal employment, limited productive assets and recurring financial hardships constrain their resilience. The inability to afford medicines, dependence on climate-sensitive livelihoods and restricted access to stable employment opportunities remain major concerns.

Viewed through the IPP lens, economic risk factors arise from the interaction of age, health, gender, living arrangements, productive assets and place-based opportunities. Older persons facing multiple disadvantages simultaneously experience the greatest financial insecurity and the lowest capacity to absorb climate and livelihood shocks. Strengthening economic resilience will therefore require integrated approaches that combine social protection, livelihood diversification, financial inclusion and targeted support for the most at-risk groups.

7. HEALTH STATUS, HEALTHCARE ACCESS, AND BARRIERS TO CARE

Health is a critical component of resilience among older persons. Good health influences independence, mobility, livelihoods, care needs and the ability to cope with environmental and climate-related stresses. This chapter examines self-reported health status, the prevalence of chronic conditions, access to healthcare services, healthcare support systems and barriers to obtaining medical care. Together, these findings provide important insights into the health resilience of older persons and the effectiveness of existing healthcare systems in meeting their needs.

7.1 Health Status and Disease Burden

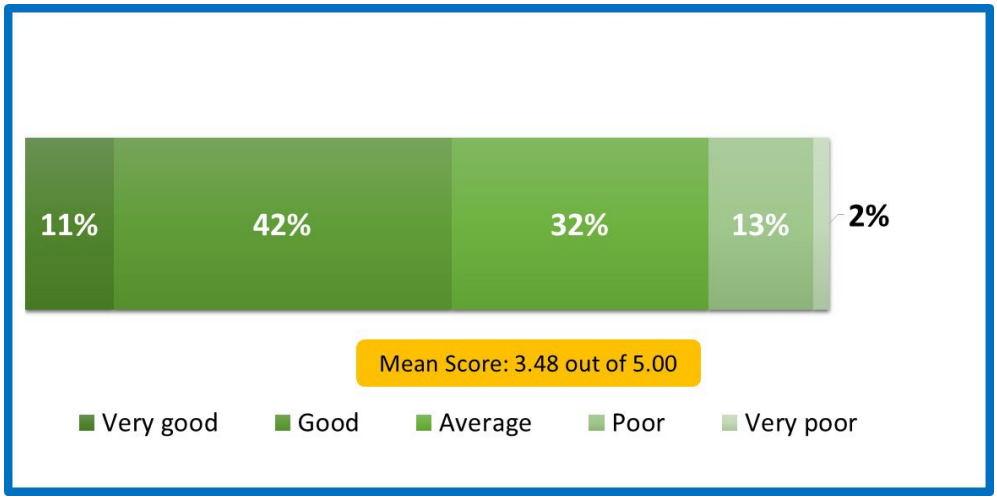

Figure 26: Percentage respondents rating their health on a five-point scale (Base: 2224)

Just over half (53%) of respondents describe their health as good or very good. However, nearly half rate their health as average, poor or very poor, indicating that significant health concerns remain widespread among older persons. The overall health profile therefore reflects a population that is ageing with substantial physical and functional challenges.

Health status deteriorates consistently with age and is strongly associated with impairment and financial insecurity. Respondents aged 80 years and above report markedly poorer health than younger cohorts. The lowest health ratings are observed among those experiencing cognitive difficulties, communication challenges, memory problems and mental health conditions, suggesting that these conditions have particularly severe implications for well-being and independence.

Economic circumstances also play an important role. Health outcomes improve steadily with income and financial independence, while respondents with no personal income report the poorest health. The findings underline the close relationship between economic security and health, suggesting that improving income adequacy and reducing financial dependency may also contribute to better health outcomes.

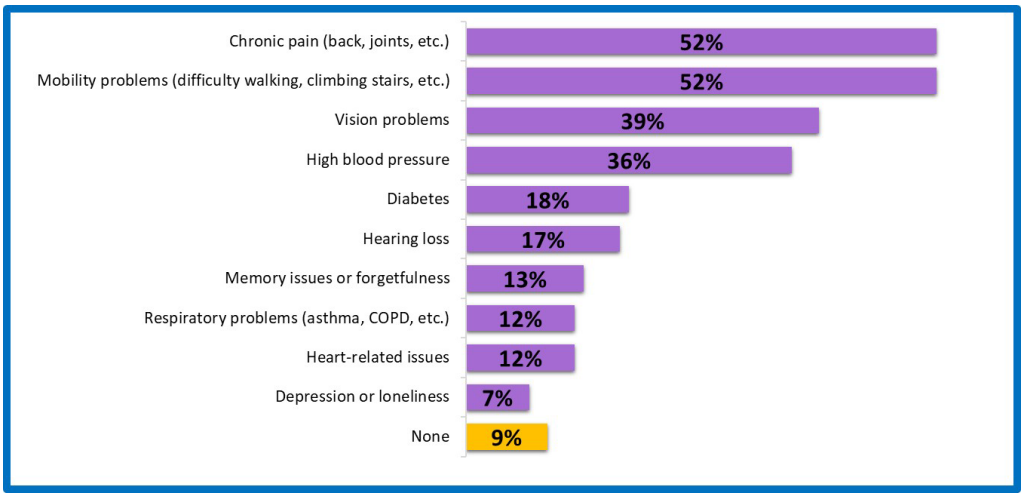

Figure 27: Health related issues of Respondents with Average, Poor or Very Poor Health status (Multiple responses) Base: 1,042

Among respondents reporting poorer health, chronic pain and mobility limitations are the most prevalent conditions, each affecting more than half. Vision problems and hypertension are also widespread, while diabetes, hearing loss, respiratory conditions, memory problems and heart-related conditions affect smaller but significant proportions.

The burden of ill health increases with age. Mobility difficulties, sensory impairments, memory problems and hypertension all become more common among the oldest-old. Mental health concerns are also evident. Although only a small proportion explicitly report depression or loneliness, these conditions are concentrated among older persons living alone, those without income and those dependent on institutional or caregiver support, suggesting that social isolation and economic deprivation contribute significantly to psychological distress.

7.2 Access to Healthcare Services

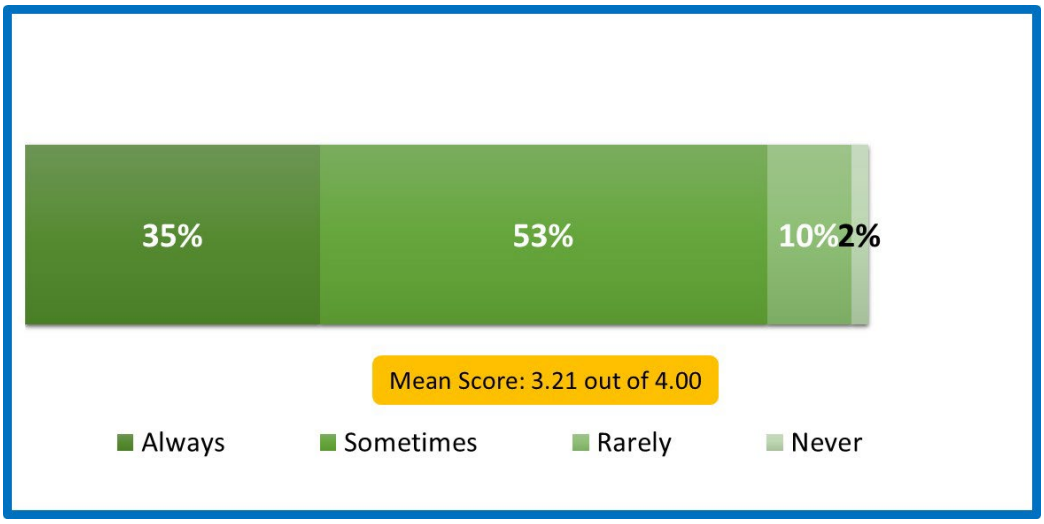

Figure 28: Accessibility to healthcare services on a four point scale (Always-4, Never-1) – Higher score means better accessibility (Base: 2224)

Most respondents report some degree of access to healthcare. However, only around one-third indicate that they can always access healthcare when needed, while more than half report that access is only available sometimes. This distinction is important because effective management of chronic conditions requires reliable and continuous access to healthcare services.

Healthcare access is weakest among respondents who report poor health, those living alone and those with little or no formal education. These groups face a particularly concerning situation because they often have the greatest healthcare needs but the lowest ability to access services consistently.

Government facilities remain the principal source of healthcare. Primary Health Centres (PHCs) and government hospitals are accessed by approximately half of respondents, making them the backbone of healthcare provision for older persons. Private doctors and clinics continue to play an important supplementary role, particularly among households with greater financial resources and stronger family support. Community health workers, especially ASHAs, provide an important bridge to healthcare for older persons who face mobility, financial or geographical barriers.

The findings also demonstrate that living arrangements shape healthcare access pathways. Older persons living alone rely more heavily on public facilities and community health workers, while those living with family are more able to supplement public care with private services. Similarly, respondents living in environmentally at-risk housing are more dependent on community-level healthcare systems because higher-level facilities are often more difficult to access.

7.3 Healthcare Support and Barriers to Care

Regular health check-ups are the most commonly reported form of healthcare support, followed by subsidised medicines, family assistance with healthcare expenses and health insurance coverage. Despite these support mechanisms, around one-fifth of respondents report receiving no healthcare support at all, leaving them particularly exposed to the consequences of untreated or poorly managed health conditions.

Family support remains a crucial source of healthcare financing, particularly for married and widowed respondents. However, support declines among the oldest-old, even though healthcare needs increase substantially with age. Insurance coverage also remains limited, leaving many older persons dependent on family assistance and out-of-pocket spending.

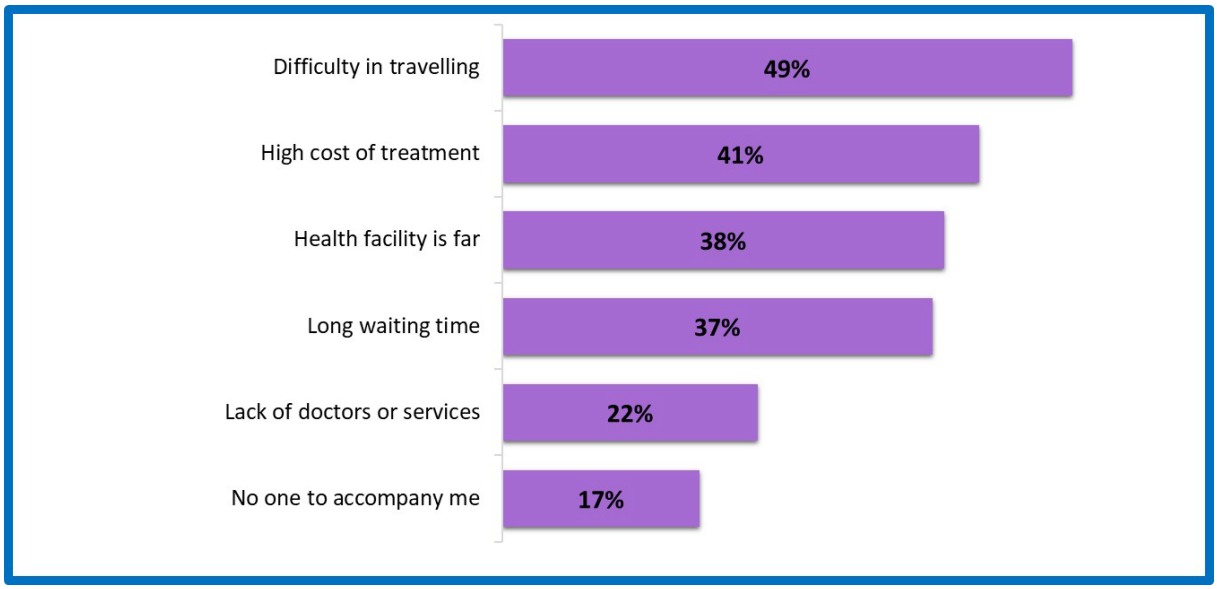

Figure 29: Barriers in getting medical care (Base: 2,224)

Barriers to healthcare are widespread and often occur simultaneously. Difficulty travelling to healthcare facilities is the most common obstacle, followed by high treatment costs, long distances to facilities and long waiting times. Together, these barriers create significant challenges for older persons, particularly those with mobility limitations, low incomes and weak support networks.

Travel barriers are especially important because they are closely linked to physical impairment and declining functional capacity. High treatment costs reinforce the economic vulnerabilities identified in earlier chapters, while long distances and waiting times further discourage healthcare-seeking behaviour. The absence of someone to accompany older persons to healthcare facilities is a particularly important barrier for those living alone and never-married respondents.

A particularly concerning finding is that respondents reporting poor health also report the greatest barriers to accessing care. Those with the highest healthcare needs face the highest treatment costs, the greatest travel difficulties and the most significant access constraints. This mismatch between need and access highlights a major challenge within the healthcare system and has direct implications for resilience and recovery capacity.

7.4 Health and Healthcare Through the IPP Lens

The findings demonstrate that health outcomes among older persons are shaped by the interaction of age, impairment, income, living arrangements, education and local service environments rather than by age alone. Poor health is concentrated among those experiencing multiple disadvantages simultaneously, particularly older persons who are poor, financially dependent, socially isolated or living with cognitive and communication difficulties.

The place dimension is equally important. Access to healthcare depends not only on individual health needs but also on household support systems, housing conditions, proximity to services and the strength of local healthcare infrastructure. Community health workers play a particularly important role in bridging these gaps for isolated and environmentally at-risk older persons.

The chapter further shows that healthcare barriers are cumulative rather than isolated. Travel difficulties, treatment costs, distance, waiting times and lack of accompaniment frequently occur together, creating compounded disadvantages for the most at-risk groups. Strengthening health resilience therefore requires interventions that address both healthcare provision and the broader social, economic and environmental factors influencing access to care.

7.5 Conclusion

The findings reveal that while many older persons maintain reasonably good health and some degree of access to healthcare services, a substantial proportion continue to face chronic illnesses, mobility limitations and significant barriers to obtaining care. Chronic pain, mobility problems, sensory impairments and hypertension are widespread, while healthcare access remains inconsistent for many respondents. Government facilities and frontline health workers remain central to service delivery, yet financial, physical and geographical barriers continue to restrict access for those with the greatest needs.

Viewed through the IPP lens, health risk factors arise from the interaction of age, impairment, income, social support and local healthcare environments. Older persons who are poor, living alone, financially dependent, cognitively impaired or residing in environmentally at-risk settings consistently experience poorer health outcomes and greater barriers to care. Strengthening resilience will therefore require integrated

approaches that improve affordability, accessibility, community outreach and targeted support for the most at-risk groups.

8. FAMILY SUPPORT AND SOCIAL CONNECTEDNESS

Family and social relationships are critical components of resilience among older persons. Beyond meeting practical care needs, family members, neighbours and community networks provide emotional support, companionship, emergency assistance and a sense of belonging. This chapter examines the strength of family relationships, levels of social connectedness, loneliness, community participation and the availability of support during times of need. Together, these findings provide important insights into the social resilience of older persons and the support systems that help them cope with everyday challenges and climate-related stresses.

8.1 Family Support Networks and Everyday Interactions

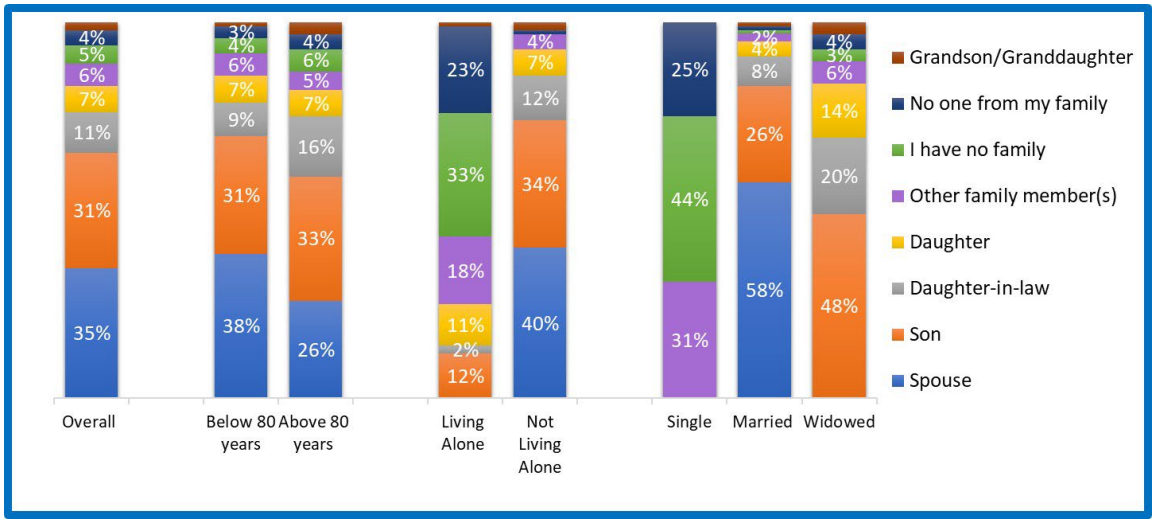

Figure 30: Family members relied on, for support by age groups, living arrangement and marital status (Base: 2224)

Family remains the primary source of support for most older persons. The spouse (35%) and son (31%) are the two most commonly relied-upon family members, together accounting for nearly two-thirds of all primary support relationships. Daughters-in-law provide support to a further 11%, highlighting their important but often under-recognised role within family care systems. By contrast, daughters account for only 7% of primary support relationships. Notably, around 9% of respondents report having no family support or no family at all, representing a particularly at-risk group.

Support patterns vary significantly across demographic groups. Men primarily depend on spouses, whereas women—especially widows—rely more heavily on sons and

daughters-in-law. As age increases, reliance on spouses declines while dependence on children and daughters-in-law rises. Older persons who are never married face the weakest support networks, with many reporting little or no reliable family support.

Family interaction remains frequent for most respondents. Nearly four-fifths interact with family members daily and a further proportion interact several times a week. However, interaction levels differ sharply by living arrangement. Older persons living with family report high levels of daily contact, while those living alone experience much lower interaction levels and are significantly more likely to report rare or no contact with family members.

The most common forms of interaction include spending time together and talking (84%), receiving emotional support (64%), sharing meals (58%) and receiving help with daily activities (49%). These findings indicate that family relationships continue to provide both emotional and practical support. However, the quality of interaction varies considerably. Qualitative analysis suggests that some older persons—particularly those with cognitive, communication or mental health difficulties—receive frequent care and supervision but still experience loneliness and exclusion from meaningful family participation.

8.2 Feeling Heard, Included and Connected Within the Family

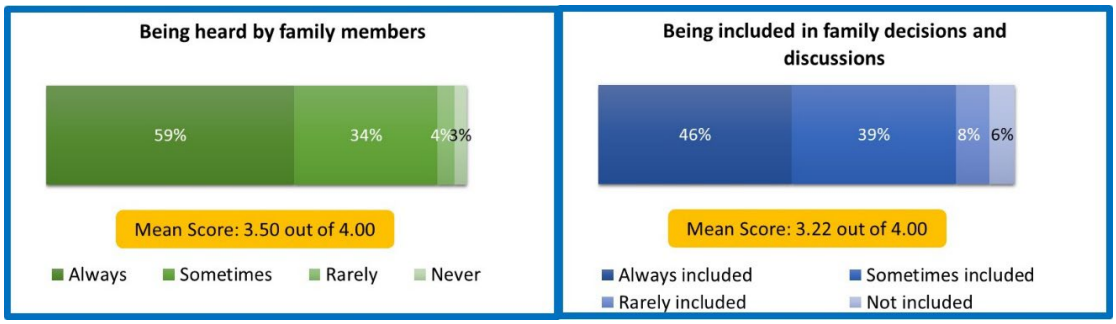

Figure 31: Frequency of family members listening to concerns and problems of senior citizens vs. being included in family discussions and decisions (Base: 2121)

Most respondents report positive family relationships. Nearly six in ten state that family members always listen to their concerns, while only a small minority report that they are rarely or never heard. However, inclusion in family discussions and decision-making is weaker than simply being listened to. Older persons generally feel that family members hear their concerns but are less likely to feel actively involved in decisions affecting household life.

The strongest differences emerge by living arrangement. Older persons living with spouses or family members report the highest levels of inclusion and participation, while those living alone consistently report the lowest levels. Age and gender differences are

present but comparatively modest. Older women report slightly lower levels of inclusion than men, reflecting broader household power dynamics. Communication-related impairments also reduce participation in family discussions, highlighting the importance of communication barriers as a driver of exclusion.

The findings suggest that emotional well-being depends not only on being physically present within a household but also on having a meaningful voice within family life. Being heard and being included are related but distinct dimensions of social connectedness.

8.3 Loneliness, Respect and Emotional Well-Being

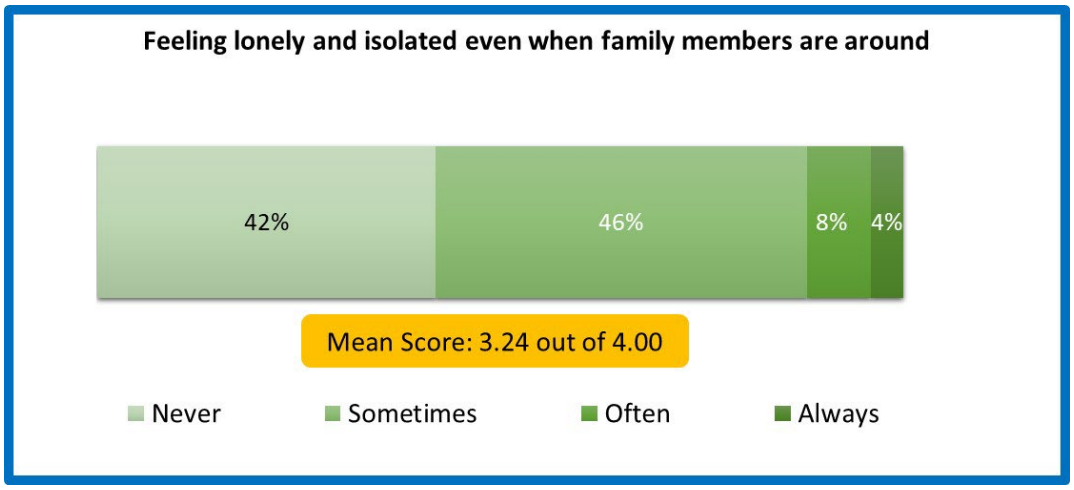

Figure 32: Frequency of feeling isolated and lonely even when family members are around (Base: 2121)

Although most respondents report relatively low levels of loneliness, the findings reveal that social isolation remains a significant concern. Around one in ten older persons report feeling lonely often or always, while many others experience loneliness occasionally. Importantly, the survey measures loneliness even when family members are physically present, indicating that emotional isolation can exist within households as well as outside them.

Living arrangement is the strongest predictor of loneliness. Older persons living alone report substantially higher levels of loneliness than any other group. Communication difficulties, hearing impairment and mental health conditions are also associated with higher loneliness levels. These findings indicate that loneliness is driven less by age itself and more by the quality of social relationships and the ability to participate meaningfully in family and community life.

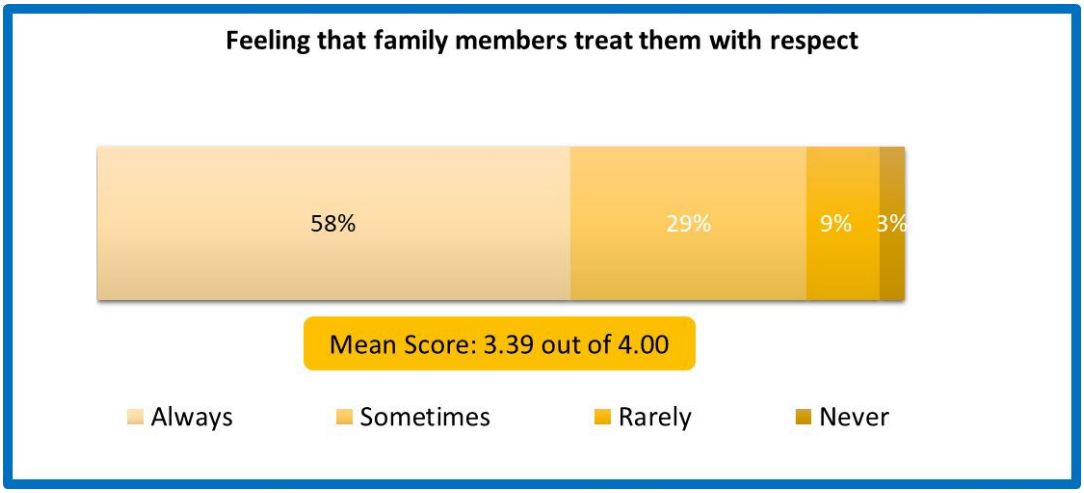

Figure 33: Feeling that family members treat the seniors in house with respect (Base: 2121)

Most older persons feel respected within their households, with a majority reporting that family members treat them with respect all or most of the time. However, respect declines noticeably among the oldest-old, women, those living alone and respondents experiencing significant dependency. The findings suggest that as health declines and dependency increases, perceptions of status and respect within households may weaken.

Together, the findings demonstrate that emotional well-being is shaped not only by the presence of family members but also by inclusion, communication, mutual respect and meaningful social participation.

8.4 Family Support During Emergencies

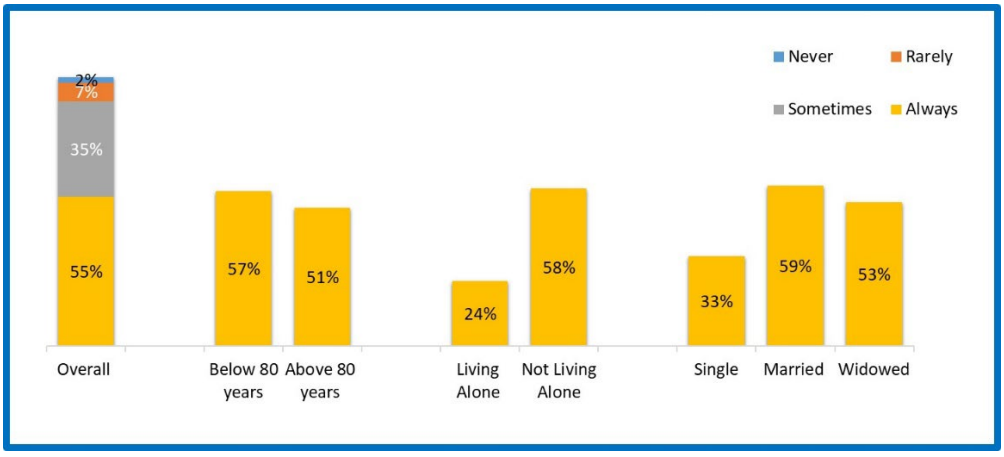

Figure 34: Availability of family members to help in case of any urgency– by age, living arrangement and marital status – Extent of help received always (Base: 2121)

Family support remains the primary safety net during emergencies. More than half of respondents report that family members are always available to help during urgent health, financial or personal situations, while a further proportion report that help is available sometimes. Overall, family emergency support appears relatively strong.

However, important gaps emerge among specific groups. Older persons living alone report substantially lower levels of emergency support and are significantly more likely to state that family members are rarely or never available when needed. Similar patterns are observed among never-married respondents. These findings have important implications for resilience during climate-related disasters and other emergencies, where timely support can be critical for evacuation, healthcare access and recovery.

The analysis also indicates that family interaction has weakened for a minority of respondents over the previous three years, particularly among those living alone, widowed respondents and those with communication difficulties. While most family relationships remain stable, these trends suggest that some older persons may face increasing social isolation over time.

8.5 Community Participation and External Support Networks

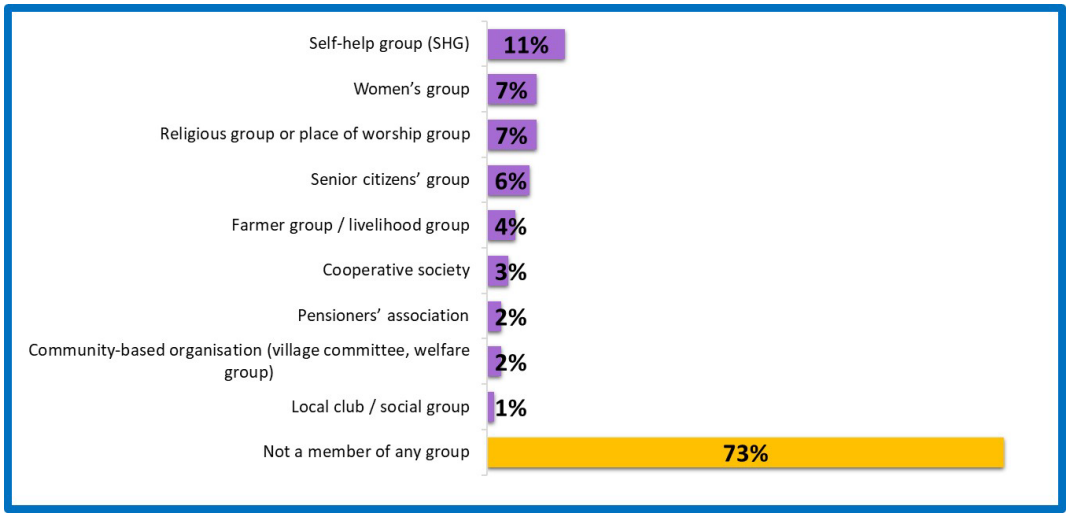

Figure 35: Membership of any group or organization in the village or community (Multiple response) (Base: 2224)

Community participation among older persons is limited. Nearly three-quarters of respondents do not belong to any organised group or association. Among those who do participate, Self-Help Groups (SHGs), women's groups, religious organisations and senior citizens' groups are the most common forms of engagement.

Participation declines steadily with age and is lower among widowed respondents, those living alone and individuals with little or no formal education. The strongest predictor of participation is education, with more educated respondents substantially

more likely to engage in organised community activities. These findings suggest that community participation remains uneven and excludes many of the groups most likely to benefit from social engagement and support.

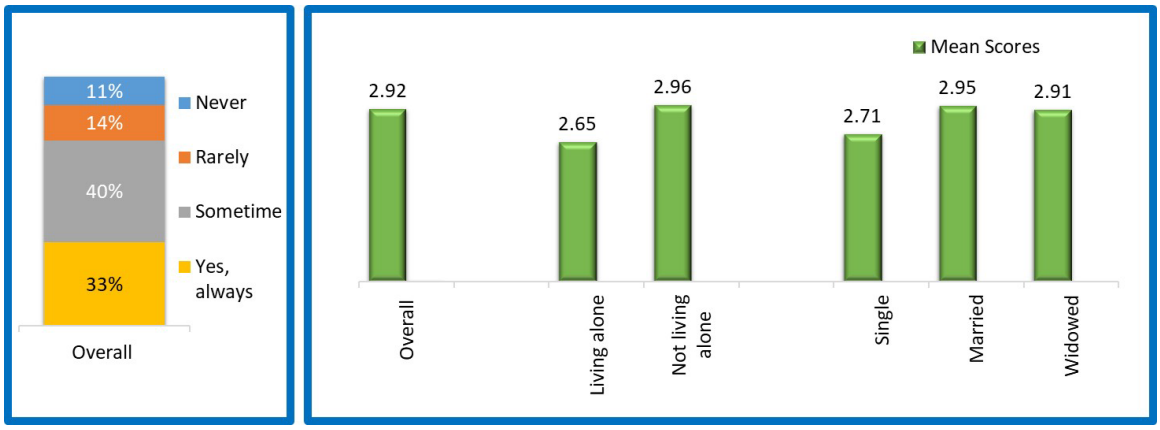

Figure 36: Support provided to Elderly by people in the neighbourhood, community or groups, when needed (Base: 2224)

Community support plays an important supplementary role alongside family support. Around one-third report that support from neighbours, community members or local groups is always available, while many others report receiving assistance occasionally. The most valued forms of community support include help during illness, emotional support, financial assistance and companionship.

However, community support is generally less reliable than family support and is weakest among those living alone and never-married respondents. This finding is particularly important because these groups often depend most heavily on community networks due to weaker family support systems.

8.6 Family Support and Social Connectedness Through the IPP Lens

The findings strongly reinforce the value of the Intersectional Place Perspective (IPP) framework. Social connectedness is shaped not by age alone but by the interaction of living arrangements, marital status, impairment, education, family relationships and community environments. Older persons who are widowed, never married, living alone, cognitively impaired or experiencing mental health difficulties consistently report weaker support networks, greater loneliness and lower levels of social participation.

The findings also demonstrate the importance of place-based support systems. Family remains the primary source of assistance, but neighbours, community groups and local networks become increasingly important when family support is absent. The quality of resilience therefore depends not only on household relationships but also on broader social environments and opportunities for participation.

Perhaps most importantly, the chapter shows that resilience depends on the quality—not merely the existence—of social relationships. Physical presence, caregiving and frequent interaction do not necessarily guarantee inclusion, emotional support or connectedness. Strengthening resilience therefore requires approaches that promote social participation, emotional well-being, community engagement and meaningful inclusion alongside practical support.

8.7 Conclusion

The findings demonstrate that family remains the cornerstone of support for older persons, with spouses, sons and daughters-in-law providing most emotional, practical and emergency assistance. Most respondents maintain regular family contact and report positive experiences of being heard, included and respected. However, significant gaps emerge among older persons living alone, widowed or never married, and those with cognitive, communication or mental health difficulties. These groups consistently experience weaker support networks, greater loneliness and lower access to emergency assistance.

Viewed through the IPP lens, social resilience is shaped by the interaction of family structures, health conditions, living arrangements, social participation and community environments. While family support remains strong overall, community participation is limited and many at-risk older persons remain socially isolated. Strengthening resilience will therefore require greater attention to social inclusion, community engagement, emotional well-being and local support systems, particularly for older persons facing multiple and overlapping risk factors.

9. GOVERNMENT SCHEMES AND INSTITUTIONAL SUPPORT

Government welfare programmes play an important role in supporting the economic security, health and well-being of older persons. This chapter examines awareness, access and utilisation of key government schemes, including pensions, food security, healthcare and housing support programmes. It also explores barriers that older persons face in accessing benefits and assesses the perceived usefulness of institutional support systems in addressing their needs. Together, these findings provide important insights into the effectiveness of existing welfare systems in supporting resilience among older persons.

9.1 Awareness of Government Schemes

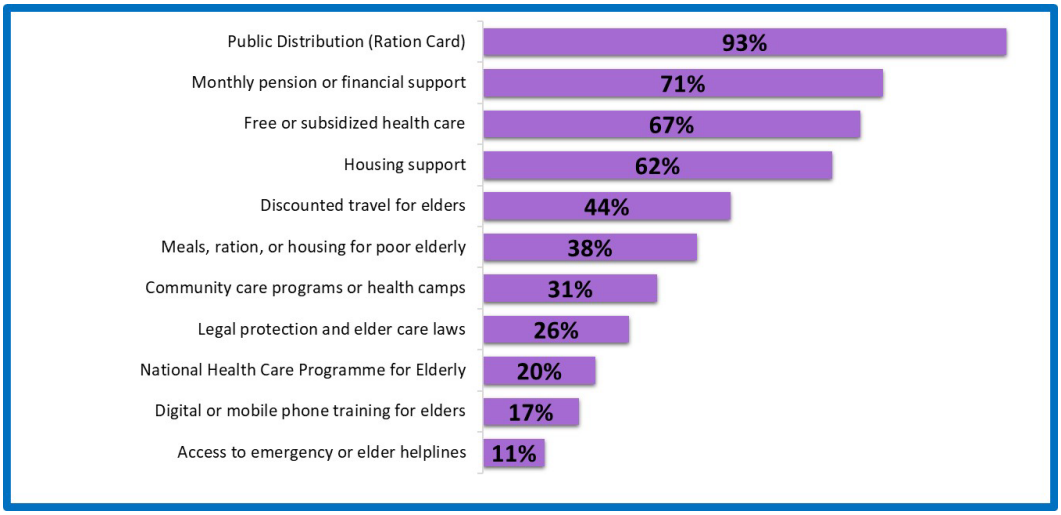

Figure 37: Awareness about various Government schemes (Base: 2224)

Awareness of government schemes is generally high for long-established programmes. The Public Distribution System (PDS) is known to almost all respondents (93%), followed by pension schemes (71%), free or subsidised healthcare (67%) and housing support programmes (62%). Awareness declines substantially for more specialised programmes such as community care services, legal protection mechanisms, older persons' helplines and the National Programme for Health Care of the Elderly (NPHCE).

The findings reveal a consistent pattern: schemes that are widely embedded in everyday life are well known, while newer, specialised or targeted programmes remain unfamiliar to many older persons. This creates important gaps in access to services that are specifically designed to address health, care and protection needs.

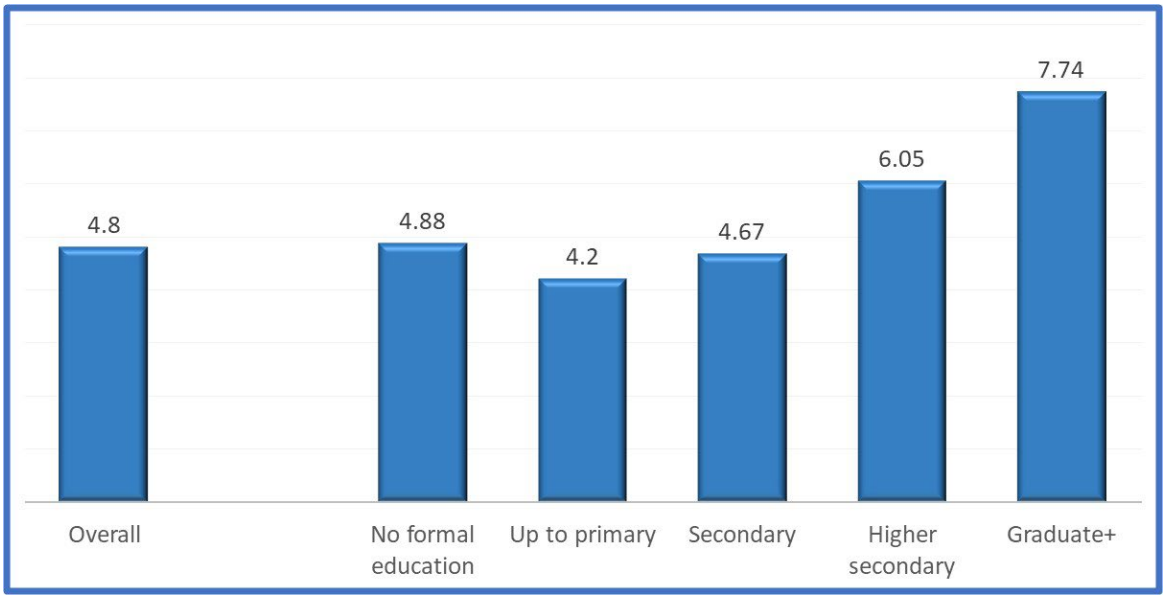

Figure 38: Average number of schemes that respondents are aware of by education (Base: 2224)

Awareness is strongly influenced by education, health and living conditions. Older persons with higher levels of education are aware of substantially more schemes than those with little or no formal education. Similarly, respondents reporting good health and safer housing conditions consistently demonstrate greater awareness than those experiencing poor health or housing-related risk factors. This suggests that those most in need of support are often the least informed about available programmes.

9.2 Access to Government Benefits and Institutional Support

Most respondents who are enrolled in government programmes report receiving benefits regularly, particularly pensions, food support and healthcare-related assistance. Pension schemes and the Public Distribution System are typically delivered on a monthly basis, providing an important source of ongoing support. Housing assistance and health insurance schemes follow different delivery models, reflecting their specific programme objectives.

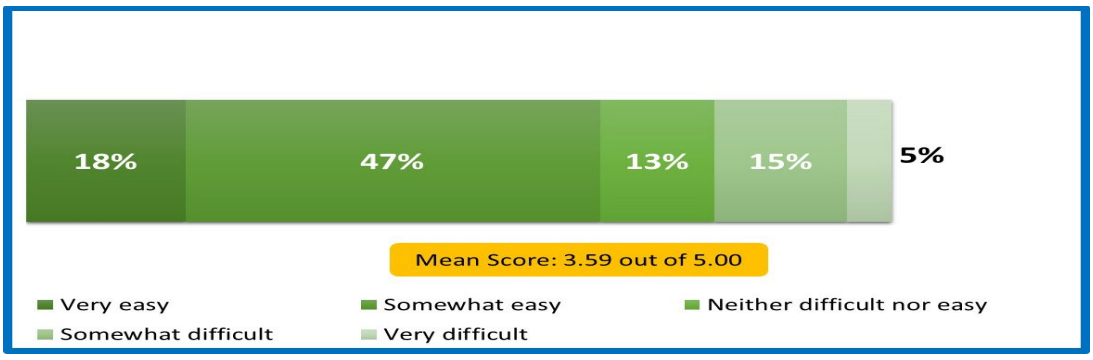

Figure 39: Ease of accessing various government schemes or benefits (Base: 2057)

The overall experience of accessing government schemes is broadly positive. Around two-thirds of respondents describe the process as easy or somewhat easy, while one in five report difficulties. Although the majority are able to access benefits successfully, a significant minority continue to face barriers in navigating government systems.

Access difficulties are concentrated among respondents with low education, poor health, lower socio-economic status and those severely affected by disasters. These findings suggest that institutional support systems are least accessible to many of the groups that have the greatest need for assistance.

9.3 Barriers to Accessing Government Schemes

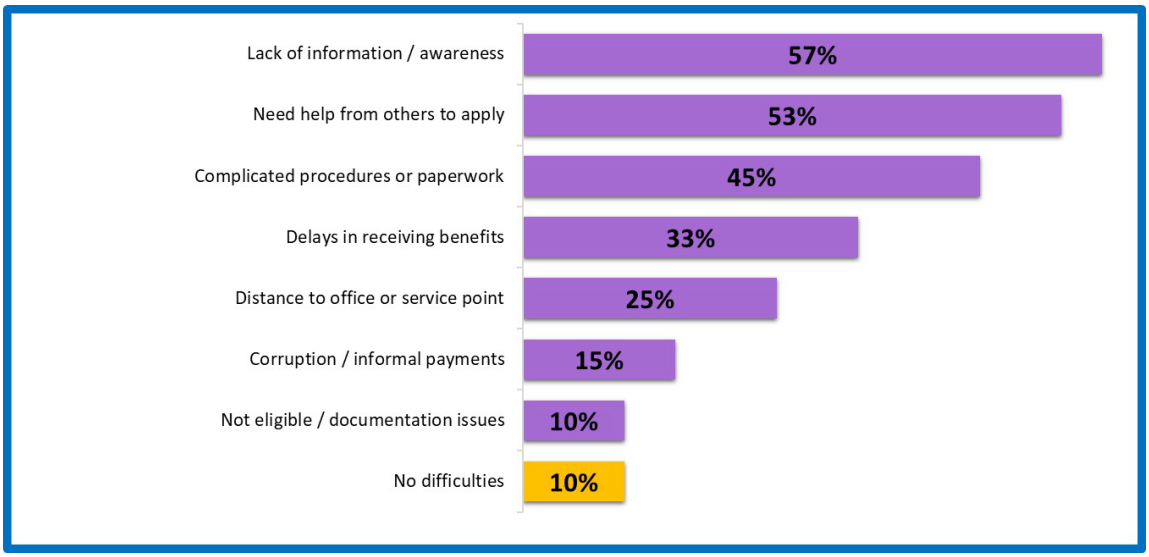

Figure 40: Elderly facing difficulties in accessing government schemes or benefits (Base: 2057)

The most significant barriers relate to information and administrative processes rather than the absence of schemes themselves. Lack of awareness is the most frequently reported challenge, followed by complex application procedures, documentation requirements and difficulties understanding eligibility criteria. Mobility constraints, long waiting times and repeated visits to government offices also create important barriers for many older persons.

Digital exclusion remains an emerging concern. Although reported by a smaller proportion of respondents, difficulties using online systems, digital authentication procedures and technology-based application processes highlight the growing importance of digital accessibility for older populations. These barriers disproportionately affect those with low education, limited mobility and reduced access to family support.

Despite these challenges, perceptions of government support remain positive. Most respondents consider welfare schemes useful in meeting their needs, particularly in relation to food security, income support, healthcare and housing assistance. However, perceptions of usefulness vary across hazard contexts, with programmes generally viewed as more effective during sudden-onset disasters than in addressing slow-onset stresses such as heatwaves, erosion and recurring environmental deterioration.

9.4 Government Schemes and Institutional Support Through the IPP Lens

The findings demonstrate that access to institutional support is shaped by the interaction of education, health, economic status, housing conditions and environmental exposure rather than by eligibility alone. Older persons with low education, poor health, greater housing risk and lower socio-economic status consistently report lower awareness and greater difficulty accessing benefits. In many cases, those who need support most are least likely to know about or successfully access available schemes.

The place dimension is equally important. Respondents affected by disasters and environmental risk factors report greater challenges in accessing support and lower satisfaction with welfare delivery. The findings suggest that institutional resilience depends not only on programme design but also on the ability of delivery systems to reach at-risk populations in different environmental and social contexts. Simplified procedures, proactive outreach, local assistance mechanisms and age-friendly service delivery systems are therefore essential for ensuring equitable access.

9.5 Conclusion

Government schemes provide a critical safety net for older persons through pensions, food security, healthcare and housing support. Awareness and utilisation of major programmes are generally high, and most beneficiaries view these schemes as useful in meeting their needs. However, significant inequalities remain in awareness, accessibility and effective utilisation. Older persons with low education, poor health, lower socio-economic status and greater environmental risk factors consistently face the greatest challenges in accessing support.

Viewed through the IPP lens, institutional support is shaped by the interaction of social, economic, health and place-based factors. Strengthening resilience will therefore require not only expanding welfare provision but also improving awareness, simplifying procedures, strengthening last-mile delivery and developing more age-responsive and climate-sensitive support systems capable of reaching older persons who face multiple and overlapping risk factors.

10. CLIMATE RISK FACTORS, RESILIENCE AND RECOVERY AMONG OLDER PERSONS

Climate-related risks affect older persons through multiple pathways, including direct exposure to environmental hazards, impacts on health and livelihoods, disruption of care arrangements, and reduced access to essential services. However, exposure alone does not determine outcomes. The ability of older persons to prepare for, respond to and recover from climate-related events is shaped by a combination of health status, family support, financial security, housing conditions, community networks and institutional assistance. Using the Intersectional Place Perspective (IPP) framework, this chapter examines the factors that increase risk, the resources that support resilience, and the recovery pathways followed by older persons across different social and geographic contexts.

10.1 Climate Impacts of Hazards on Older Persons

Rather than focusing only on exposure, which has been covered in Chapter 4, he analysis examines how climate events affect the lives of older persons through their impacts on health, livelihoods and housing.

Older persons with impairments consistently report greater adverse health impacts following climate events. Heatwaves are associated with worsening chronic illness, fatigue and mobility challenges, while floods and storms frequently disrupt access to medicines and healthcare. Across all hazard types, respondents reported increased physical limitations and greater dependence on caregivers following climate shocks.

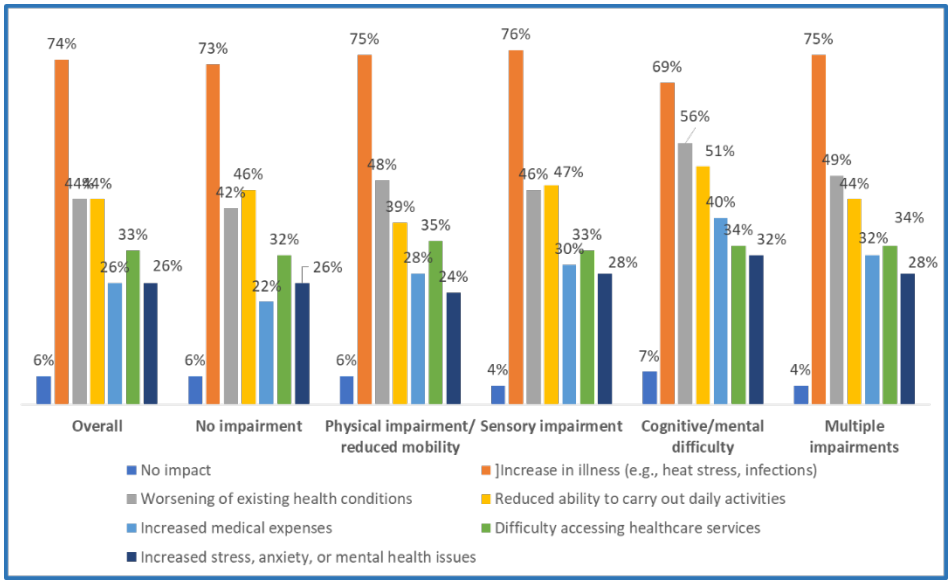

Figure 41: Impact of Climate Hazards on Health across Elders with Impairments (Base: 1525)

Climate events also have significant livelihood consequences. Droughts and rainfall variability are particularly disruptive for agricultural households, while floods and storms affect informal work, small businesses and household income sources. Even where direct losses are limited, recurring climate events create uncertainty and increase economic vulnerability.

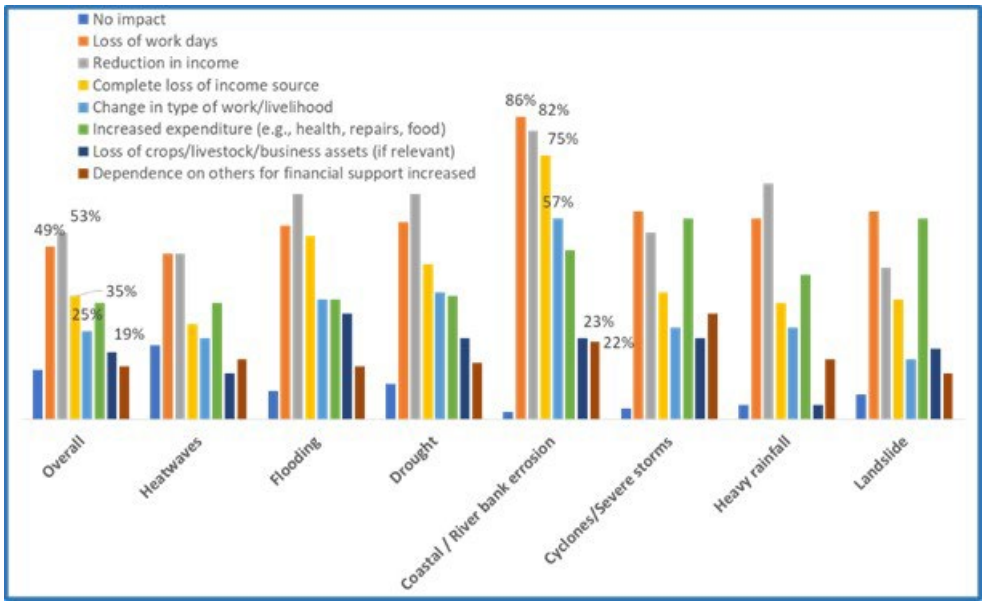

Figure 42: Impact of Climate Hazards on Livelihoods across types of Hazards (Base: 1525)

Housing impacts are equally important. Flooding, cyclones and heavy rainfall damage roofs, walls, sanitation facilities and household assets. Poor-quality housing increases exposure to subsequent climate events and contributes to longer recovery periods.

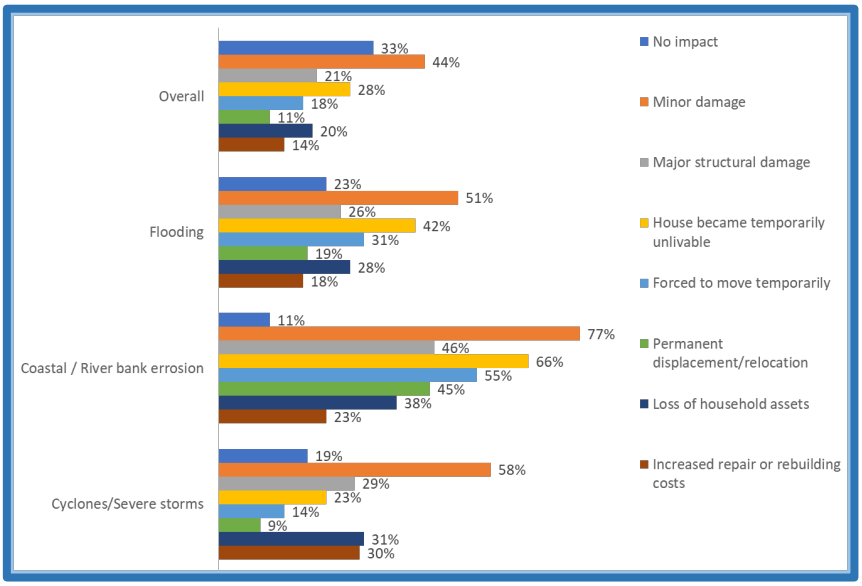

Figure 43: Impact of Climate Hazards on Housing across types of Hazards (Base: 1525)

10.2 Longer-Term Consequences of Climate Events

The effects of climate events often continue long after the immediate hazard has passed.

Many respondents reported worsening health following climate events, particularly those with pre-existing illnesses, mobility limitations and impairments. The cumulative effect of repeated exposure contributes to declining physical resilience among some groups.

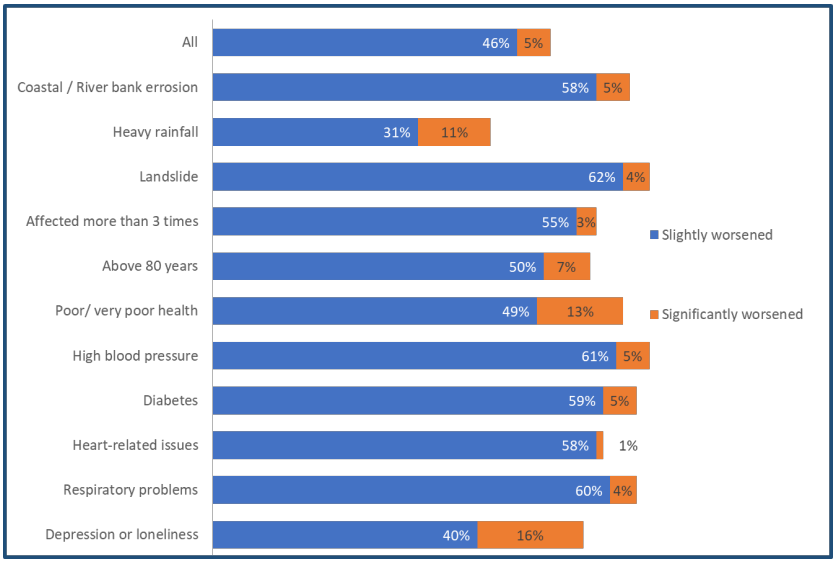

Figure 44: Self reported worsening health status after the climatic event (Base: 1525)

Climate shocks also affect livelihoods and income. Respondents exposed to droughts, floods and storms frequently report reductions in earnings, reduced agricultural productivity and increased dependence on family support or government assistance.

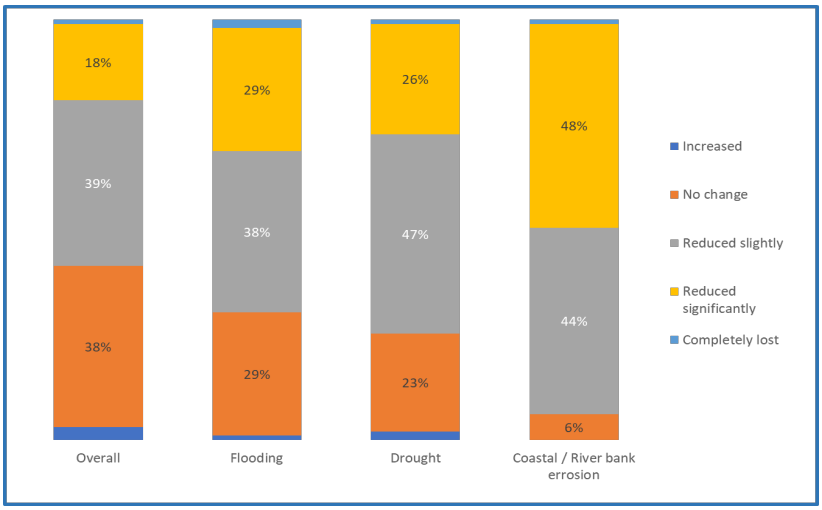

Figure 45: Change in Income and Livelihood after the climatic event by the different event types (Base: 1525)

Housing recovery often remains incomplete, especially among poorer households and those living in environmentally exposed locations.

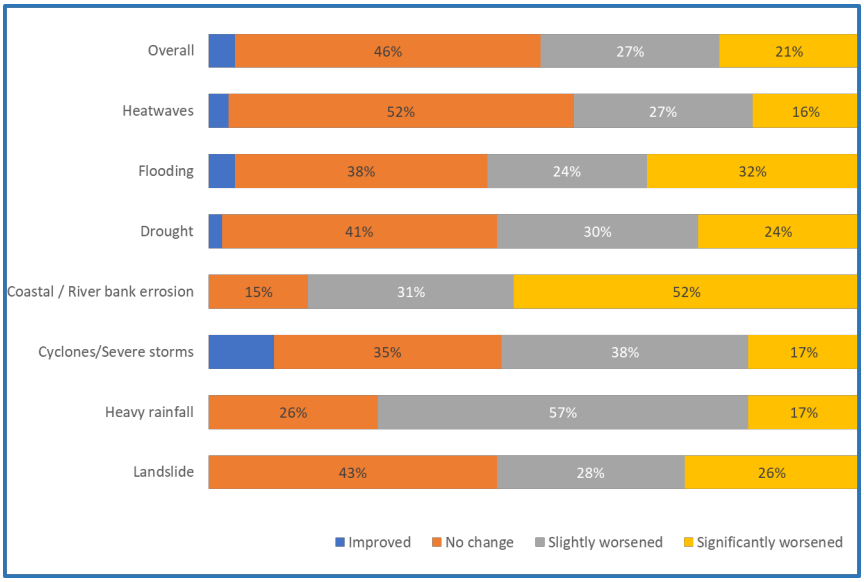

Figure 46: Change in Housing Status after the climatic event by the different event types (Base: 1525)

10.3 Coping Responses during Climate Events

Older persons employ a wide range of coping strategies to manage climate-related stresses.

Heatwave responses primarily involve behavioural adaptations such as remaining indoors, increasing water intake and reducing physical activity.

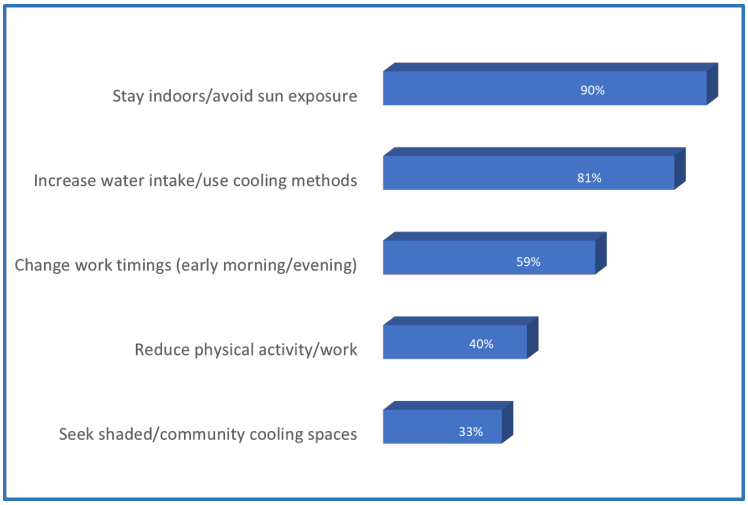

Figure 47: Heatwave Coping Mechanisms (Base: 991)

Flood-related coping frequently involves temporary relocation to safer locations, particularly among households residing in low-lying areas.

Drought-affected households adopt water conservation measures, reduce agricultural activity and depend increasingly on family support or alternative income sources.

Cyclone-prone households often use shelters, community buildings or safer housing arrangements during emergencies.

Although coping strategies vary across hazard types, they consistently demonstrate the active role that older persons play in managing climate-related risks.

10.4 Health Systems, Early Warning and Community Preparedness

Health systems and frontline workers provide an important layer of resilience.

Overall, a large majority of respondents consider local health workers, ASHAs and other frontline personnel helpful during climate-related events. Their role is particularly important in supporting older persons with chronic illnesses, mobility limitations and impairments.

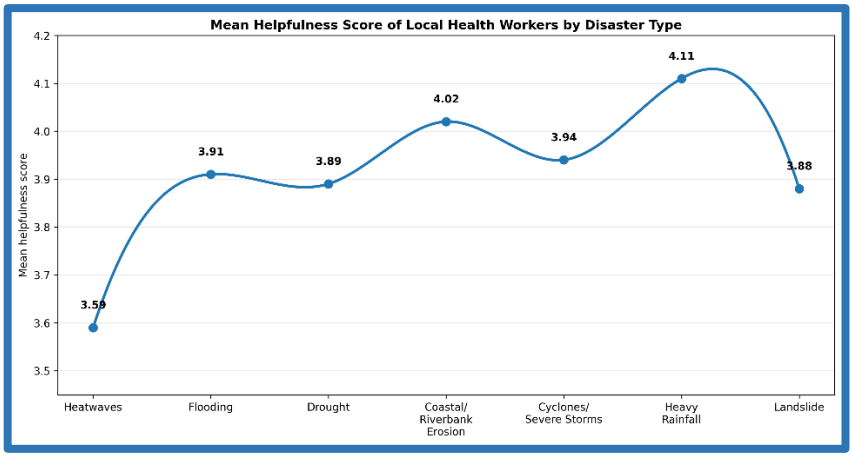

Figure 48: Mean Helpfulness Score of Local Health Workers by Climate Shock Type (Base: 1729)

Early warning systems also contribute significantly to preparedness. Information is received through multiple channels, including local government, community networks, media and family members.

10.5 Coping Resources and Sources of Resilience

The ability to cope with climate-related shocks depends heavily on available support systems and resources.

Family support remains the most important source of resilience, followed by savings, household assets, community support and government assistance. Financial coping measures include drawing upon savings, borrowing from relatives, reducing expenditure and seeking temporary livelihood alternatives.

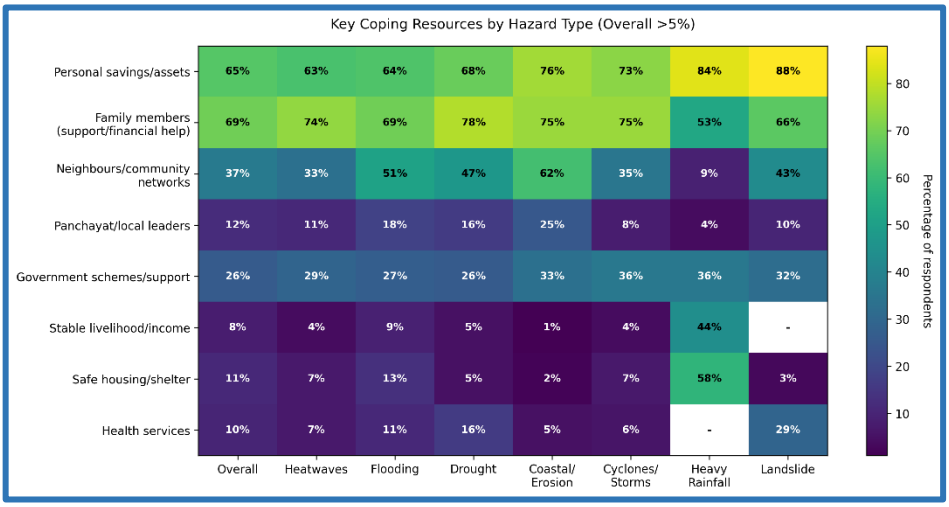

Figure 49: Key Coping Measures by Hazard Type (Base: 1729)

The findings demonstrate that resilience is supported primarily by informal support systems, with formal institutions playing an important but secondary role.

10.6 Adaptation Pathways

Many older persons have actively adapted to changing environmental conditions.

Adaptation measures include modifications to housing, changes in livelihood activities, improved water storage, altered work patterns and enhanced preparedness behaviours. Households experiencing repeated climate events are often more likely to adopt adaptive strategies.

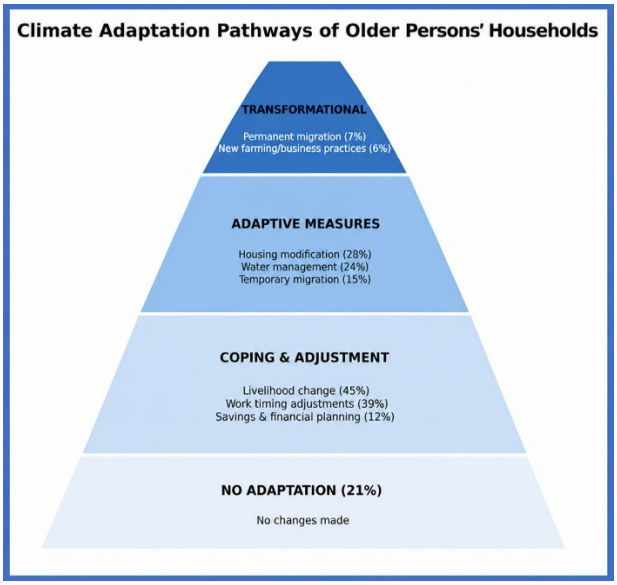

Figure 50: Adaptation Pathways against Climatic Events (Base: 1729)

These adaptation measures illustrate that older persons are not passive recipients of assistance but active participants in building resilience.

10.7 Adaptive Capacity and Recovery

The Adaptive Capacity Index provides a comprehensive assessment of preparedness, adaptation and confidence in responding to future climate events.

Overall, the majority of respondents demonstrate moderate to high adaptive capacity, reflecting substantial levels of learning, preparedness and adaptation.

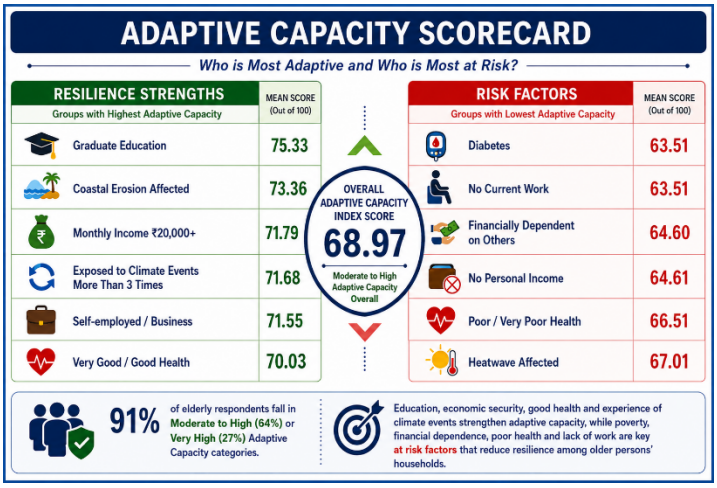

Figure 51: Adaptive Capacity Index – Strengths and Risk Factors (Base: 1729)

Recovery experiences vary considerably across population groups. Respondents with stronger family support, better health and greater financial resources generally recover more quickly and more completely than those facing multiple disadvantages.

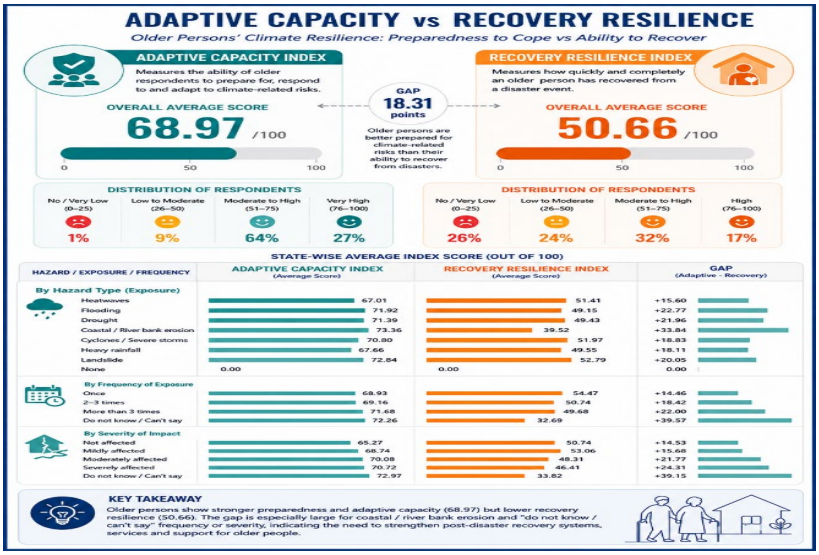

Figure 52: Adaptive Capacity Index and Recovery Resilience Index – a comparison (Base: 1729)

The findings demonstrate a strong relationship between adaptive capacity and recovery outcomes.

10.8 Resilience Profiles and the Resilience Ecosystem

The analysis identifies several resilience pathways among older persons.

Some respondents can be described as Climate-Adapted and Resource-Secure, characterised by strong family support, good health and stable financial resources. Others face multiple overlapping risk factors, including poor health, social isolation, poverty and repeated climate exposure.

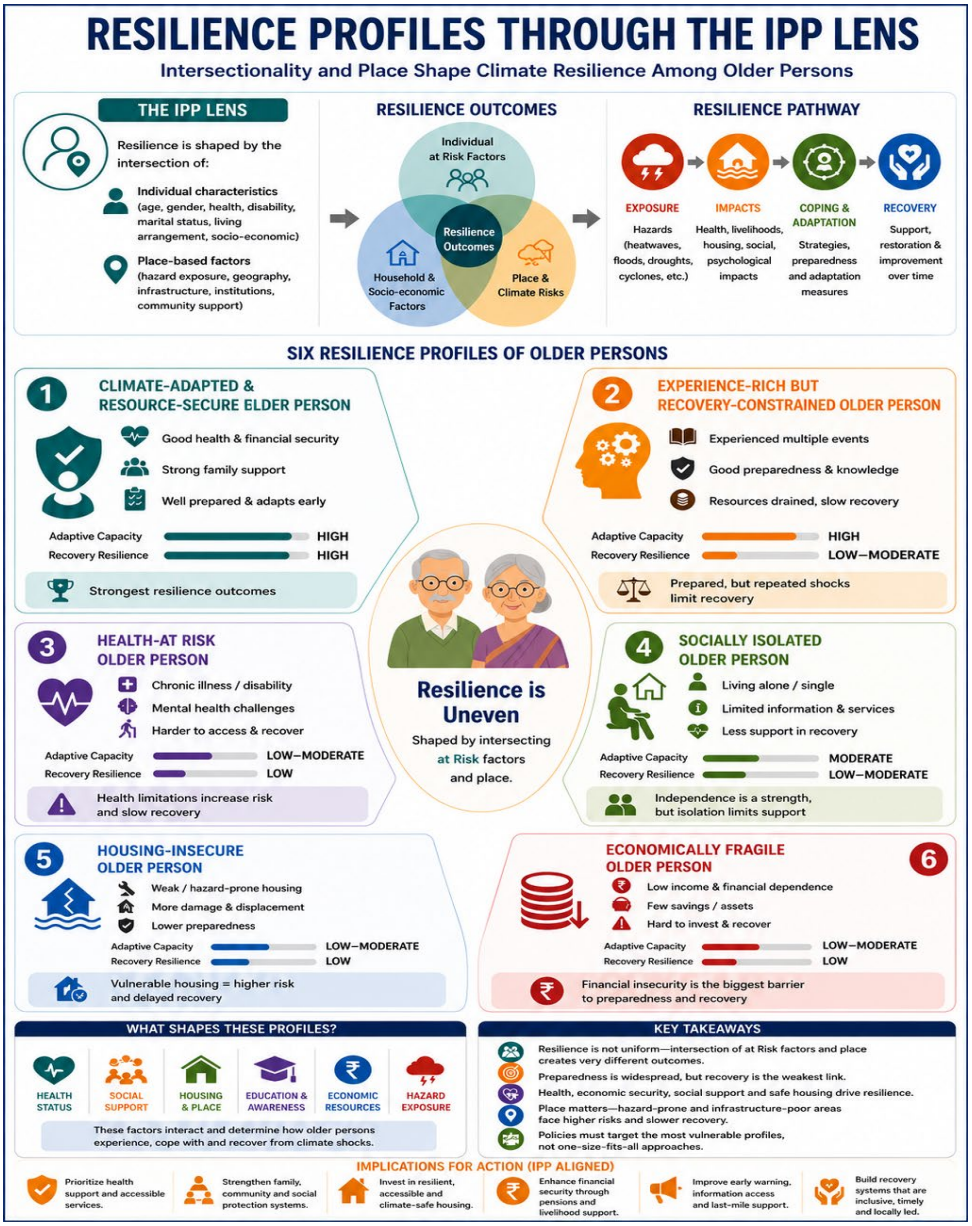

Figure 53: Resilience Profiles through the IPP Lens

Resilience is best understood as an ecosystem involving family support, community networks, health systems, social protection programmes and environmental conditions.

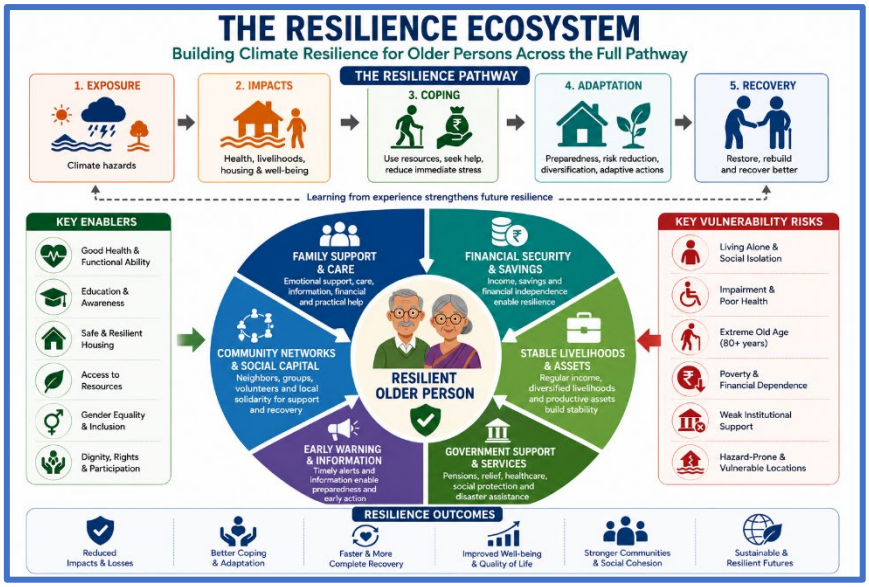

Figure 54: The Resilience Eco-system

The Composite Resilience Index demonstrates that resilience is not distributed equally. Higher resilience is associated with stronger support systems, safer housing and better health, while lower resilience is concentrated among older persons living alone, widows, persons with impairments and economically disadvantaged households.

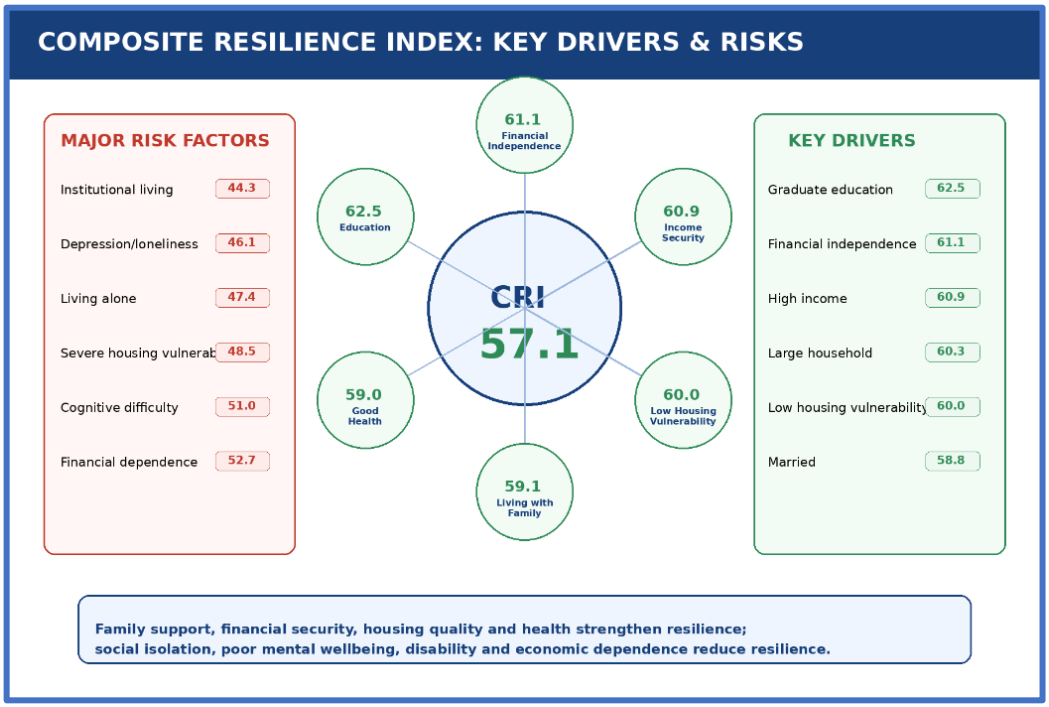

Figure 55: Composite Resilience Index – Key Drivers and Risks (Base: 2224)

10.9 Climate Risk, Resilience and Recovery Through the IPP Lens

The findings strongly reinforce the value of the Intersectional Place Perspective (IPP) framework in understanding climate resilience among older persons. Climate-related risks are not determined solely by exposure to hazards but emerge from the interaction of multiple social, economic, health and environmental factors. Across the chapter, poor health, impairment, living alone, widowhood, poverty, weak housing conditions and limited access to services consistently emerge as the factors most strongly associated with lower resilience and more difficult recovery pathways. Older persons experiencing several of these risk factors simultaneously face significantly greater challenges than those exposed to only one form of disadvantage.

The findings also demonstrate the importance of place-based conditions in shaping resilience outcomes. Older persons residing in drought-prone, flood-prone, coastal erosion and cyclone-affected areas experience different combinations of risks and recovery challenges. While climate hazards provide the immediate trigger, their consequences are mediated by local livelihoods, housing quality, availability of health services, social protection systems and community support structures. Consequently, individuals exposed to similar hazards often experience very different outcomes depending on the resources and support available within their households and communities.

The chapter further highlights that resilience is built through the interaction of individual capacities, family support systems, community networks and institutional responses. Family support remains the strongest source of resilience, while savings, community solidarity, health services and government programmes provide important additional layers of protection. The IPP framework therefore demonstrates that strengthening climate resilience among older persons requires integrated interventions that simultaneously address health, care, social protection, housing, livelihoods and local environmental conditions rather than focusing only on disaster response.

10.10 Conclusion

The findings demonstrate that climate-related risks are widespread among older persons, but resilience is shaped less by hazard exposure alone and more by the interaction of health, financial security, social support, housing conditions and access to services. Climate events affect health, livelihoods and housing simultaneously, with impacts falling most heavily on older persons living alone, widows, persons with impairments, the oldest-old and economically disadvantaged households.

At the same time, the study highlights significant resilience among older persons. Family support, savings, community networks, frontline health workers and government assistance emerge as the strongest foundations of adaptation and recovery. The findings

underscore the need for integrated, age-responsive climate resilience strategies that strengthen care systems, social protection, healthcare, community preparedness and climate adaptation while recognising older persons as active contributors to resilience rather than passive recipients of support.

11. POLICY, SERVICE DELIVERY, INCLUSION GAPS AND PERCEIVED RISK IN CLIMATE RESILIENCE

Climate resilience depends not only on the capacities of individuals and households but also on the effectiveness, accessibility and inclusiveness of the institutions designed to support them. Government schemes, healthcare services, social protection programmes, disaster preparedness systems and relief mechanisms play a critical role in reducing risk and supporting recovery among older persons. However, access to these systems is not uniform. Differences in health, financial resources, social support and environmental exposure influence both access to services and perceptions of their adequacy.

This chapter examines older persons' perceptions of government support, identifies major service delivery gaps and experiences of exclusion, and explores how older persons themselves understand risk and vulnerability during climate-related disasters. Through the IPP lens, the chapter highlights which groups remain most at risk of being left behind and where policy responses need to become more inclusive and responsive.

11.1 Adequacy and Inclusiveness of Government Support

Overall perceptions of government support are moderately positive. Nearly two-thirds of respondents (62%) consider existing government schemes and services sufficient to meet their needs during climate-related events, while 63% perceive disaster relief systems as inclusive of older persons. These findings suggest that existing programmes provide an important foundation for climate resilience.

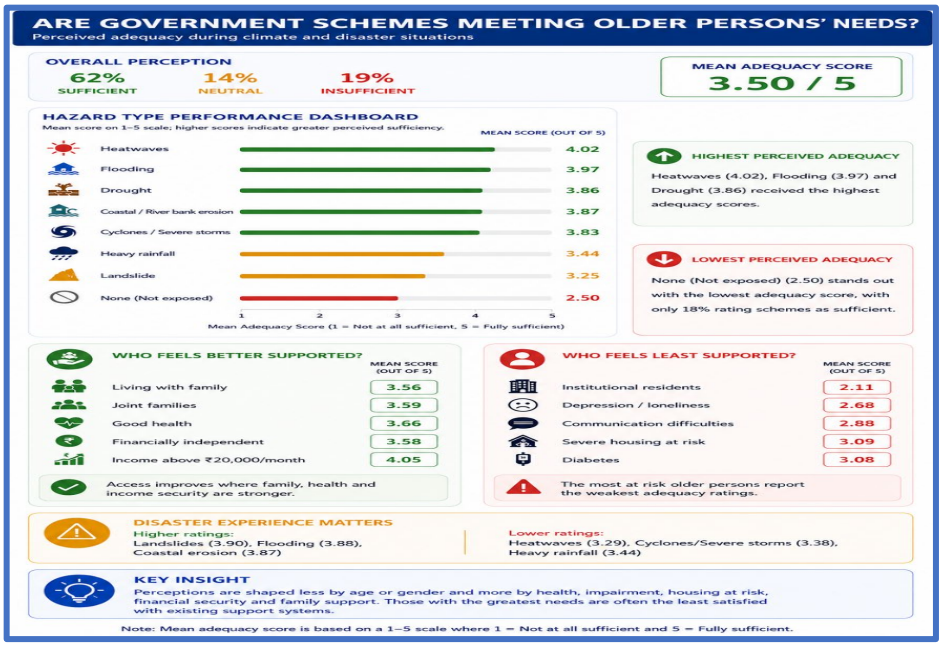

Figure 56: Sufficiency of Government Schemes and Services during Climatic Events (Base: 2224)

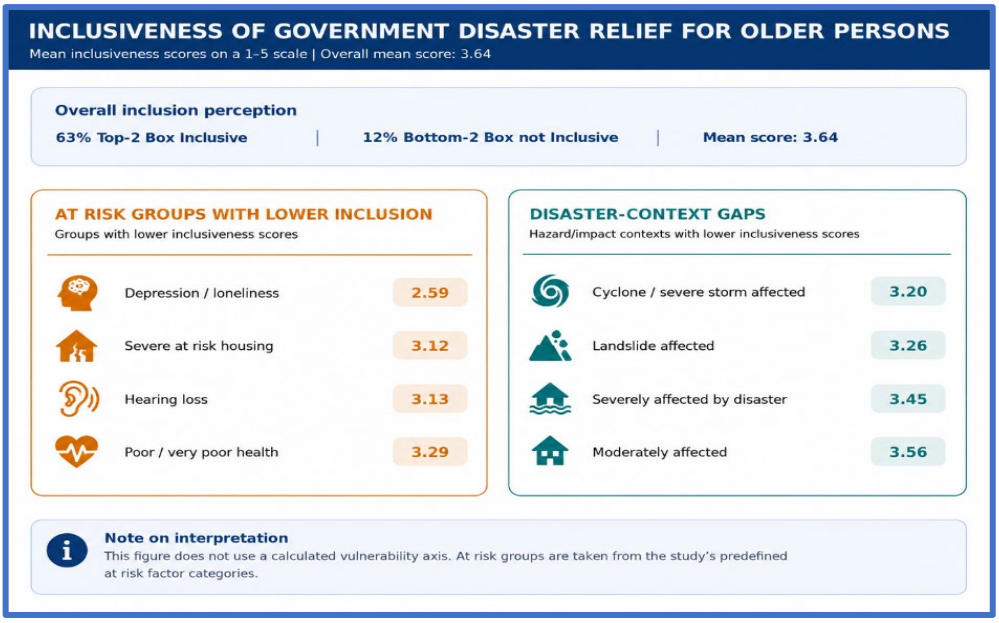

Figure 57: Inclusiveness of Government Climatic Shock Relief for Elders (Base: 2224)

Despite generally favourable assessments, important inequalities emerge. Respondents living alone, those residing in institutional settings, individuals reporting poor health, depression or loneliness, and those living in severely at-risk housing consistently report lower levels of satisfaction and inclusion. Similarly, perceptions become less positive among respondents who experienced severe disaster impacts, indicating that support systems are often least effective for those facing the greatest challenges.

The findings suggest that government support is valued by many older persons but remains less accessible and less responsive for groups experiencing multiple and overlapping risk factors.

11.2 Service Delivery Gaps and Exclusion from Support

Among respondents who considered existing support systems inadequate, the most commonly reported service gaps relate to healthcare services (62%), financial assistance and social protection (51%), emergency response (41%) and disaster preparedness systems (38%). These are precisely the services most needed before, during and immediately after climate shocks.

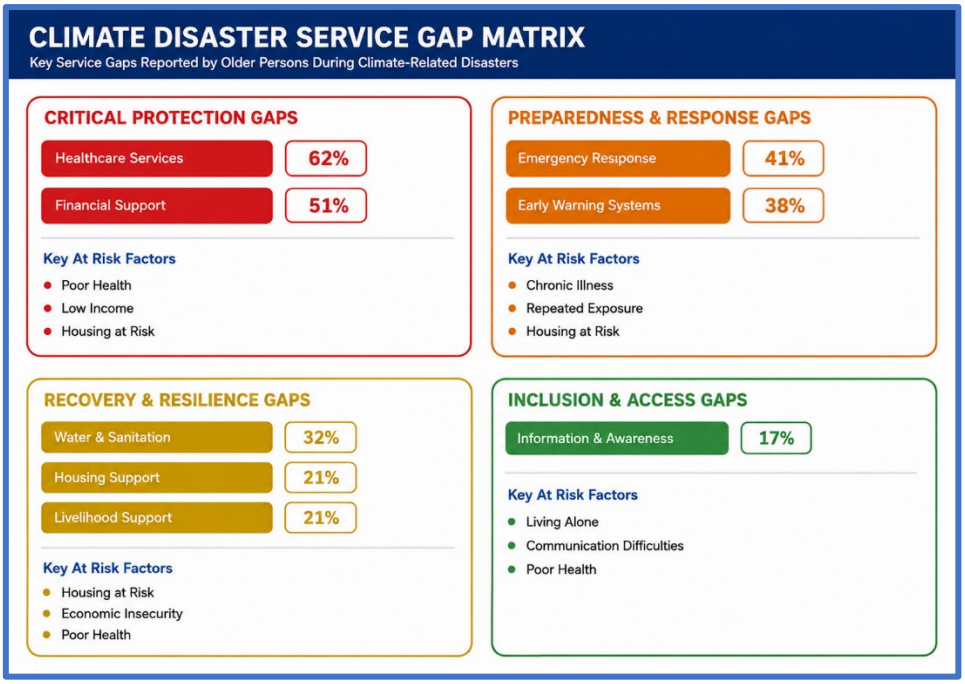

Figure 58: Service Gap Matrix (Base: 417)

The chapter also identifies important experiences of exclusion. Nearly one-quarter of respondents (23%) report having been excluded from a government scheme or support programme for which they believed they were eligible. Exclusion is particularly high among respondents exposed to coastal erosion, flooding, cyclones and severe disaster impacts. These findings suggest that those experiencing the greatest climate-related losses are also more likely to perceive barriers in accessing support.

The primary reasons for exclusion are not discrimination but administrative and informational barriers. Lack of awareness, complex application procedures, documentation requirements and lack of transparency in beneficiary selection emerge as the most frequently reported causes. These barriers are especially pronounced among older persons with health limitations, functional impairments and those residing in environmentally vulnerable locations.

11.3 Perceived Risk and Differential Vulnerability

Older persons demonstrate a strong awareness that climate risks are not experienced equally. Only a small minority believe that all older persons face similar levels of risk. Instead, respondents consistently identify poor health, living alone and poverty as the principal factors increasing vulnerability during climate-related disasters.

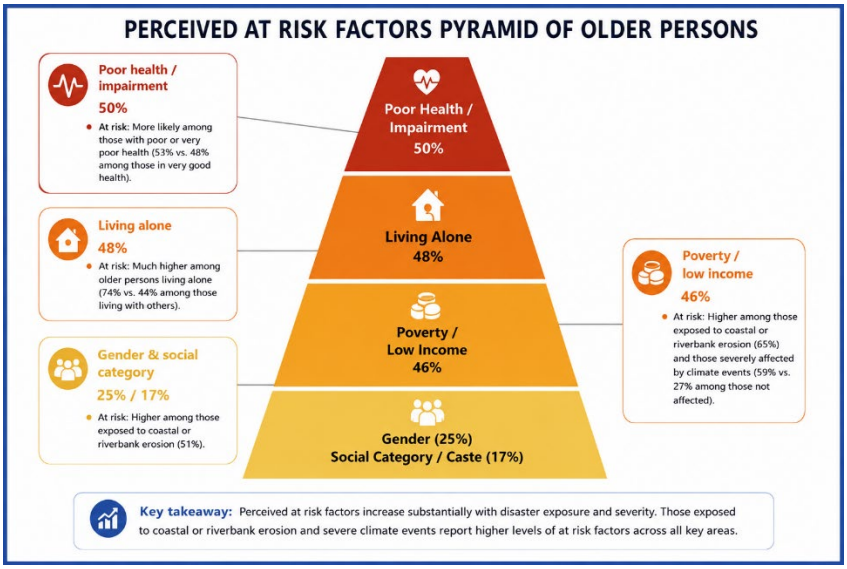

Figure 59: Perceived Risk Pyramid of Elders (Base: 2224)

At the overall level, impairment or poor health (50%), living alone (48%) and poverty or low income (46%) emerge as the most frequently cited risk factors. Risk perceptions increase substantially among respondents exposed to severe climate events, particularly coastal erosion, flooding and heavy rainfall.

Respondents also recognise that some categories of older persons face greater challenges than others. The groups most frequently identified as being at greater risk are:

- Older persons aged 80 years and above.
- Older persons living alone.
- Older persons with impairments or chronic illnesses.
- Older women.
- Poor or low-income older persons.

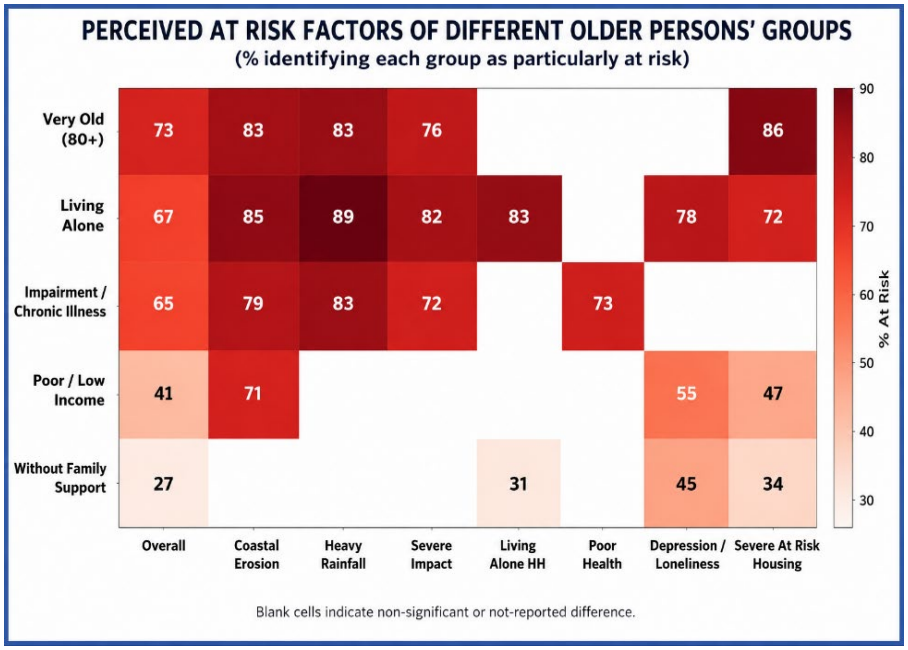

Figure 60: Perceived Risk of Different Older Persons (Base: 1682)

The findings indicate that older persons themselves view climate vulnerability as the result of multiple overlapping disadvantages rather than age alone. Health limitations, social isolation, lack of family support and economic insecurity consistently emerge as the factors most strongly associated with risk.

11.4 Climate Resilience Through the IPP Lens and Policy Implications

The chapter strongly reinforces the relevance of the Intersectional–Place Perspective (IPP) framework. Perceptions of service adequacy, inclusion and risk are shaped not by age alone but by the interaction of health status, impairment, financial security, social support, housing conditions and environmental exposure.

Older persons experiencing poor health, social isolation, financial insecurity and housing risk consistently report lower satisfaction with government support, greater exclusion from schemes and stronger perceptions of vulnerability. At the same time, residence in hazard-prone locations amplifies these disadvantages by increasing exposure while placing additional pressure on household resources and support systems.

The findings suggest that climate resilience policies must move beyond universal approaches and adopt more targeted strategies focused on older persons facing multiple and overlapping disadvantages. Strengthening climate-responsive healthcare, improving social protection, simplifying access to schemes, strengthening awareness and outreach systems, and prioritising older persons living alone, with impairments or in hazard-prone locations should be central components of future resilience strategies.

11.5 Conclusion

This chapter demonstrates that climate resilience among older persons depends not only on the existence of support systems but also on how accessible, inclusive and responsive those systems are to diverse needs. While most respondents view government schemes and disaster relief efforts positively, important gaps remain in healthcare, social protection, preparedness and emergency response, particularly for those facing severe climate impacts and multiple vulnerabilities.

Viewed through the IPP lens, vulnerability is concentrated among older persons experiencing poor health, impairment, financial insecurity, social isolation, insecure housing and residence in hazard-prone areas. The findings highlight the need for more targeted, inclusive and older person-centred climate resilience policies that strengthen service delivery while addressing the underlying inequalities that place some older persons at greater risk of being left behind.

12. GOOD PRACTICES AND PATHWAYS FOR STRENGTHENING OLDER PERSONS' CLIMATE RESILIENCE

While earlier chapters focused on climate risks, resilience capacities and service gaps, this chapter highlights the practical actions, support systems and interventions that help older persons cope with climate-related disasters. The findings demonstrate that resilience is built through a combination of household preparedness, family and community support, responsive government interventions and targeted assistance for at-risk groups.

Drawing on both survey findings and published evidence, the chapter identifies good practices currently being used by older persons and communities, highlights successful government and NGO initiatives, and proposes a set of replicable models for strengthening climate resilience among older persons across diverse hazard contexts.

12.1 Household-Level Coping Innovations

Household preparedness represents the first line of defence against climate-related shocks. Older persons and their families frequently adopt practical measures based on lived experience, local knowledge and available resources.

The most commonly reported household resilience practices are storing food in advance (55%) and storing water (54%), followed by housing improvements (31%), financial planning and savings (27%), advance disaster planning (25%) and livelihood diversification (22%). Use of early warning information is reported by one-fifth of respondents (20%).

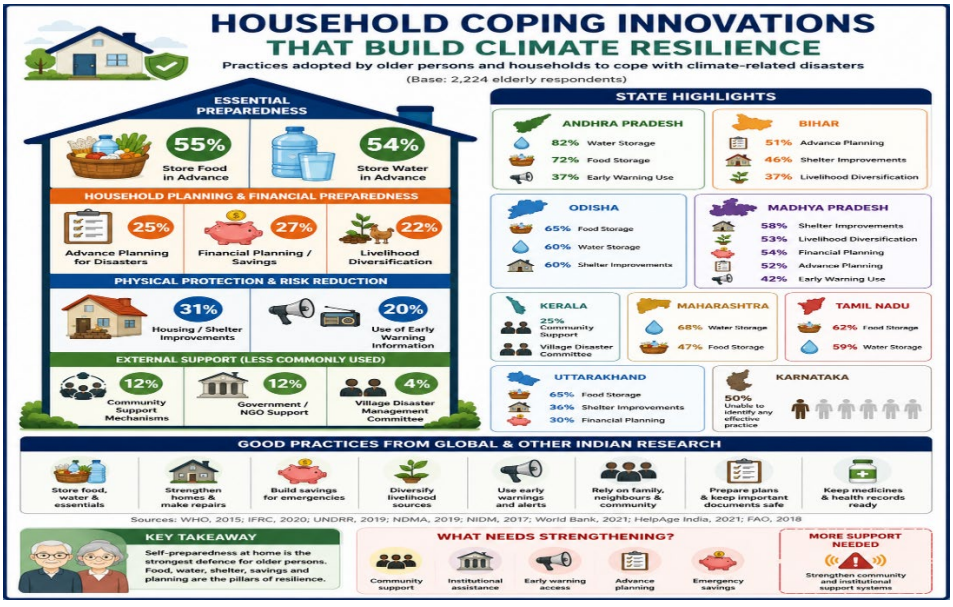

Figure 61: Household Coping Good Practices to deal with Climatic Events (Base: 2224)

The findings suggest that resilience at the household level is driven primarily by practical self-preparedness measures that help older persons secure food, water, shelter and finances during periods of disruption. Adoption of coping measures is highest in areas experiencing repeated climate hazards, indicating that disaster experience encourages preparedness and adaptation.

Published evidence supports these findings. The practice of maintaining emergency food stocks and household essentials has been widely documented in cyclone-prone regions of Odisha and Bangladesh as an effective preparedness measure for older persons and vulnerable households. Similarly, household water storage and rainwater harvesting have been recognised as important adaptation measures in drought-prone regions of India. Climate-resilient housing modifications, including raised plinths and reinforced roofing, have also been shown to reduce disaster impacts and improve safety for older residents. Emergency savings and financial preparedness are recognised internationally as important predictors of post-disaster recovery.[5] Livelihood diversification has similarly been associated with greater resilience in drought-prone regions of India and South Asia. Household preparedness plans and the use of early warning systems have been shown to improve preparedness and evacuation outcomes, particularly among older persons living independently. Family support networks and simple preparedness measures such as safeguarding medicines and important documents are also recognised internationally as critical resilience practices for older persons

12.2 Community-Based Good Practices

Community support systems provide an essential layer of protection for older persons, particularly when formal assistance is delayed or difficult to access.

Family-based care and support (56%) emerges as the most frequently reported community resilience mechanism, followed by priority access to relief and services (32%), community monitoring and welfare checks (24%), community shelter and relocation support (21%) and volunteer support groups (17%).

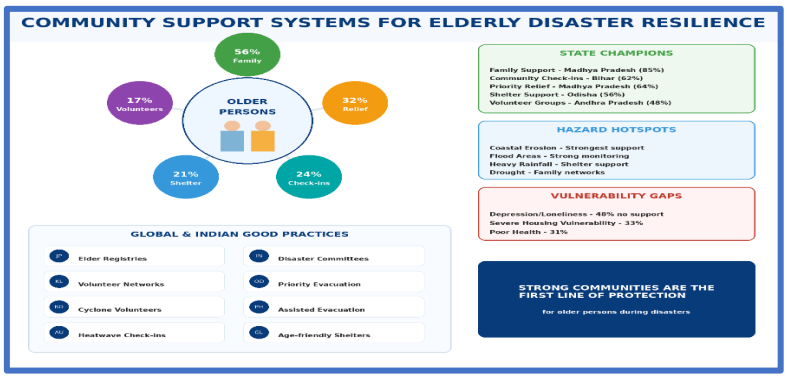

Figure 62: Community Good Practices for Older Persons' Climatic Shock Resilience (Base: 2224)

The findings demonstrate that communities with strong social networks are often better able to identify, monitor and support older persons before, during and after disasters. Areas exposed to repeated hazards, particularly floods and coastal erosion, report stronger community support systems than areas with limited disaster experience.

Published evidence reinforces these findings. Community monitoring systems and welfare-check programmes have been successfully implemented following the Kerala floods and in Japan's disaster preparedness systems, helping identify and support older persons living alone. Priority access arrangements for older persons during relief distribution and emergency response are recognised internationally as good practice for age-inclusive disaster management. Community shelters, assisted evacuation systems and local disaster preparedness committees have also been shown to improve outcomes for older persons during disasters.

12.3 Successful Government and NGO Initiatives

Respondents identify financial assistance, food relief and healthcare support as the most effective government and NGO interventions during climate-related disasters.

Financial assistance, including pensions and cash transfers (50%), emerges as the most frequently cited successful intervention, followed by food and relief distribution (36%), accessible healthcare services (29%), early warning systems (22%) and shelter support (20%).

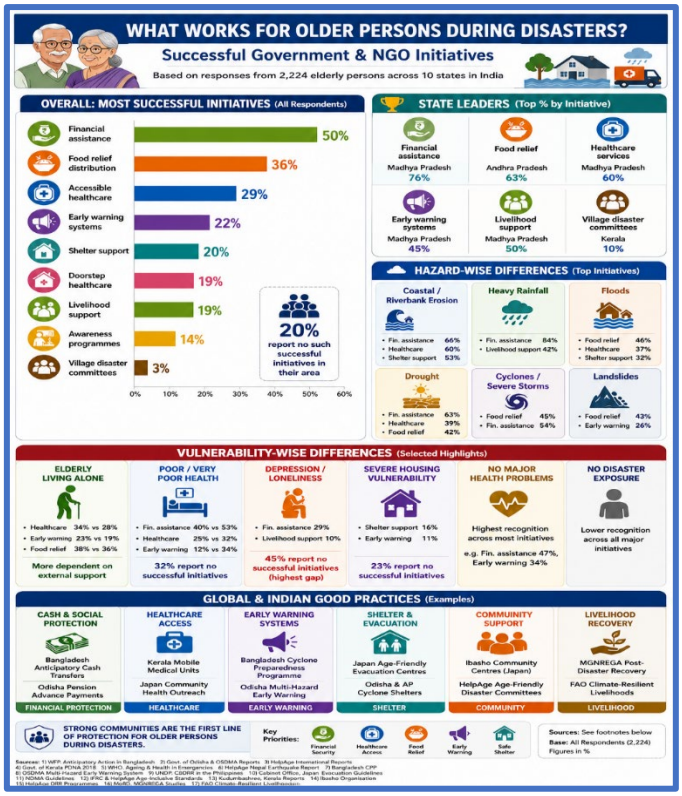

Figure 63: Successful Government and NGO Initiatives for Climate Resilience for Elders (Base: 2224)

The findings indicate that successful interventions combine immediate relief with longer-term support for recovery and resilience. Financial protection, healthcare continuity and timely information are particularly valued across almost all states and hazard contexts.

12.4 Priorities for Strengthening Resilience

While respondents recognise many successful initiatives, they also identify important areas requiring further action.

Increasing financial support emerges as the single most important priority (72%), followed by improved healthcare access (51%), stronger community support systems (40%), improved housing (37%), support for older persons living alone (36%), livelihood support (35%) and improved preparedness and early warning systems (33%).

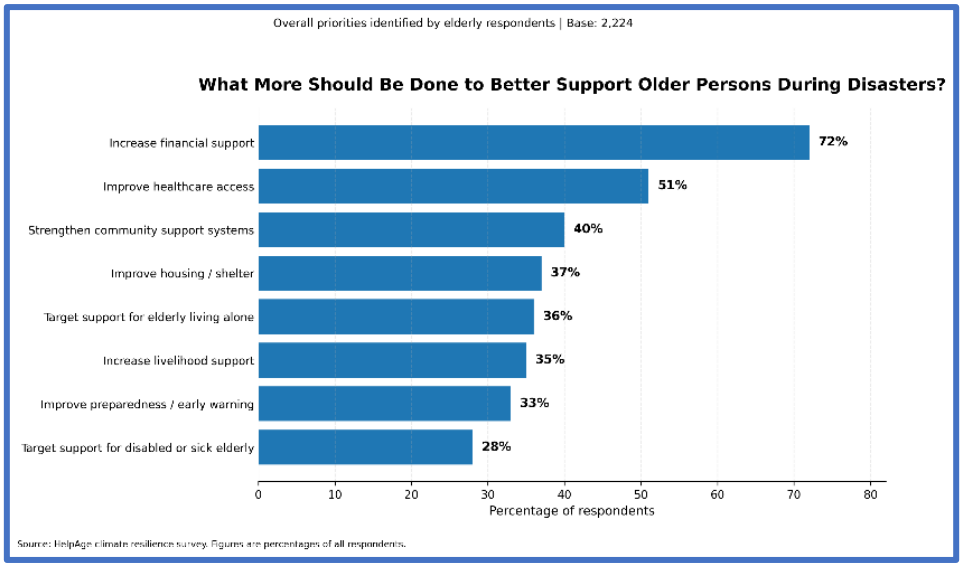

Figure 64: What more should be done to better Support Elders during Climatic Events (Base: 2224)

The findings suggest that older persons view climate resilience as extending far beyond emergency relief. Respondents consistently emphasise the importance of financial protection, healthcare, housing, community support and targeted assistance for those facing social isolation, poor health and other risk factors.

Support needs become broader and more intensive among respondents exposed to repeated disasters, severe climate impacts, poor health and insecure housing, demonstrating the cumulative nature of vulnerability and resilience needs.

12.5 Replicable Models for Building Climate Resilience

The findings point towards five practical models that can be adapted across different climatic and geographic contexts.

Model 1: Household Preparedness and Self-Reliance

- Food, water and medicine storage
- Housing improvements
- Emergency savings
- Livelihood diversification
- Household preparedness plans

Model 2: Family and Community Care Networks

- Family support systems
- Community monitoring
- Volunteer support groups
- Priority support for at-risk older persons

Model 3: Integrated Health and Social Protection

- Pensions and cash transfers
- Mobile healthcare services
- Continuity of medicines
- Targeted support for chronically ill older persons

Model 4: Age-Inclusive Preparedness and Early Warning

- Early warning dissemination
- Preparedness planning
- Assisted evacuation systems
- Village Disaster Management Committees

Model 5: Targeted Support for High-Risk Older Persons

- Older persons living alone
- Persons with impairments
- Chronically ill older persons
- Poor and socially isolated households

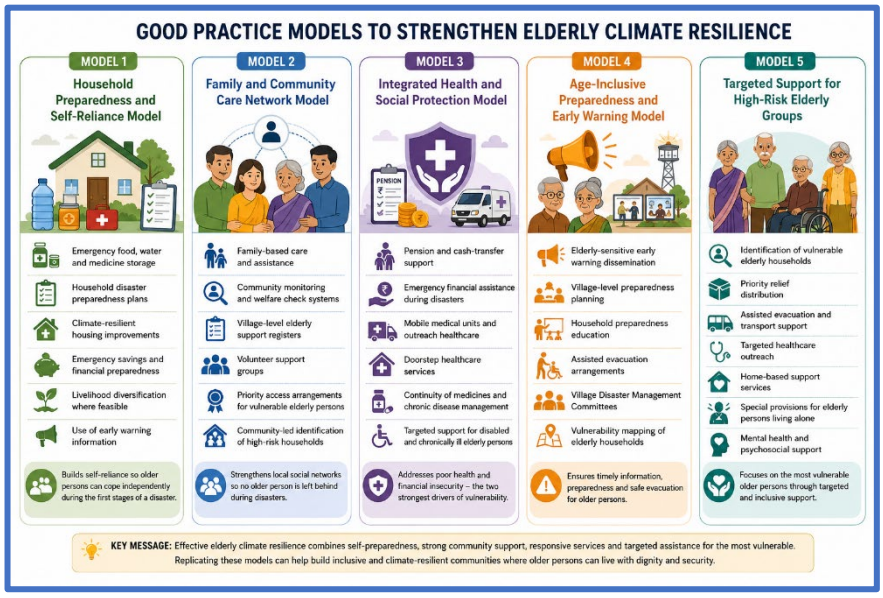

Figure 65: Good Practices Models for Replication to Build Climate Resilience for the Elders

Together, these models provide a practical framework for strengthening resilience by linking household preparedness, community support, social protection, healthcare and disaster management within a single integrated system.

12.6 Conclusion

The findings demonstrate that resilience among older persons is built through the combined contribution of household preparedness, family and community support, responsive government interventions and targeted assistance for at-risk groups. Practical coping measures, strong social networks, financial protection, healthcare services and early warning systems emerge as the most effective foundations of resilience.

The chapter further shows that resilience needs are greatest where poor health, social isolation, economic insecurity and environmental exposure overlap. The most effective pathways for strengthening climate resilience are therefore those that integrate self-preparedness, community solidarity and age-responsive institutional support within a comprehensive and inclusive resilience framework.

13. BEYOND THE NUMBERS – QUALITATIVE RESEARCH INSIGHTS FROM OLDER PERSONS, COMMUNITIES AND KEY STAKEHOLDERS

While the quantitative findings presented in the preceding chapters provide robust evidence on the prevalence, patterns and determinants of climate risks, resilience and wellbeing among older persons, they do not fully capture the lived experiences behind the statistics. The qualitative component of the study was therefore undertaken to deepen understanding of how older persons experience climate-related changes in their daily lives, how families and communities respond to emerging challenges, and how institutions perceive and address the needs of ageing populations in climate-at risk settings.

Guided by the **Intersectional Place Perspective (IPP)** framework, the qualitative enquiry explored how factors such as age, gender, impairment, widowhood, living arrangements, socio-economic status and local environmental conditions interact to shape experiences of risk and resilience. The qualitative findings complement the survey results by providing richer context and explanation for the patterns observed in the quantitative analysis, while also bringing forward the voices of older persons, caregivers, community members and institutional stakeholders.

The chapter draws together evidence from **Key Informant Interviews (KIIs), Focus Group Discussions (FGDs) and Life Stories/Appreciative Inquiry Case Studies** conducted across the ten study states. Together, these narratives help illuminate the realities of ageing in a changing climate, highlighting both the challenges faced by older persons and the strategies, support systems and resilience pathways that enable them to cope, adapt and recover.

13.1 Qualitative Research Design and Coverage

The qualitative component was designed to complement the quantitative survey through a combination of **30 Key Informant Interviews (KIIs), 60 Focus Group Discussions (FGDs) and 10 Life Stories/Appreciative Inquiry Case Studies**, resulting in a total of **100 qualitative interactions across the ten study states**. This mixed qualitative approach enabled the study to capture perspectives from older persons, caregivers, frontline service providers, local leaders and government stakeholders, thereby providing insights at individual, household, community and institutional levels.

The **30 KIIs** comprised interviews with **10 District Social Welfare Officers (or equivalent officials)** and **20 village-level stakeholders**, including ASHA workers, agricultural extension officers, Panchayat representatives and disaster management

committee members. These interviews explored climate-related risks facing older persons, service delivery challenges, preparedness and response mechanisms, social protection systems, institutional gaps and opportunities for strengthening age-inclusive resilience.

The **60 FGDs** included discussions with older persons aged **60–69 years, 70–79 years and 80 years and above**, as well as **older widows, older persons with impairments and caregivers of physically dependent older persons**, with one group of each category conducted in every state. In addition, **10 Life Histories/Appreciative Inquiry Case Studies** documented the experiences of older persons who had directly experienced climate-related disasters such as floods, droughts, cyclones and heatwaves. Together, these qualitative methods provided rich insights into the impacts of climate change on health, livelihoods, care arrangements, social connectedness and recovery processes, while also documenting local adaptation practices, traditional knowledge and examples of resilience among at-risk older persons.

This chapter is organised around the key themes explored in the quantitative analysis and presents qualitative insights that help explain and contextualise the survey findings. It examines older persons' experiences of climate change and its impacts on health, livelihoods, income security, housing, care arrangements and social connectedness. The chapter also explores access to government schemes and institutional support, preparedness, coping and recovery strategies, and the factors that strengthen or weaken resilience among different groups of older persons.

The final sections synthesise perspectives from older persons, caregivers and stakeholders on service delivery gaps, emerging good practices and pathways for strengthening age-inclusive climate resilience. Together, these narratives provide the human stories and lived experiences behind the quantitative findings.

13.2 Care Needs, Dependency, and Support

Qualitative field assessments indicate that most of the older persons' population requires comprehensive, multidimensional care. This systemic need is driven by advancing age, progressive physical decline, and compounding environmental stressors. Despite a notable proportion of elders residing with family members—such as sons, spouses, and daughters-in-law—a significant segment remains highly at risk due to the complete absence of familial or formal institutional support networks.

Furthermore, outbound family migration frequently forces older individuals, even at advanced ages, to continue cooking for themselves and independently managing daily household chores. This living arrangement is primarily a function of absolute necessity, occurring because they either live entirely alone or have adult children who reside separately—a reality particularly pronounced among older widows.

While these arrangements are indicative of individual resilience, they place a severe physical and mental burden on senior citizens, particularly during episodes of acute illness. To ensure basic survival and secure food, it is common in multiple instances for individuals well into their 70s and 80s to be compelled to continue performing strenuous, manual agricultural labour in the fields.

Cohort Analysis: Senior Citizens (Aged 60–80+ Years)

Core Vulnerabilities and Daily Living Challenges

During structured interactions with senior citizens aged 60–80+, clear functional dependencies emerge across multiple layers of daily life:

Strenuous Domestic Tasks: Due to structural physical limitations, elders require daily support for heavy domestic chores, including cooking, washing clothes, and fetching water.

Extreme Being at Risk of the 80+ Sub-Cohort: Senior citizens aged 80 and above represent an exceptionally frail demographic. They concurrently navigate severe physical frailties (including acute hearing and mobility loss), profound social isolation, a complete lack of independent income, and the absence of a surviving spouse or supportive family network.

Forced Self-Care: Even when living with family, some elders feel functionally isolated, receiving limited direct care support. Out of absolute necessity, many senior citizens are forced to become "care providers" to themselves, independently managing fundamental household operations and sustenance.

The study highlights extreme being at risk for individuals who have never married, have no children, or have lost their immediate family members, leading to complete dependence. This sense of isolation is reflected in the field testimonies:

"I never got married; my parents passed away, and my brothers passed away too. Other relatives have moved to other towns." 60-69 Female, Yadgir district, Karnataka.

Familial Care and Living Arrangements

Qualitative data reveals that when familial care is available, it is often fragile or highly gendered. It is occasionally provided by daughters or daughters-in-law who assist with basic care and cooking due to an elder's severe physical limitations or failing eyesight. Interaction with caregivers shows that the path to caregiving is often driven by necessity, citing the absence of other family members or an inherent sense of duty.

"There is no one else to look after her; I am the only daughter. So I am the one looking after my mother……everyone else is living far away." — Female caregiver, Waynand district, Kerala

"Caregiving responsibilities are often assumed out of necessity, particularly when adult children migrate for work, leaving older parents at risk and dependent on external support, often feeling like orphans." — Male caregiver, Kolar, district, Karnataka

"Economic necessity forces migrant workers to leave older parents and children uncared for, resulting in a 'miserable' state for those left behind." — Male caregiver, Nandurbar district, Maharashtra

Conversely, it is positive to note that while many speak of “care” as a necessity, some express a voluntary commitment towards elderly care:

"We are doing it with love itself; I decided it myself. Someone needs to be there to look after her. To play our role, I decided on this responsibility myself. I am moving forward with the mind-set that it is my responsibility." — Female caregiver, Wayanad, Kerala

“My daughter-in-law is my caretaker…she takes care of my food and other arrangements.” — 70-79 Female FGD, Madhubani district, Bihar

“I receive all material and financial support from my son…. he takes care of me.” — 60-69 Male, Bihar

There were instances where some daughters periodically visited their parents to assist them in their day-to-day activities:

“I am lucky that my daughter comes regularly to spend time with us and feed us.” — 70-79 Female, Bihar

“All my children care for me….they look after me, it's only that I like to stay separately.” — 60-69 Male, Karnataka

"I wake up in the morning and walk a bit, then drink tea, then there is no special work at home, then I look after the children and sit here and there." — 70–79 Male FGD, Kerala

The following verbatim accounts from respondents highlight the spectrum of familial disengagement and forced self-reliance:

"There is minimal or no familial care…. adult children, even those living in proximity or within the same village, provide little to no financial, material, or direct care support." — 60–69 Male FGD, Karnataka

"Here, the life of every human being is nothing but difficulty after difficulty…my daughter-in-law and my wife take care of me." — 60–69 Male FGD, Bihar

The migration of younger family members to other towns or separate living arrangements, often driven by a lack of educational and employment opportunities in

their home areas, directly contributes to elders living alone or separately. This results in reduced direct care support.

"My children are staying in Mumbai, my wife and I are alone…we take care of ourselves." — 70–79 Male FGD, Bihar

"The elder son kicked us out of the house... he does not want to keep us in the house at all." — 70–79 Female FGD, Madhya Pradesh

"Despite knee pain, I try to contribute to household chores….I sweep the house, fill water, bring vegetables, prepare food….I cook in the daytime, and my daughter-in-law cooks in the evening." — 70–79 Female FGD, Uttarakhand

"Traditionally, son and daughter-in-law should take care of the elders…in some houses, the tradition continues; however, this system is gradually fading away." — 70–79 Female FGD, Uttarakhand

Migration takes a huge toll on family members, including elders and their sole caregivers. The study reveals that the burden of caregiving mostly falls on women, particularly female spouses, daughters, or daughters-in-law, who often manage the entire household and care for multiple sick family members when male partners migrate. Older female spouses, despite their own poor health, consistently display higher involvement in household chores than older men.

A few respondents in Odisha and Karnataka mentioned the wife's role in supplementing household income, working exhausting hours in labour without rest to support the family and children's education, underscoring the heavy load women carry.

“Daughters-in-law typically bear the overwhelming burden for older parents, leading to significant physical and emotional exhaustion.” — Caregiver, Gujarat

Medical Vulnerabilities and Institutional Care Gaps

Beyond basic Activities of Daily Living (ADLs), this cohort requires intensive medical assistance to manage chronic health issues, age-related debility, hearing loss, and restricted mobility. Environmental and climate factors further compound these structural risks:

Climate-Induced Illnesses: Elders report a significant increase in intense heat, leading to severe physical discomfort and illness. Physical debilitation, heat stroke, and vomiting were common ailments expressed during peak summer seasons. A systemic lack of clean drinking water also poses a significant health risk to the at risk elderly. Intense heat is physically debilitating, directly hindering their ability to work.

Systemic Neglect in Mountainous Terrains: Older males in mountain regions report profound systemic neglect, highlighting a complete absence of community, legal, or administrative support networks.

The Double Burden of Caregiving: In multiple instances, older individuals face the compounding strain of serving as full-time caregivers for an incapacitated or paralyzed spouse while simultaneously managing their own health declines.

"My husband is paralyzed, I have to take care of him on one side... I get only Rs.4000 pensions… I have to manage food and other expenses." — 70–79 Female FGD, Andhra Pradesh

Transactional Formal Support: Formal institutional support remains essentially non-existent. Elders report a complete lack of engagement from government organizations, community groups, and local health centres beyond basic pension collection or transactional medicine distribution.

Inaccessible Healthcare Infrastructure: Local primary health facilities offer basic medications without proactive community outreach, and functional hospitals are frequently absent within the villages. Accessing city hospitals requires traveling long distances (5 to 6 kilometres), incurring exorbitant transport costs that can consume up to half of an elder's daily wage.

Customary Care, Social Isolation, and Intergenerational Shifts

The physical absence or emotional disengagement of younger generations exacerbates the caregiving gap, driving widespread social isolation, deep emotional distress, and acute feelings of abandonment. This alienation is captured by the pervasive sentiment: "No one welcomes us old people anymore."

Regarding customary care and the structural role of tribal councils, clans, or family councils in providing care and resolving disputes, elders express a clear preference for resolving internal family conflicts through community-based dialogue rather than resorting to formal courts. However, they express deep scepticism regarding whether their voices are genuinely valued, indicating a severe weakening of traditional authority systems.

"We do not have such councils …no support received." — 70–79 Female FGD, Uttarakhand

Furthermore, there is a distinct erosion of traditional community care systems and basic respect, with elders reporting explicit instances of neglect and verbal disrespect, including being told they “smell."

This shift is accelerated by rapid technological changes; the younger generation's belief that online platforms like YouTube serve as the "ultimate authority" effectively negates

the necessity of consulting elders for traditional knowledge, historical practices, or guidance. This pervasive lack of support across family, community, and state structures leaves many older individuals feeling abandoned and unheard, resulting in a general sense of fatalism regarding their future.

Cohort Analysis: Senior Citizens Suffering from Physical Impairment

Nature of Impairments and Psychological Impacts

For senior citizens suffering from physical impairments, the requirement for consistent care is critical. Respondents in this cohort experience natural age-related physical deterioration compounded by long-term or sudden-onset physical impairments. A distinct psychological variation is observable based on the timeline of the impairment:

Acquired Impairments: Seniors who acquire impairments later in life experience profound mental distress, severe tension, and a sense of mourning for their lost physical capabilities. They perceive their condition as a significantly heavier psychological burden than those born with a physical impairment.

Prevalent Conditions: Most respondents live with multiple co-morbidities, including severe vision impairment (often caused by failed cataract surgeries, advanced age, or heatwave-induced blurring), mobility impairments, and acute hearing loss.

“I fell from a vehicle…surgery was done, there is a rod in my leg since then I am walking with a stick…cannot see from one eye…this was due to failed surgery, I have been in this condition for several years” — 70-79 Female FGD, Andhra Pradesh

“I must keep lying down, I cannot get up due to back pain….my husband takes care of me…he gets a pension and 30 kegs of rice” — 70-79 Female FGD, Andhra Pradesh

“Most of the elders in this village suffer from knee pain and poor eyesight…” — 60-69 Male FGD, Tamil Nadu

Extreme heat also directly impacts the physical conditions of the elders in the villages:

"It's so hot for people that we can't bear it. It's just spinning like scorching heat. Now, when we sit, our eyes get blurred." — 70-79 Female FGD, Andhra Pradesh

Assistance Profiles and Domestic Realities

The everyday operational realities of the impaired cohort highlight severe functional deficits and high safety hazards:

Impaired Vision: Visually impaired seniors face highly restricted mobility and safety risks, yet multiple respondents are forced to cook and manage domestic chores completely unassisted.

Impaired Mobility: This segment includes individuals suffering from chronic knee, back, and nerve pain, alongside post-traumatic mobility restrictions (such as surgical rods embedded in limbs). These seniors rely heavily on rudimentary tools like self-made wooden sticks, face extreme risks of falling, or are reduced to dragging themselves across floor mats.

Hearing Loss: Acute hearing loss results in intense social confinement and absolute dependency, placing individuals at high risk of severe household neglect and causing them to view themselves as severe emotional burdens to their families.

Assistance requirements span essential Activities of Daily Living (ADLs)—including washing clothes, cleaning homes, sweeping courtyards, cooking meals, and bathing—as well as specialized needs such as physical navigation over unstructured pathways during adverse weather, fetching potable drinking water from communal pumps, and securing daily groceries or state rations.

While some live exclusively with an aging spouse, many have children who have either migrated "very far away" or live separately within the same village. Even when cohabitating with sons and daughters-in-law, active daily support and communication are minimal. The burden remains disproportionately heavy on older women, who face a pronounced "care gap" from children alongside immediate distress regarding food security and sanitation.

Impairment and Isolation

The lived experiences of impaired senior citizens underscore a heavy reliance on self-care, informal networks, or spiritual coping in the complete absence of formal institutional, volunteer, or Panchayat-led intervention. A few testimonies relate to the theme.

"No .. we are alone. ... Who will help, sir? The son and daughters-in-law live next door. They do their own work and eat. It seems we only get to eat if we do our own work." — 60–69 Female FGD, Odisha

"Our life cannot go on without assistance….it will only work if someone helps. The daughter-in-law has been our support until now.” — 60–69 Female FGD, Bihar

"We have to do our own work. No one helps us, sir, neither sons nor daughters-in-law." — 60–69 Female FGD, Andhra Pradesh

"No one helps. I cook and eat my own food. I sweep the house and courtyard while sitting, I wash the utensils while sitting. I do it myself by resting in between." — 70–79 Female FGD, Bihar

"In our community, you won't find anyone in old age homes... It's the wealthy people and those from influential groups... In our community, very few people are in old-age homes. No matter what happens, we stay here..." — 70–79 Male FGD, Gujarat

"My leg was broken... they put in rods... surgery was done. Since then, I've been walking with this stick. ... One eye surgery failed... oh... I can't see anything. ... Everyone has knee pains, sir... oh, we are struggling. ... It has been fifteen years…" — 70–79 Male FGD, Andhra Pradesh

"I live alone, son. My children live outside... I live alone. If an ashram opens somewhere, I would go there." — 60–69 Male FGD, Tamil Nadu

"I cook myself. Even if I can't see, if I do not cook for myself. Who will give me food, sir?" — Visually Impaired Respondent

The emotional impact of this care gap manifests as deep feelings of abandonment, severe isolation, and an expressed desire for an end to their suffering. This is exacerbated by community indifference; impaired seniors report that simple requests made to neighbourhood children—such as physical turning assistance or directional guidance—are routinely ignored or dismissed.

Customary care systems remain fragile and inconsistent, and relying on formal government maintenance laws is widely viewed as ineffective due to entrenched power dynamics within families. Elders feel "abandoned and unheard," with little recourse for grievance redressal. Formal complaints and appeals to local authorities or even the media have been historically ineffective.

During the discussions, a few respondents mentioned receiving care and support from their sons, daughters-in-law, or daughters, but noted that gaps persist due to caregivers being occupied with various other tasks and lacking knowledge about ailment-specific elderly care. Caregivers frequently highlight the need to balance their own livelihood work with the full-time demands of care, often making difficult compromises.

Elderly health conditions, particularly post-crisis deterioration (e.g., a stroke after COVID) and severe cognitive or sensory impairments, demand complex and adaptive care strategies. The suddenness of physical decline often leaves caregivers unprepared for the increased intensity of care. Caregivers for bedridden or high-needs elderly experience severe personal restrictions and limited opportunities for external support or respite. Furthermore, caregivers for senior citizens in the community face a critical lack of comprehensive support from government bodies and NGOs.

“It's been about four months since she became bedridden. Until six months ago, we used to help her walk. When we held her, she would walk with us. But after COVID, it suddenly became like this” — Female Caregiver, Kerala

"I do everything, looking after my in-laws, give medicine and everything for twenty-five to thirty years." — Female Caregiver, Bihar

In many households, support networks are limited, with female caregivers often managing entirely alone. A female caregiver in Odisha recounted managing her ill mother-in-law, father-in-law, child, and herself, highlighting the immense pressure when one person has to handle everything. Conversely, in Odisha, another caregiver expressed great pride and gratitude for the opportunity to care for her parents, seamlessly integrating daily care with traditional religious rituals.

Climate change, particularly intense heat waves and heavy rainfall, directly exacerbates daily caregiving challenges by causing severe physical discomfort for the elderly (such as restlessness from heat) and creating practical difficulties for caregivers (including drying clothes during rain and navigating local waterlogging).

Cohort Analysis: Widows (Aged 60–80+ Years)

Socio-Economic Hardships and Living Arrangements

The lived reality of older widows in rural India is characterized by severe socio-economic hardship, which is deeply tied to their living arrangements and a systemic lack of reliable support structures.

Public Health Correlates: Common causes of spousal death include alcohol-related illnesses, sudden heart attacks, and untreated fevers, pointing to underlying public health infrastructure gaps in these communities.

Residential Isolation: Most older widows live completely alone due to the death of their spouse and the outward economic migration or separate residential choices of their adult children.

Fragmented Household Dynamics: Family support is highly inconsistent. While some widows live and cook directly with family members, others are forced to cook separately despite residing in the same structural space or village as their sons. This highlights a lack of integrated family care and increases their being at risk to isolation and nutritional neglect.

Multidimensional Care Needs: Like other cohorts, widows suffer from a convergence of chronic illnesses—including diabetes, hypertension, kidney problems, and age-related physical fragility—which severely impair their capacity to independently perform tasks like bathing, fetching water, cooking, and general household management.

Lived Experiences of Widows

Verbatim testimonies from older widows reveal a profound sense of structural neglect, family breakdown, and a sharp reversal of traditional caregiving expectations.

"I live separately, sir. ... I have one son, and yet cooking separately, I cook everything separately." — 60–69 Widow FGD, Andhra Pradesh

"My grandson provides everything for me, even bringing water to wash my hands. He does everything. He gives me water to wash my hands. Now I have many illnesses. One is diabetes, and the second is blood pressure... No, they serve it on a plate and give it to me. I only need to eat. He gives me water. Then, if I say I need to bathe, he brings water. He helps me. I can only do that much now. I can't do anything else." — 70–79 Widow FGD, Kerala

"In our community, as soon as children start earning, they get separated from their parents." — 60–69 Widow FGD, Madhya Pradesh

“During extreme weather conditions, I feel restless, tired and dizzy.” — Widow FGD, Andhra Pradesh

"No matter how many children you have.. it won't be the same. When my husband was alive... it was fine. Now, with our children, we feel like we are standing under a barren tree." — 70–79 Widow FGD

"My son is a drunkard and has to take care of the grandchildren and cook for them using my pension money." — 60–69 Widow, Bihar

There is a widespread sentiment across regions that "no one provides any help, no one does anything." Respondents state that neither villagers nor formal local associations step in during crises, leaving widows with the impression that "everyone has their own problems." However, minor regional exceptions exist where neighbours provide baseline mutual aid during acute illness:

"Sometimes the community helps with all the work. When we fall ill or have a fever, they bring us food and water. They help with all the chores." — 60–69 Widow FGD, Odisha

Conclusion

The findings presented in this section highlight a critical, systemic strain in the rural care ecosystem for older persons. While familial support remains a vital safety net for a select few, a significant proportion of older individuals—particularly impaired seniors and widows—experience systematic neglect, emotional isolation, and economic exploitation within their immediate family units. This structural breakdown is driving a widespread, explicit plea for the establishment of formal institutional care facilities, such as old-age homes.

Concurrently, existing formal healthcare facilities are largely inaccessible, unaffordable, and frequently discriminatory, leaving older individuals with severe, chronic health conditions to suffer without dignified or adequate treatment.

Addressing these multifaceted risk factors requires a holistic, integrated policy framework. Such an approach must not only enhance formal social safety nets and implement targeted climate adaptation measures, but also actively rebuild local institutional trust, strengthen community-based care models, and guarantee rural senior citizens their fundamental right to security, healthcare, and human respect.

Integrating with the Quantitative Findings

The quantitative findings presented in Chapter 5 revealed that while the majority of older persons receive care primarily through family networks, significant disparities exist in care adequacy, caregiving arrangements and experiences of support. The survey highlighted high levels of dependency in both Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs), with dependency increasing sharply among the oldest-old, persons with impairments and those living alone. Although 95% reported that their care needs were fully or mostly met, the quantitative analysis also identified important risk factors, particularly among older persons living alone, those without spouses, and individuals facing cognitive, physical or mental health challenges. The data further demonstrated that family members—especially sons, spouses and daughters-in-law—remain the cornerstone of the rural care ecosystem, while formal care services and community support systems play only a limited role.

The qualitative findings provide important context behind these statistics by revealing the lived realities, emotional experiences and practical challenges associated with caregiving and ageing. While the survey data showed that most care needs are met, life histories and FGDs reveal that this support is often fragile, heavily dependent on unpaid family members—particularly women—and increasingly strained by migration, poverty, ill-health and changing family structures. The narratives highlight how many older persons continue to undertake physically demanding household and agricultural tasks despite advanced age and declining health, often because no alternative support exists. They also illuminate experiences of social isolation, neglect, abandonment, caregiver burden and the gradual weakening of traditional care systems, particularly among widows, older persons with impairments and those living alone. At the same time, the qualitative evidence reinforces the survey finding that family remains the primary source of resilience, while also demonstrating how climate stress, migration and economic pressures are placing growing strain on informal care arrangements. Together, the quantitative and qualitative findings provide a comprehensive picture of

a rural care ecosystem that continues to rely overwhelmingly on families but faces increasing pressures in meeting the complex and growing care needs of older persons.

13.3 Livelihoods, Income, and Financial Security

This section discusses the findings from qualitative interactions with cross-sectional groups of senior citizens to assess the livelihoods, financial situations, and economic vulnerabilities in the study area. The findings are presented for each senior-citizen cohort in the subsequent pages.

Cohort: Senior Citizen (60-80+)

Livelihood and Source of Income

Due to a lack of sustainable income sources, many elders are entirely dependent on meagre government provisions or are forced to engage in manual labour despite advanced age and declining health. Attempts to supplement livelihoods through backyard gardening or foraging are frequently disrupted by environmental degradation or wildlife.

Forced by economic necessity, able-bodied seniors continue to engage in strenuous manual labour. The primary occupations available are restricted to agricultural fieldwork, such as weeding and paddy cultivation, which must often be performed under extreme weather conditions.

"There are no earnings from anywhere. Also, the government gives these 4000 rupees. We buy rice with that. There is no support…so I have no choice but to go for some work here and there in case I am called to do some labour work in the fields, I go." 70–79 Female FGD, Anantapur district, Andhra Pradesh

Nowadays, daily wages seem to have increased due to the heat. We get 500 if we go for weeding related work. If we go for paddy work, they give four hundred and fifty." But what is the value of 500 in the current time…" 80+ Female FGD, Anantpur, Andhra Pradesh

If you go to the village now and take a 500-rupee note, it's equivalent to 100. ...Earlier, when you used to go with a 100-rupee note, you'd get so many vegetables. Now, even if you take a 500-rupee note, we hardly get anything." 60-69, Female FGD, Rajkot, Gujarat

Welfare pensions form the absolute baseline for survival, yet administrative errors, slow processing times, and systemic exclusions mean many eligible senior citizens remain entirely cut off from receiving benefits. Pension amounts vary dramatically by state administration, ranging from 600 rupees to 4000 rupees. Regardless of the region, these amounts are consistently deemed insufficient, particularly when supporting multi-person households or disabled dependents.

"The pension hasn't come; who knows what the reason is? Since my legs don't work, how can I go to the office to enquire…There is no income; we work as labourers and eat. Nothing has come for the last two or three months." 60-69, Female FGD, Rajkot district, Gujarat.

“The government is helping so much that they are giving us 600 rupees a month. ... I am not getting any pension at all. ... I have made the Aadhaar card and ration card, but nothing is coming through them." 70-79 Male FGD, Ratlam district, Madhya Pradesh.

Income streams are overwhelmingly inadequate to meet standard costs of living. High costs of cooking fuel compel seniors to sacrifice convenience for traditional wood stoves, while medical emergencies or chronic illnesses completely drain monthly allowances, sacrificing nutritional intake for survival.

“Our financial situation often affects our diet. Most of what I eat is ration rice. Yes. We only get nutritious food if we receive it through the ration shop. Otherwise, we don't have the financial status to buy it with money." (70-79, Male FGD, Kollam district, Kerala)

Financial Security

Financial security is virtually non-existent for a significant portion of this demographic. Severe crop damage from unseasonal rains and cyclones wipes out capital investments, pushing elders into deep cycles of debt or forcing them to liquidate minimal personal assets to survive economic deficits. Agricultural livelihoods face compounding threats from unseasonal rainfall, intense heatwaves that cause severe water scarcity, and rampant wildlife damage. Invasive wildlife distributions completely invalidate localized farming efforts.

"If monkeys come, coconuts won't be left. They drink the water and break the coconuts. ... Because of the monkeys, we can't do any farming; we can't do anything. ... We are in a situation where we have to buy everything from the shop." 80+ Female FGD, Wayanad, Kerala.

Besides, breakdown in traditional family support structures has left many older individuals economically abandoned. Adult children—even when gainfully employed

and residing nearby—frequently deny food or financial assistance to their aging parents, forcing them into near-total dependency on state welfare.

"As long as the body was strong, we used to do farming ourselves; now everything is on a sharecropping basis. This time, the rice crop came and was destroyed. We cultivated wheat, but there was no wheat this time, due to unfavourable climatic change...We hardly get financial support from our children…children say they have to educate their own children and do other things; nothing is left" (60-69 Male FGD, Madhubani district, Bihar)

Elders across several regions maintain awareness of their land rights. However, actual capital derived from land ownership is minimal due to systemic blockages, bureaucratic errors in land records, and severe environmental shocks that devalue agricultural holdings.

Cross-Cutting Analysis

This section synthesizes how age, gender, and geography shape economic risk factors within the cohort, before moving into topic-specific findings on income adequacy, dependency, pensions, and land-based livelihoods.

Findings by Gender and Age

Table 5: Economic Risk Factors across Gender and Age

Demographic Group	Key Findings
Older Women (Ages 70–79)	Highly likely to engage in forced manual labour. In districts like Anantapur, Andhra Pradesh, women in this bracket actively seek casual field labour to secure basic food and survival necessities.
Older Men (Ages 60–69)	Engaged in irregular agricultural and field labour. In Yadgiri, Karnataka, younger senior men rely entirely on being called for day-wage agricultural work.
Advanced Elderly (Ages 80+)	Strenuous physical exertion continues out of sheer necessity. Both male and female elders engage in casual field labour and arduous domestic chores (such as fetching water and collecting firewood) due to absolute isolation or insufficient income.

Financial Security and Adequacy of Income

Table 6: Financial Security and Income Adequacy across Gender and Age

Focus Group / Demographic	Key Findings

Older Women & Widows	Experience acute financial insecurity. Single older women or those living alone after a spouse's death have virtually zero independent revenue streams, pushing them into severe poverty.
Older Men (80+)	Face extreme systemic neglect. In Sitamarhi, Bihar, the oldest-old males report that their children earn minimal wages (10,000 to 12,000 rupees a month) while supporting large families, leaving no surplus income to care for older parents.

Adequacy of Income and External Hardships

Table 7: Adequacy of Income and External Hardships across Expense Heads

Hardship Category	Key Findings
Groceries vs. Medicine	Available income is profoundly inadequate. Purchasing basic rations and household groceries leaves absolutely nothing over to cover vital medical expenses.
Inflation and Fuel Costs	In Bihar (Sitamarhi), rule changes and high costs associated with LPG cylinders (forcing a single cylinder to stretch to 45 days) create food insecurity and periods of hunger. In response, older women in Rajkot (Gujarat) and Anantapur (Andhra Pradesh) revert to collecting free firewood in fields, accepting the physical toll to mitigate financial strain.
Hidden Cost	In remote areas like Rudraprayag (Uttarakhand), the high cost of auto fares to reach primary hospitals (located 5 to 6 kilometres away) consumes up to half of an elder's daily wage, creating a massive financial barrier to healthcare.

Financial Dependency and Decision-Making

Table 8: Financial Dependency and Decision-making

Dimension	Key Findings
Financial Dependency	High across all demographic groups, particularly for the oldest-old (80+) and unmarried or widowed individuals who have no direct line of descendants. Traditional familial safety nets are undergoing severe strain, leading to functional isolation and transactional family dynamics. Elders are frequently forced to look at whatever small amount their children provide as an "allowance".
Bureaucratic Dependency	Elders rely heavily on adult children or relatives to manage financial documentation, scheme enrolments, and legal identity cards. When familial support is absent, eligible seniors completely miss out on benefits due to a lack of independent literacy and awareness.
Financial Decision-Making	Elders hold minimal power. Due to a severe decline in intergenerational respect, elders report being socially excluded within their own homes. Furthermore, their voices are largely ignored or undervalued in local community-based dispute dialogues.

Pension Status: Receipt and Amounts

Table 9: Pension Status: Receipt and Amounts

State / District/group	Pension Amount & Realities

Andhra Pradesh ***(Anantapur, Krishna district, Female 70-79, Male 60-69)***		**4,000 rupees**. Vital for buying rice, but coverage is inconsistent. Some eligible women report getting nothing at all
Karnataka ***(Yadgiri, Naikal block, Male 60-69)***		**4,000 rupees** accompanied by 5 kg of ration rice. Crucial for survival, but it leaves elders with zero leverage to secure credit or loans during crises.
Across multiple states		**2000 rupees**. Outpaced by current living costs and medical expenses, subject to recurring monthly disbursement delays.

Systemic Issues in Pension Schemes

Table 10: Systemic Issues in Pension Schemes

Issue Type	Key Findings
Historical Disparities	In Andhra Pradesh, elders trace old-age pensions from 200–300 rupees under early administrations to peaking at 4,000 rupees. Despite higher nominal figures, inflation renders the amount insufficient.
Spousal Dependency Gaps	In instances where a pension is issued under a husband's name, the physical incapacitation or paralysis of the spouse severely expands the caregiving and financial burden on the older wife, who must stretch a single basic pension to cover medical care.
Exclusion Errors	Bureaucratic and administrative apathy cause applications to be ignored or discarded. Elders in high at risk brackets frequently lack access to secondary welfare programs, such as the Ayushman Bharat health cards or the Annapurna food grain scheme.

Land Ownership and Agricultural Activities

Table 11: Land Ownership and Agricultural Activities

Livelihood Disruptions	Key Findings
Crop Damage	Climate change intersects directly with asset precarity, rendering land ownership a volatile source of livelihood. Elders across rural contexts observe a severe drop in crop yields and rainfall compared to historical patterns, with heavy, erratic rainfall routinely destroying core commercial crops like cotton.
Field Structural Failures	In Madhubani, Bihar (Madhepur/Parsad village), low-lying geographical plots suffer from acute waterlogging. Due to failed local drainage infrastructure, floodwaters stagnate in agricultural fields with no exit route, destroying crop cycles.
Extreme Heat Exposure	Crop cultivation has become dangerous for the elderly. Intense heatwaves quickly char lush paddy fields. Elders working these fields experience severe physical debilitation, sunstroke, and vomiting, noting that their bodies can no longer tolerate the field environment.

Geographic & Demographic Intersection Summary

Table 12: Geographic and Demographic Intersections

At Risk Type	Key Findings
Mountainous/Hilly Isolation ***(Uttarakhand)***	Geographic isolation compounds demographic risk factors. Senior women (70–79) in remote villages like Jhakholi (Rudraprayag) face the most severe barriers to accessing basic amenities, reliable, clean water, and physical healthcare outreach. In places like Dunda (in Uttarkashi), basic government rations must still be transported to remote markets on horses.
Deep Social Isolation ***(Odisha)***	Younger senior women (60–69) in Gajapati district exhibit the highest concentrations of combined economic and extreme social isolation.
Severe Institutional Distrust	Across Bihar, Gujarat, and Karnataka, local Panchayats and governance structures are viewed as entirely disengaged and opportunistic. They fail to distribute relief funds equitably or manage basic public health infrastructure (leading to vector-borne disease outbreaks like dengue).

Conclusion

Ultimately, economic insecurity is not driven by income alone but by the interaction of age, place, climate exposure, and weakening family support systems. The data indicate an urgent need to reform rural elder-care policy in India through structural interventions, localized grievance facilities, and age-friendly social safety nets.

Cohort: Senior Citizen with Impairment (60-80+)

Livelihood and Source of Income

The primary livelihoods available to impaired senior citizens are highly precarious and physically taxing. Due to physical limitations and severe limitations, a significant portion of the respondents is forced into involuntary idleness or extreme self-reliance. For those who can still work, livelihoods revolve around demanding daily wage manual labour, agricultural field work, garden work, fruit picking, and fishing. These jobs require long hours (mostly from 6:00 AM to 5:30 PM) for meagre pay-outs. Below are some of the verbatim responses from the respondents to describe their economic situation and hardships.

"There are no rains, sir. No crops are growing at all. ... It is difficult, sir. How can we manage in this heat? ... Even if you go, you get heatstroke, fall, and have to go to the hospital." As reported 60-69, Female FGD, Anantapur, Andhra Pradesh

"There's no work, right? If it rains, there's no work. My son cannot go out. He's someone who goes for construction work. So our income and expenses become a big struggle. ... When there's no work, there's a lot of struggle at home." 70-79, Female FGD, Wayanad district, Kerala

“Earlier, I used to make some sweets and go from market to market. Now that my legs and hands are strained, sir, I am not doing anything. I am just all alone." 70-79, Female FGD, Gajapati district, Odisha

"The income isn't sufficient. It's like this: take Palmyra work, for instance... because of the rain, the Palmyra work gets ruined. We don't get money as before. ... we sowed paddy, but there was no rain last year. Everything dried up. ... and for the last five or six years, even sea-related work has become difficult." 60-69 Male FGD, Ramnathpuram district, Tamil Nadu.

Income from all sources—including manual labour and social security programs—is fundamentally inadequate. Meagre finances fail to cover basic living costs, life-saving medicines, transport to healthcare facilities, or the nutritious foods (like milk and curd) recommended by doctors to counteract chronic weakness and illness. Below mentioned verbatims corroborate the findings mentioned.

"The doctor says to eat milk and curd, but with 1100-1200, where will milk and curd come from, where will medicines come from, and where will we eat anything? It depends on money." 70-79 Male FGD, Sitamarhi district, Bihar

One of the older female respondents from Anantapur district, Andhra Pradesh, mentioned that "My income is nothing, sir... I get a pension... I live on that pension and stay idle. ... Even with knee pains, I have to go for work. There's no choice."

Some survive on income support from children, one of the older females from Kolar district in Karnataka mentioned, "My son and daughter-in-law give some money ... No one else will give, we don't do work now, so who will give a loan to people like us?”

Pensions serve as the primary lifelines for survival, encompassing old-age, widow, and disability pensions. However, distribution is marred by systematic administrative failures, bureaucratic hurdles, non-receipt, and severe multi-month delays. There is also widespread confusion regarding supplemental central welfare allocations (e.g., the Indira Gandhi Old Age Pension).

Financial Security and Dependency

Financial insecurity is widespread and acute. Senior citizens face a multi-layered crisis marked by zero or highly unstable income streams, leaving them almost entirely dependent on micro-welfare or informal community assistance. Climatic disruptions and crop failures routinely plunge households into vicious cycles of mounting debt. As mentioned by one Male elderly from Anantapur district, Andhra Pradesh, “Financial difficulties will increase. There won't be food on the earth, only hardships... There's no income at all; there are only debts."

Traditional filial care networks are deteriorating rapidly. While some elders are supported by a spouse, siblings, or daughters-in-law, a substantial number report extreme neglect from their adult children. Financial dependency on children is described as "fragile and inconsistent"; many adult children live separately or interact with their parents transactionally—primarily surfacing when it is time to collect the elder's government pension. Due to internal family power dynamics and the perception of disabled elders being an economic "burden," senior citizens exercise very little agency in financial decision-making. Their central role in household finances is frequently reduced to being a passive conduit for direct benefit transfers (pensions), which are often monitored or managed by adult children.

Land Ownership and Agricultural Activities

Land ownership profiles among respondents are highly fractured. A substantial portion of disabled elders are entirely landless, while those who do own small patches of land (e.g., smallholder plots of around 2 acres) often hold completely unviable assets due to a lack of investment capital and water scarcity. “Many of us lack personal land or face situations where their land is unusable (due to lack of water, high investment costs, or labour shortages)..." was reported by an impaired older persons from Anantapur district, Andhra Pradesh.

Elders traditionally cultivated crops like finger millet. However, agriculture has become profoundly unprofitable due to severe droughts, blistering heatwaves, dropping water tables, unseasonal weather shifts, and high input costs.

“A farmer might have sown four or five measures of seeds, but if the road breaks and soil falls on it, the entire field is ruined. ... If there is no farming, where will we get food from?" reported by an older female respondent from Gajapati district, Odisha, regarding the impact of heavy rains in the district.

Cross-Cutting Analysis

Gender-Specific Highlights

Female Seniors: Older women bear a disproportionately heavy physical and emotional burden. They are culturally expected to continue performing strenuous daily household chores (such as cooking, fetching water, sweeping, and washing clothes) despite severe physical pain and limitations. Furthermore, they face severe privacy and health risks due to a lack of clean, in-house sanitation facilities.

Male Seniors: Primarily observed in states like Karnataka, Gujarat, and Madhya Pradesh, male participants express deep disillusionment, highlighting structural neglect and a lack of institutional accountability. They speak more explicitly about the

direct economic strain caused by climate change on traditional livelihoods like agriculture.

Conclusion

The findings reveal a multi-layered crisis where physical impairment, severe income insufficiency, and rapid climate degradation intersect. As traditional family safety nets fray, senior citizens are left in a state of forced self-reliance. The study underscores an urgent need for institutional accountability, regularized and inflated pension delivery, and impairment-inclusive climate adaptation plans to protect India's most invisible marginalized group.

Cohort: Senior Citizen Widow (60-80+)

The findings reveal widespread economic precarity among older widows. Livelihoods are fragile and heavily influenced by age, health, widowhood status, family support, climate variability, and access to social protection. Pensions and ration systems form the backbone of survival for many respondents, yet these supports are frequently considered inadequate. Widows who remain economically active participate primarily in agricultural labour, livestock-related activities and petty trade. Migration of adult children has weakened traditional support systems, resulting in greater social and financial isolation.

Livelihood and Source of Income

Speaking about age-appropriate jobs, one of the respondents from Namakal district of Tamil Nadu said, "We won't sit and do heavy labour work; our backs will ache, our hands and legs will ache. We have aged now. If there is something like packing, or stacking, or drying things".

Agricultural labour emerged as the most common occupation among those still working. However, climate variability, declining health, and reduced labour demand have diminished employment opportunities. Several widows had transitioned from active labour participation to complete pension dependence. Income adequacy emerged as one of the strongest concerns. Respondents consistently reported that available income was insufficient to cover food, healthcare, housing maintenance, and social obligations. Some respondents survive through careful rationing of food and expenditure. Diet quality often declines when income falls or agricultural production fails.

A couple of respondents from Uttarakhand lamented how the climate has led to food insecurity for them and their families.

"The drought happened this year only, … wheat was destroyed. Everything got destroyed. ... We don't even have a canal. The canal is also ruined. ... All the fields are getting washed away," - Uttarkashi district, in Uttarakhand.

“When this flood came, the flood of the Ganga, all our fields were washed away. The Ganga took them from below. Everything was washed away. It caused a lot of damage, too." – Uttarkashi, Uttarakhand.

Financial Dependency and Decision-Making

Dependency takes several forms. Some widows depend on sons, daughters or grandchildren. Others depend primarily on government pensions and public distribution systems. A few respondents described situations where children had migrated, leaving them economically and socially isolated. Dependency is particularly acute among women aged 70 years and above. Physical limitations reduce earning capacity, thereby increasing reliance on family members and government schemes. The findings also reveal reversed dependency patterns. In some households, widows continue supporting grandchildren despite receiving little support from adult children.

Talking about financial dependency, one of the widows from Namakal district, Tamil Nadu, mentioned, “If we can make 2000-3000 rupees, we will manage our livelihood with that. We won't have to depend on any other children. If we have it, we can spend ten rupees on those grandchildren. Otherwise, when they come calling 'Grandma', we are unable to give even one rupee."

Decision-making power is closely linked to access to income and literacy. Many widows have limited influence over major financial decisions. Financial decisions are often shaped by sons, male relatives or other household members. Low literacy creates additional barriers. Respondents repeatedly noted that lack of education prevented them from understanding schemes, claiming benefits or navigating administrative systems. Where widows controlled pension income directly, they exercised greater autonomy over food purchases and healthcare expenditure. Nevertheless, overall decision-making power remained constrained.

Pension Coverage and Pension Amounts

Pensions are among the most important safety nets available to older widows. For some respondents, pensions constitute the sole source of cash income. Participants repeatedly emphasized their dependence on pension transfers for survival.

However, pension adequacy remains a major concern. Some respondents reported receiving around Rs.1000 per month, while others expressed dissatisfaction and demanded larger amounts. Participants specifically referred to expectations of

Rs.5000 pensions and argued that existing support was insufficient for contemporary living costs. The pension system, therefore, performs an essential protective role but does not eliminate poverty or being at risk. Some of the verbatim related to the widow pension are presented below.

An older widow from Yadgir district, Karnataka, said, "We are not getting the five thousand pensions; it would be good if they gave it."

Dependency on pension was reported to be high among respondents in Kollam district in Kerala. “There's no other way. We wait for this pension money to come. After giving that money, the next month... when the pension for this month is received... Once that's given, then we buy medicine.”

“The main issue is that we are not getting any money. Our widow's pension also stopped coming. We used to get 600 rupees, but even that stopped, so now who will give? No one gives anything, was reported by a respondent from Ratlam district in Madhya Pradesh.

Land Ownership

Land ownership is a major determinant of economic security. Widows with access to land possess greater livelihood options and stronger resilience. However, many respondents reported little or no land ownership. Landlessness contributes to: Reduced livelihood opportunities, dependence on wage labour, exclusion from agricultural support, and greater being at risk during disasters. The study found cases where compensation and aid distribution appeared linked to land ownership, disadvantaging poorer widows without assets.

Age-wise Analysis

Table 13: Financial Security by Age Groups

Age Group	Findings
60–69	More likely to participate in wage labour and agricultural work. Continued engagement in economic activities reflected both need and capability.
70–79	Increasing health limitations reduced earning capacity. Dependence on pensions and family support became more pronounced.

Age 80+	Highest levels of dependency. Respondents in this age range relied heavily on caregivers, pensions, and social assistance. Mobility challenges significantly restricted participation in livelihood activities.

Across all age groups, widowhood intensified being at risk, but the interaction between age, health and poverty became increasingly severe with advancing age.

Conclusion

The study demonstrates that older widows occupy one of the most economically at risk positions within rural communities. Policy priorities should include strengthening pension adequacy, expanding age-friendly livelihood opportunities, improving access to healthcare, supporting climate-resilient agriculture, strengthening community care systems and enhancing outreach to socially isolated widows. Special attention should be paid to landless widows, disaster-affected households, and women aged 70 years and above. Overall, the evidence suggests that livelihood risk factors among older widows is not simply a matter of income poverty but reflects an intersection of gender, age, health, climate and social exclusion.

Integrating with the Quantitative Findings

The quantitative findings demonstrate that economic insecurity remains a defining feature of later life for many older persons. Although **49% report being financially independent**, the overwhelming majority (**92%**) earn less than ₹10,000 per month and continue to depend on a combination of pensions, informal work, agriculture and family support to meet basic needs. Nearly half of respondents rely on pensions as their primary source of income, while substantial numbers continue to engage in self-cultivation, agricultural wage labour and other informal occupations well into old age. Financial risk factors are particularly pronounced among women, widowed and never-married older persons, persons with impairments, those living alone and the oldest-old. The survey further highlights widespread financial hardship, with **52% unable to afford medicines**, **41% forced to borrow money**, and **29% unable to afford sufficient food**, despite relatively high levels of pension coverage and banking access. Landlessness, seasonal employment, climate-sensitive livelihoods and weak financial autonomy further compound being at risk, particularly among those facing multiple overlapping disadvantages.

The qualitative findings provide important context behind these statistics and reveal the lived realities of economic insecurity among older persons. Across states, many respondents described being compelled to continue physically demanding agricultural and wage labour despite advanced age, poor health and declining physical capacity because pensions and family support alone were insufficient for survival. Life Stories

and FGDs highlight how climate-related crop losses, droughts, floods, heatwaves, water scarcity and environmental degradation have directly undermined traditional livelihoods and reduced the value of land as a productive asset. Older persons repeatedly spoke of rising living costs, inadequate pension amounts, delayed pension payments, increasing medical expenses and growing dependence on ration systems for food security. The narratives further reveal that weakening family support structures, migration of younger generations and the growing cost of healthcare have left many older persons feeling economically insecure even when they receive pensions or own small parcels of land. Widows, older persons with impairments and those living alone emerge as particularly at risk, often balancing chronic illness, declining earning capacity and social isolation alongside financial hardship.

Taken together, the quantitative and qualitative findings show that livelihood risk factors among older persons are not simply a function of low income but arises from the interaction of age, health, impairment, family support, climate exposure, land ownership and local economic opportunities. The quantitative evidence identifies the groups facing the greatest economic risks, while the qualitative narratives explain how these vulnerabilities are experienced and managed in everyday life. Both strands of evidence consistently demonstrate that climate change is intensifying existing economic pressures by disrupting agriculture, increasing living and healthcare costs, and weakening already fragile livelihood systems. At the same time, they highlight the critical role played by pensions, family support, community networks and personal resilience in helping older persons cope with financial uncertainty. Together, the findings underscore the need for stronger social protection, more adequate pensions, climate-resilient livelihood opportunities, improved access to healthcare and targeted support for older persons facing multiple and overlapping risk factors.

13.4 Health Status, Healthcare Access, and Barriers to Care

This qualitative section presents a deep dive into findings related to the health care ecosystem in which the senior citizens live and interact. The thematic findings are presented for each of the cohorts for better assessment of the situation for targeted policy interventions.

Cohort: Senior citizen (60-80+)

Health Conditions and Chronic Health Issues

Senior citizens face an accumulation of physical vulnerabilities that are heavily exacerbated by natural and man-made living environments.

Age-Induced Sensory & Mobility Deficits

Advanced age among respondents (especially those 80+) is tightly coupled with severe hearing loss and restricted physical mobility. A high incidence of chronic health issues, such as high blood pressure, diabetes, and physical mobility issues, was reported by several aging participants.

One of the respondents who underwent surgery said, “I can't do anything, leg pains, I had an operation. I cannot move and am just surviving, eating whatever family gives” -60-69, Male FGD, Krishana District, Andhra Pradesh.

“I have BP, sugar, and pain in the knees….cannot walk properly…spend a lot of money on medicines.” 60-69, Male FGD, Madhubani district, Bihar.

Most of the 80+ respondents reported physical pain and stiffness “My son will lift my feet and take me if there is pain, because I cannot walk well.” 80+ Female, Ananatpur, Andhra Pradesh.

Mobility constraints were the most common issue reported by many elders. “You are completely helpless. Completely helpless. I stay at home only.” 80+ Male, Sitamarhi, Bihar.

Climate-Induced Somatic Stress

Extreme heat waves and erratic climate variations trigger direct physical ailments, including sunstroke, extreme fatigue, dehydration, and vomiting.

"The heat is very intense, we are unable to bear it... If the sun hits, we get tired, we can't work; the body doesn't cooperate." — 70-79, Female, Kolar district, Karnataka

Vector-Borne Pathogenic Risks

Elders are also falling sick due to Blocked and dirty open drainage systems within settlements act as breeding grounds for mosquitoes, directly resulting in acute outbreaks like dengue among elderly clusters.

Poor basic amenities are also reported to contribute in illness. Issues with drinking water were reported in Anantapur district, Andhra Pradesh: “Dirty and smelly water comes in the taps. “Our children often fall sick after drinking that water.” 70-79, Female.

"The drains outside, they haven't been cleaned for months... It stinks so much, and there are so many mosquitoes... Just last month, three or four people here got dengue." — 70-70, Female, Anantapur, Andhra Pradesh

Access to Health Care Facilities

The rural healthcare ecosystem is broadly perceived by beneficiaries as transactional, physically remote, and structurally unsupportive. Local Primary Health Centres (PHCs) and sub-centres are criticized for focusing solely on basic medicine dispensing; they fail to offer proactive outreach, preventative screening, or specialized geriatric counselling.

Multi-specialty or primary hospitals are absent within immediate village boundaries, requiring elders to travel substantial distances (5 to 6 kilometres or more) to urban centres to access diagnostic care

ASHA workers, who are structurally positioned to act as frontline health support, are perceived as detached bureaucratic collectors who record information for surveys but offer no tangible healthcare support or relief.

"The hospital is there, sir, but no one has ever told us about the Ayushman health card. No one came. We go, we get our medicine, and we come back. That's all." —70-79, Female, Anantapur, Andhra Pradesh.

"No, there is no hospital here. We have to go at least five to six kilometres away to the main hospital in the city." — 70-79, Female, Anantapur district, Andhra Pradesh.

One of the respondents mentioned challenges faced while traveling to a health facility due to advanced age. She suggested the need for a home visit by medical staff. "The health staff don't come home; we have to go there. If we can go to the facility via auto or any other vehicle, they can also come home. ... Elderly people face difficulty even in crossing the road." 80+ Female, Dang, Gujarat.

Money Spent on Health Treatment

Out-of-pocket medical expenditure poses an existential threat to the survival of economically marginalized rural elders. Old-age cash transfers (ranging between 2,000 to 4,000 rupees) are completely consumed by the soaring cost of basic groceries and cooking fuel, leaving almost nothing for vital chronic illness medications.

In the absence of agricultural crop yields or casual daily wage labour, elderly individuals have no liquidity to buy medicines and are completely denied informal credit or loans due to their perceived lack of repayment capacity.

Travel fares via local private transport options (like autos) are highly exploitative, often absorbing up to half of an elder's daily wage or a substantial portion of their pension, creating an immediate barrier to seeking care.

"We don't have the money to go to the hospital when we fall sick. Life is very difficult. And the travel fare to get there is so high that the auto drivers take away half of our daily wages." — 60-69, Male, Nandurbar, Maharashtra

"If you don't have daily wage work or crops, you will also have less money for your medicines. In such situations, if you say you will get a loan... Who will give a loan? No one will give us." — 60-69, Male, Yadgir, Karnataka,

"There is a hospital at the Dongregaon Bridge, right? I was admitted there. It cost three lakh rupees there."70-79, Female, Nandurbar, Maharashtra

"We get two thousand, but what is that enough for these days? If we buy rice and groceries, nothing is left for medicines." — 70-79, Female, Anantapur, Andhra Pradesh.

Health Care Support Received (Welfare & Community Outreach)

There is a profound disconnect between macro-level state health protection policies and their micro-level realization on the ground. Flagship state medical insurance initiatives, such as the Ayushman Bharat card scheme, suffer from implementation failure in these segments, leaving participants completely without health cards or cost coverage.

Village Panchayats operate in a disengaged manner, offering zero proactive information on older persons' welfare schemes, medical assistance, or disaster safety protocols.

In most of the places, Non-Governmental Organizations (NGOs) and community charity groups are absent from these rural ecosystems, leaving the elderly to survive in total isolation.

Barriers in Getting Medical Support

The intersecting structural barriers preventing rural elders from acquiring dignified medical care can be categorized across four operational metrics :

Systemic & Bureaucratic Hurdles: Statutory applications for welfare and health support are routinely ignored, delayed, or discarded by local administrative clerks, cultivating deep-seated institutional distrust and fatalism.

Language and Communication Gaps: State communications regarding insurance schemes are frequently distributed in non-local dialects or technical formats. The lack of plain-language vernacular messaging (e.g., regional Telugu) completely locks out non-literate seniors.

Severe Intergenerational Social Erosion: Traditional joint family safety nets have fractured. Adult children frequently offer limited financial or caregiving assistance, leaving isolated seniors physically unable to seek medical care when incapacitated.

Community exclusion & Safe Water Deficits: Elders encounter explicit social exclusion within their settlements, sometimes to the extent that neighbours refuse to share drinking water. Compounded by contaminated, foul-smelling tap water supplied by local infrastructure, this directly drives up multi-generational gastrointestinal illnesses.

Senior citizens face bureaucratic hurdles, with applications for schemes often ignored or discarded, fostering a sense of helplessness and distrust towards government offices. Verbatim below highlights the situation faced by the senior citizens.

"If it's in Telugu, it will be understood. If it's anything other than Telugu, it won't be understood, sir." — 60-69, Male, Anantapur, Andhra Pradesh.

"They don't even share water now, sir. They mark their houses and tell us to keep our distance. Oh, no one welcomes us old people, anymore." — 80+ Female, Anantapur, Andhra

Demographic & Geographic Matrix Analysis

To understand the internal variations across the dataset, the qualitative findings have been analysed by Gender, Age Group, and State/District location.

Findings Segmented by Gender

Female Senior Citizens

Risk Factors Framework: Aging rural women display extreme systemic being at risk driven by high rates of widowhood, severe social isolation, and an overwhelming spousal caregiver burden. When a husband becomes paralyzed or chronically infirm, the female partner must single-handedly absorb the physical strain of household management and medical logistics. Due to limited autonomous financial savings, they remain dependent on a single pension allocation, which forces many, back into strenuous manual field labour to avoid starvation.

Location & Context: High concentrations of isolated, working female seniors were observed in the Anantapur and Atmakur field blocks of Andhra Pradesh. ……..

Male Senior Citizens

Risk Factors Framework: Ageing rural men frame their health struggles primarily around the loss of physical capacity and livelihood security due to changing climate conditions. They exhibit intense anxiety regarding rising medical costs. As environmental degradation limits daily wage crop labour options, their lack of disposable income directly results in the cutting back to complete stoppage of necessary chronic disease medications.

Location & Context: Predominant across the agrarian settings of Yadgir (Karnataka) and Krishna (Andhra Pradesh) districts.

Findings Segmented by Age Group

The Younger-Old (60–69 Years)

Risk Factors Framework: This cohort remains highly involved in casual agricultural labour. Their primary health challenges relate to severe physical fatigue, heat stroke, and musculoskeletal strain caused by working long hours in fields during intense heat waves. They are acutely sensitive to the rising market costs of medical care, food items, and basic utilities.

Geographic Focus: Observed extensively in Dunda block (Uttarkashi, Uttarakhand) and Bapulapadu block (Krishna, in Andhra Pradesh).

The Mid-Old (70–79 Years)

Risk Factors Framework: This group experiences significant gaps in pension coverage combined with a sharp drop-off in intergenerational care from adult children. Because their pensions are either irregular or diluted by household basic needs, they face the physical strain of managing household tasks entirely on their own. Many are forced to continue performing manual labour well into their 70s.

Geographic Focus: Active in field sites throughout Kamasamudra block (Karnataka) and Atmakur block (Andhra Pradesh).

The Oldest-Old (80+ Years)

Risk Factors Framework: This advanced age bracket represents the most at risk segment, characterized by high rates of unaddressed sensory impairments (such as profound hearing loss), severe mobility deficits, and widowhood. They experience near-total financial dependence and severe social isolation. Many live completely alone, cut off from formal welfare support, and face bureaucratic exclusion due to missing or delayed pension payments.

Geographic Focus: Concentrated in the remote pockets of Bhutahi block (Sitamarhi, Bihar) and Gogikona block (Yadgir, Karnataka).

Cohort: Impaired Senior citizen (60-80+)

Health Conditions and Chronic Health Issues

Senior citizens within this study populate a landscape of profound, compounding, and debilitating physical ailments. The data reveals a high prevalence of multiple, co-occurring chronic health issues, primary among which are severe degenerative joints/bone conditions (chronic knee, back, and nerve pain), post-traumatic mobility impairments resulting from untreated or poorly managed accidents, and pervasive vision loss. A significant sub-theme is the occurrence of failed surgical interventions (e.g., eye surgeries), which leave participants completely blind or permanently impaired. These chronic health issues do not merely exist as medical diagnoses; they fundamentally restrict daily functioning, strip elders of personal independence, and force them to execute necessary survival tasks under conditions of continuous physical suffering. Extreme climate events, such as acute heatwaves, directly exacerbate these ailments, causing physiological stress like blurred vision and severe dizziness. The older respondents suffer from a high prevalence of multiple, debilitating impairments, including vision impairment (often from failed surgeries or age-related), chronic knee/back/nerve pain.

Access to Healthcare Facilities

Physical access to healthcare infrastructure—ranging from Primary Health Centres (PHCs) and local government hospitals to private practitioners—is severely compromised for this demographic. While medical infrastructure exists, the journey to reach it is characterized by environmental, financial, and physical barriers. Specialised geriatric care, impairment-specific medical protocols, and pain-management therapies are completely absent at the primary care level. Crucially, climate and weather changes act as physical barriers to healthcare access: during extreme heatwaves, intense morning sun, and scorching outdoor temperatures render traveling to a clinic physically hazardous for impaired seniors, exposing them to heatstroke, severe dehydration, and fainting spells. Consequently, medical visits are deferred, and chronic conditions are left to deteriorate. A few verbatim related to medical facilities are presented below.

"Even if we want to go to the hospital, we don't feel like going in the sun; the heart doesn't feel like it. We feel dizzy..." 70-79 Male Anantapur district, Andhra Pradesh

"Participants suffered significant mobility challenges and limited access to specialized, distant, and expensive healthcare." Female, Gajapati district, Odisha

"We are helpless, how will we go? Where is a hospital in the village? ... Neither medicine nor doctor, nothing is available here…There is no arrangement for the elderly in the hospital. Even if we go, thinking that since they are elderly, we should treat them first... We don't even get medicine." – 70-79, Female, Sitamarhi district, Bihar

"There is a Primary Health Centre in the village, but only medicine for cold and fever is available there, nothing else. The doctor is always there, but medicine is not available." 60-69, Male, Sitamarhi district, Bihar

“In these 60 or 70 years, the village people have never seen a health camp. If it can be held every year, what could be better than that?" 60-69, Female, Sitamarhi district, Bihar

"Sometimes if there's a crowd at the PHC, we avoid going….there's a long queue so we avoid…., also in case of high fever, they don't give injections, they don't give drips, they don't do any of that. They only give medicines and tablets … Sometimes in such a situation we go to a private clinic for days,” reported by 70-79 Male, Rajkot, Gujarat

Inadequate treatment arrangements at a government facility were highlighted by a Male respondent in Kolar, Karnataka. “Even if we go there, they just give four tablets, five tablets, or ten tablets and send us back; they don't give anything else. If there's an operation, they make a note and ask us to come prepared."

Talking about ineffective treatment, one of the respondents from Ratlam district, Madhya Pradesh, mentioned, “PHC gives pills and says, take them, eat them... but it does not work. Slowly, health issues become the same as before, so if you want a long treatment, you will need more money, and you should go somewhere else for treatment.

Money Spent on Health Treatment

Economic precarity transforms healthcare into an unsupportable financial burden for impaired seniors. In general, the respondents reported inconsistent or no regular income, surviving on highly inadequate or irregularly disbursed government old-age or disability pensions (ranging from Rs.300 to Rs.4,000–6,000 depending on state welfare policies). Because central safety-net schemes like Ayushman Bharat are reported as ineffective or restricted when dealing with complex, major surgeries or long-term specialized medications, elders are forced to either bear exorbitant out-of-pocket expenses or forego care entirely. The lack of financial means leads directly to escalating cycles of rural debt or forces individuals with severe physical impairments to continue executing exhausting manual or agricultural labour just to pay for basic medicines and food.

"If there is some money, we can manage like this somehow" -Female, Wayanad, Kerala

"One has to go to Sitamarhi... When we take someone in a serious condition, the vehicle owner charges Rs.1400-1600 as rent from the poor person. This has been the situation for three years." 70-79, Male, Sitamarhi district, Bihar

"That's why I am saying that this health card didn't work in the hospital. Even now, for the past eight months, one has to go to Tindi and then go for a check-up every 15 days. They prescribe medicines worth Rs.2000-3000. And we must pay Rs.1000 just for the registration. We needed surgery there; he has been going there for eight months. In Tindi, at that Shubham hospital, they charge Rs.1000 just for the checkup..." 60-69 Male, Rajkot, Gujarat

"I just bought two tablets... just went to the medical store and bought them. It cost four thousand rupees." 70-79, Female, Wayanad, Kerala

Healthcare Support

The formal healthcare support ecosystem for impaired senior citizens is fragmented, deficient, and severely compromised by structural exclusion. Institutional support in the form of subsidized medical supplies, home-based nursing, or accessible transport is virtually non-existent. Awareness and receipt of critical health cards—such as the

central Ayushman Bharat card, state-level equivalents (e.g., Aarogyasri in Andhra Pradesh), or specialized old-age benefits—are low due to lack of proactive government outreach. Instead, support is overwhelmingly informal, fragile, and volatile. Spousal care serves as a primary baseline support system when available, and temporary assistance from empathetic neighbours or localized charity (such as factory owners distributing food/ tiffins) fills urgent gaps. However, family-based caregiving is deeply transactional: adult children and daughters-in-law are widely reported to withhold emotional and physical care, actively neglecting the seniors' health requirements and only helping when the elder's monthly pension is distributed.

"The women in the government hospital show a lot of attitude. ... Why would they care about poor people? Their salary is guaranteed anyway. ... He won't check you, won't call the doctor, won't even touch you. He just gives the tablet, writes a paper, and that's it." 70-79 Male, Nandurbar, Maharashtra

Barriers and Challenges in Getting Medical Support

The study highlights a series of structural, behavioural, and infrastructural barriers that systematically isolate disabled seniors from receiving medical support:

Critical Assistive Device Deficit

There is an acute lack of proper mobility aids (such as wheelchairs or functional walkers). Seniors rely heavily on crude wooden or iron walking sticks. If the stick slips, they experience catastrophic falls with no physical capacity to stand up independently.

"No, sir there are no wheelchairs. Just sticks in hand? You walk holding these sticks. What if the stick slips? If it slips, I will fall, I can't get up. Wheelchairs and similar things should be provided. ... Those who cannot walk can be taken in a wheelchair. ... They should be there; the more there are, the better it will be." Male, Rudraprayag district, Uttarakhand

Climate-Induced Isolation

Extreme weather patterns physically cut off access to healthcare. Severe droughts and heatwaves in the south and central regions cause debilitating physical weakness, while heavy monsoons, landslides, and cyclones in northern and eastern states physically strand disabled elders inside unstable housing.

Institutional Indifference and Official Hostility: Local governance structures (Panchayats, Block/MRO offices) are perceived as profoundly apathetic and exclusionary. Rather than acting as supportive access hubs, local administrative

officials routinely dismiss or neglect impaired elders who attempt to navigate bureaucratic channels to claim their health and pension entitlements.

Information Asymmetry: Proactive outreach in vernacular languages regarding welfare rights, medical camps, or grievance mechanisms is non-existent, generating a profound digital and knowledge divide.

Demographic and Regional Sub-Analysis

Findings by Gender

- **Male Participants (Predominantly sampled in Karnataka, Gujarat, Madhya Pradesh, Maharashtra, Tamil Nadu):** Male seniors with impairment voice intense, explicit disillusionment regarding macro-economic erosion and local institutional accountability. They focus heavily on how climate-induced agricultural destruction (crop failures, drought, non-viable land) eliminates traditional agrarian livelihoods, driving them into deep debt or forcing them to execute exhausting physical manual labour despite severe skeletal or spinal pain. They express strong frustration over systemic exclusion from pensions and ration distributions due to bureaucratic or official neglect.
- **Female Participants (Predominantly sampled in Kerala, Odisha, Andhra Pradesh, Bihar, Uttarakhand):** Female seniors frame their experiences through the severe, day-to-day physical and emotional toll of chronic illnesses, alongside an acute domestic "care gap". They detail extreme instances of forced self-reliance, describing how they must sit flat on the floor to crawl, cook, sweep, and wash utensils because their families or daughters-in-law completely refuse to speak to or assist them. They emphasize immediate, basic survival struggles, such as severe domestic water scarcity, lack of household sanitation/latrines, and the severe physical toll of fetching water or navigating unstable terrain during climate disasters.

Findings by Age (60–80+ Years)

As participants advance across the 60 to 80+ age continuum, their intersecting physical impairments and structural neglect worsen exponentially. Advanced age triggers a profound collapse in traditional intergenerational respect; younger generations are characterized as hyper-materialistic, viewing disabled elders not as family members worthy of care, but as physical and financial burdens. This structural abandonment fosters intense emotional isolation, extreme social invisibility, and pervasive despair. For older seniors, the lack of human assistance for basic mobility leads directly to severe psychological trauma, with multiple participants explicitly

communicating fatalism and suicidal ideation, viewing death as the only viable escape from perpetual neglect and pain.

The study exposes a severe policy and humanitarian gap at the intersection of aging, impairment, and climate change in the study areas. To mitigate these systemic failures, professional interventions are recommended:

- **Climate-Resilient Healthcare Delivery:** Decentralize health delivery by establishing mandatory, door-to-door mobile medical units and localized geriatric health camps, specifically operating during early mornings or cooler hours during heatwave seasons to bypass climate-induced mobility barriers.
- **Universal Distribution of Assistive Technologies:** Implement a rigorous, state program for the direct home delivery and regular maintenance of robust assistive devices (ergonomic crutches, specialized wheelchairs, vision aids) to reduce catastrophic fall risks.
- **Proactive Welfare Integration & Accountability:** Mandate local Panchayat and Block administrative bodies to actively map and register all disabled elders for Ayushman Bharat and state health cards via localized, low-tech vernacular campaigns.
- **Community-Based Care Ecosystems:** Formulate state-subsidized, village-level volunteer care networks to support isolated elders with immediate survival needs—such as clean water delivery, domestic sanitation support, and medicine collection—thereby mitigating the erosion of informal filial care.

Cohort: Widow (60-80+)

The study results so far show that older widows are one of the marginalized populations operating at the intersection of severe socio-economic hardship, climate-induced physiological stress, and systemic healthcare exclusion. Subsequent pages will explore their health needs and experiences.

Health Conditions and Chronic Health Issues

Older widows bear a compounding physical burden due to advanced age, intense daily chores, and poor nutrition. Prominent chronic conditions identified include diabetes, hypertension, renal vulnerabilities, and musculoskeletal deterioration, causing severe mobility issues.

Climate change acts as a risk multiplier: extreme heatwaves, erratic rainfall, and severe hot winds induce physiological trauma, resulting in generalized burning sensations, coughing, fevers, acute headaches, and recurrent dizziness or collapse during manual labour. Verbatim below provide more details.

"Now I have many illnesses. One is diabetes, and the second is blood pressure... whether the body is scorched by the sun or if it rains, can't bear it... Occasionally, get dizzy, get tired, and fall." Anantapur, Andhra Pradesh

"Pain in the hands and feet. Headache and feeling uneasy. Blood pressure increases. We have to work in the sun, and the sun is very intense. Excessive sweating, feeling uneasy, feeling dizzy... "- widow from Nandurbar district, Maharashtra

"Things like diarrhoea and heartburn will occur. Vomiting happens, and one feels dizzy and faints. All these things happen. ... Sometimes we get four pots of water, and sometimes the water doesn't come at all. It's very difficult," a widow from Namakkal, Tamil Nadu

Access to Healthcare Facilities

Formal medical infrastructure exhibits deep operational vacuums. While Primary Health Centers (PHCs) are nominally established, they lack targeted geriatric support systems or dedicated welfare pathways for widows. When asked about special health programs at the PHC level, participants consistently responded with "Don't know". The physical journey to public hospitals is defined by exclusionary long queues and exhaustive standing times that older women find impossible to endure. Consequently, there is an over-reliance on local private practitioners for immediate symptom management, which costs hundreds of rupees per consultation and fails to offer sustainable healthcare answers.

"When we go to the hospital, we stand in line along with everyone else. We just stand in line with everyone else. If we go to a private doctor, he gives tablets and pills. He gives four or five pills and takes two or three hundred rupees." Kolar district, Karnataka

Demand for a medical facility for elders was mentioned by a respondent in Bihar, "Build a separate hospital for treatment. ... Build a shelter for the elderly to live in. Arrange separate medical treatment for the elderly. Arrange all the food and drinks for the elderly." Madhubani district, Bihar.

Money Spent on Health Treatment & Financial Burden

The financial dimensions of healthcare access are extremely challenging. Due to minimal public medical coverage, widows face exorbitant out-of-pocket healthcare expenses. Severe conditions (e.g., kidney failure or major operations) strip households of productive assets, driving families to sell vital livestock and secure high-interest

loans from informal local lenders. This creates an intergenerational debt trap from which older widows cannot independently escape.

"My health is not good; there was a problem with my kidney. I stayed in Vijayawada Government Hospital for three months. ... We sold a buffalo for three hundred thousand. We got treatment by taking loans from around us." Anantapur, Andhra Pradesh

Healthcare Support Received

Formal institutional healthcare support specifically targeting widows is virtually non-existent. Informally, the care grid is highly fractured and unreliable. In rare, positive instances, close family members or supportive grandchildren step in to assist with manual health needs or fetch water. However, the dominant reality across rural nodes is a complete lack of formal care, forcing widows into self-medication or complete neglect when family structures undergo breakdowns due to distress migration, extreme poverty, or substance abuse.

Barriers and Challenges in Getting Medical Support

The primary systemic barriers include:

- **Physical Immobility:** Lack of accessible or mobile medical facilities makes travel impossible for disabled, frail, or non-ambulatory widows.
- **Information and Literacy Gaps:** Profound educational exclusion leaves widows entirely unaware of state healthcare schemes or specialized programs at local PHCs.
- **Poverty and Lack of Institutional Credit:** Incapacity to pay upfront private fees combined with refusal from informal lenders to provide lines of credit due to an absence of land assets.
- **Administrative and Institutional Dismissal:** Indifferent, ageist, or dismissive attitudes from local officials and front-line healthcare workers.

Strategic Recommendations for Programmatic Design

1. **Decentralized Geriatric Mobile Health Clinics:** Eliminate the physical mobility barrier by sending monthly healthcare vans containing diagnostics and free prescription drugs directly into remote rural pockets.
2. **Targeted Low-Literacy Awareness Campaigns:** Leverage local ASHA and Anganwadi networks to execute visual and oral information campaigns describing rights, healthcare schemes, and social security entitlements directly to illiterate widows.

3. **Universalization and Timely Disbursal of Widow Pensions:** Remove all administrative hurdles, fingerprinting mandates for disabled elders, and corrupt middlemen from the financial pipeline.
4. **Climate-Sensitized Health Interventions:** Establish community cooling shelters and clean drinking water points to insulate at risk elderly bodies from heatstroke, dehydration, and climate-induced collapses.

Integrating with the Quantitative Findings

The quantitative findings reveal that health challenges are widespread among older persons, with only **53% rating their health as good or very good**, while nearly half report average, poor or very poor health. Chronic pain (**52%**), mobility difficulties (**52%**), vision problems (**38%**) and high blood pressure (**36%**) emerge as the most common health concerns among those reporting poorer health. Health outcomes deteriorate consistently with age, financial dependency and impairment status, with the oldest-old, persons with cognitive or mental health difficulties, and those who are financially dependent reporting the poorest health status. Although most respondents have some access to healthcare services, only **35% report always being able to access healthcare when needed**, while nearly half face difficulties in travelling to facilities (**49%**), high treatment costs (**41%**), distance to facilities (**38%**) and long waiting times (**37%**). Older persons living alone, those with poor health, low education levels and limited household support consistently face greater barriers to care.

The qualitative findings provide important context behind these patterns and demonstrate how health vulnerabilities are experienced in everyday life. Across all cohorts, older persons described a combination of chronic illnesses, mobility limitations, vision and hearing loss, chronic pain, diabetes and hypertension that increasingly restrict their independence and ability to work. Many narratives highlighted how extreme heat, erratic weather, droughts, floods and poor environmental conditions aggravate existing health problems through dehydration, exhaustion, dizziness, respiratory illnesses and vector-borne diseases. Older persons with impairments and widows reported particularly severe challenges, often describing situations where they were unable to travel independently, delayed seeking treatment because of extreme weather or transport difficulties, or continued strenuous labour despite illness due to financial necessity. The narratives also reveal widespread dissatisfaction with healthcare quality, with respondents frequently describing PHCs as offering only basic medicines, inadequate specialist care and limited geriatric support. Long distances to facilities, high transport costs, ineffective health insurance coverage, lack of assistive devices and poor awareness of schemes such as Ayushman Bharat further compound exclusion from healthcare services.

Taken together, the quantitative and qualitative findings demonstrate that health risk factors among older persons extend far beyond the presence of disease alone. The survey identifies the groups most affected by poor health and barriers to care, while the qualitative evidence explains how age, impairment, poverty, social isolation, climate exposure and weak institutional support interact to create cumulative disadvantages. Both strands of evidence consistently show that older persons living alone, widows, persons with impairments, the oldest-old and those experiencing financial insecurity face the greatest challenges in maintaining health and accessing timely care. Climate-related stresses further intensify these vulnerabilities by increasing physical health risks, disrupting mobility and raising the costs of treatment and caregiving. Together, the findings highlight the need for age-friendly and climate-responsive healthcare systems that combine affordable treatment, community outreach, mobile health services, assistive technologies, improved scheme awareness and stronger support mechanisms for at-risk older persons.

13.5 Family Support and Social Connectedness

Cohort: Senior citizen (60-80+)

Family Support Systems and Care Networks

For senior citizens aged 60–80 who do not suffer from severe physical impairments and are not widowed, family support networks function primarily through a model of **reciprocal co-dependence**. Rather than being passive recipients of intensive clinical or physical care, these seniors act as vital anchors within the household.

However, the traditional safety net is structurally fragile. The network relies almost entirely on the presence of a co-residing son and daughter-in-law. When economic pressures drive the younger generation to migrate for seasonal or long-term wage labour, this cohort is suddenly thrust back into primary self-reliance, forcing them to manage heavy domestic duties and small-scale agriculture without youth support.

Reciprocal Family Responsibility: "We live together with our son. He goes out to work, and we manage the house and look after the children while they are away. We support each other." — *Male, Andhra Pradesh, Krishna, 60-69*

Compulsion to work for survival and well-being: "Work? Yes, we have to work. Work has to be done. ... Yes, it has to be done for our daily survival. ... As long as hands and feet can move, one should do a little something. ... Does the belly get full just by sitting?" - *Female, Maharashtra, Yavatmal, Kalgaon, 60-69*

Generational Responsibility & Daughters' Role*: "It's not a custom as such, but what they mean to say is that even when there is a son, he mostly doesn't take interest in looking after those people. That's why daughters are more sensitive towards their*

parents. So whatever happens, even if they've been married off elsewhere, they still come and do everything." Female, Gujarat, Rajkot, Derdi, 60-69

The Strain of Youth Migration: "My son had to go to the city because there is no work here after the rains failed. Now, at 72, I have to carry the water plastic containers from the village tap myself because there is no one else." — *Male, Odisha, Bolangir, 70-79*

Call for older person support systems: "Please try, the sooner such arrangements are made for the elderly, the more we will remember that here..." - Female, Bihar, Sitamarhi, Parihar, 70-79

Resilience and Family Support for Chores: “"If not, my daughter-in-law will look after it. ... We do all the work now, and when we can't, the girl (daughter-in-law) comes and takes care of it." - *Male, Tamil Nadu, Ramanathapuram, Kadaladi, 80+*

Family Separation and Support: "there are three sons, all three have separated, now it's just the two of us old folks, they provide us with food and water." *Female, Madhya Pradesh, Guna, Awan, 80+*

Dependency and Loss of Autonomy: "One has to live by the advice of the son and the daughter-in-law. One has to agree with whatever they say. One cannot speak against them." - *Male, Maharashtra, Yavatmal, Kalgaon, 80+*

Frequency and Quality of Family Interactions

Seniors in this cohort experience highly frequent, daily contact with family members due to shared living arrangements. However, high frequency does not automatically mean high-quality interactions.

As households face rising financial stress, daily communication often shifts from meaningful family dialogue to **functional and transaction-driven exchanges**. Conversations tend to center around daily expenses, farm inputs, and the deployment of the senior's pension. When the older persons attempt to pass down traditional social or agricultural knowledge, they frequently encounter resistance or dismissiveness from younger generations, who view traditional practices as outdated in a rapidly changing world.

Friction Over Changing Times: "When we tell them how we used to manage the fields or solve village disputes, they say, 'Times have changed, your old ways do not work now.' They listen, but they do not respect the words." — *Male, Madhya Pradesh, Guna, 60-69*

Transactional Communication: "They speak to us nicely when the pension date comes because that money pays for the electric bill and the children's school books. Other days, everyone is busy with their own phones and work." — *Female, Tamil Nadu*, *Namakkal,* 60-69

Loss of older person authority: "Whatever they say is the word, whatever the children say is the word. It's over, our whole story is over." - *Male, Karnataka, Yadgiri, Naikal, 60-69*

Role of Elders in Traditional Decision-Making: "We do tell them what the methods will be, what the traditions are... we tell everything... what materials will be needed and what will not, we explain everything." *Female, Bihar, Sitamarhi, Parihar, 70-79*

Changing Family Dynamics and Respect for Elders: "Back when we were small, they would give a daughter if the parents-in-law were there, thinking about who the daughter would live with. Now it's not like that. Now, the moment they get married, the husband and wife take a bag and want to leave immediately." - *Male, Karnataka, Yadgir, Gogikona, 80+*

Voice, Inclusion, and Participation in Family Life

The level of influence and decision-making power this cohort holds is directly tied to their **economic utility and asset ownership**. Because these seniors do not have major physical or cognitive impairments, those who hold land titles or contribute a steady pension maintain a strong voice in family decisions.

However, their inclusion is increasingly threatened by a widening digital divide. As essential family functions—such as market pricing, banking, weather tracking, and government benefit applications—shift to smartphones, seniors find themselves sidelined. They are forced to rely on younger relatives to navigate these digital spaces, which gradually erodes their independence and authority in household planning.

Financial Neglect by Children: "They would send money only if they had any. They say they have to educate their own children and do other things; nothing is left." - *Male, Bihar, Madhubani, Madhepur, 60-69*

The Digital Divide: "Everything is on the mobile phone now. The cooperative messages come on the phone, the bank updates come on the phone. Because I cannot operate it well, my son handles it, and I am left out of the loop." — *Male, Karnataka, Kolar, 70-79*

Asset-Driven Authority: "Because the land is still in my name, they ask for my approval before making any big changes. If I give away the land now, I know my voice will no longer matter in this house." — *Male, Gujarat*, *The Dangs,* 70-79

Older Persons Agency and Decision Making: "The children take the decisions, who asks us, we have become old." - *Female, Uttarakhand, Rudraprayag, Jhakholi, 70-79*

Importance of Financial Independence: "When money comes, it's very comfortable... control comes into your hands..." – *Male, Maharashtra, Yavatmal, Kalgaon, 80+*

Domestic Abuse and Neglect by Sons: "He drinks alcohol and hurls abuses, even if we do something, he abuses us, and his sons are also terrible. The son kicked us out of the house... he does not keep us in the house at all." – *Female, Madhya Pradesh, Guna, Awan, 80+*

Emotional Well-being, Loneliness, and Respect

While these senior citizens generally maintain a baseline of social respect by holding together intact families, they experience a distinct form of **emotional isolation**. They are physically surrounded by family, yet they often feel deeply lonely due to the decline of traditional community spaces and shifting cultural values that prioritize individual economic gain over collective family life.

Furthermore, their emotional well-being is frequently undermined by systemic administrative challenges. Frustrating encounters with public systems—such as biometric fingerprint mismatches at ration shops caused by ageing skin—can make seniors feel outdated and invisible, chipping away at their self-worth.

Role of older persons and community respect: "The word of the older persons is accepted by everyone. … It is universally accepted. If the head of the house, if an older person says something, then almost everyone accepts it. Their word is followed. Yes. Whatever the older person says, their word is accepted." - *Male, Uttarakhand, Uttarkashi, Dunda, 60-69*

The Loneliness of Changing Values: "The house is full of people, but everyone is living in their own world now. The grand-children are always on their screens. There is no one to sit and talk about life with anymore." — *Female, Maharashtra, Yavatmal, 60-69*

Systemic Loss of Dignity: "When the machine at the ration shop refuses to read my fingerprints, the dealer shouts and tells me to come back later. It makes me feel like a beggar in my own village, even though I have worked hard all my life." — *Male, Andhra Pradesh, Anantapur, 70-79*

Social Isolation & Wisdom: "There is no one to ask or value our opinion. ... if someone speaks, no one listens to what anyone says anymore."- *Male, Madhya Pradesh, Ratlam, Birmawal, 70-79*

Need for social and emotional support: "That's what gives the greatest happiness. Because even if no children look after us, at least there is someone to check on us." - *Female, Keralam, Wayanad, Muttil, 80+*

Loneliness, and Family Separation: "Everyone passed away … My wife also died... And my four sons live in Ludhiana, Punjab... I have pain everywhere...." - *Male, Bihar, Sitamarhi, Bhutahi, 80+*

Cultural Respect for Elders: "Look, we live together in the society and celebrate all festivals together. There is no problem with anything. Thus, the advice of the elderly is highly respected. Yes, absolutely. In our place, in our culture, there is absolute importance for the elderly." - *Male, Bihar, Sitamarhi, Bhutahi, 80+*

Changing Family Relationships and Crisis Support

The stability of family relationships faces its toughest test during sudden health emergencies or climate-induced shocks. For this cohort, an unexpected illness can instantly shift the dynamic from mutual support to an **economic and caregiving strain**.

Sudden illness caused due to climate shocks incidents and emergency medical care, its availability and cost of treatment.. The high costs of private healthcare, transport, and medications often force households to take out high-interest loans, creating underlying resentment. During natural disasters like severe heatwaves or sudden floods, these active seniors try to help, but can quickly become at risk due to failing public health infrastructure and emergency services.

Infrastructure Failures in Crisis: "When the heat wave hit last summer, I collapsed. There was no power for hours, and the local health centre had no medicine or fans. My family had to hire a private jeep to take me to the district hospital, costing us a week's wages." — *Female, Andhra Pradesh*, *Krishna,* 60-69

Lack of Disaster Relief: "(Source of economic misery) No, we have not received anything. Not for drought, not for excessive rain." *Karnataka, Yadgiri, Naikal, Male, 60-69*

The Resentment of Medical Debt: "I fell sick with a severe respiratory issue during the harvest season. My son had to borrow Rs 30,000 from a local lender at high interest to pay the private hospital. Now, even though I am recovered, I can feel the tension in the house because of that debt." — *Male, Bihar, Madhubani, 70-79*

Financial Aid for Older Persons At Risk: "And if someone is from the Below Poverty Line category, someone who has no money, they should be helped with some financial assistance during a disaster." - *Female, Uttarakhand, Rudraprayag, Jhakholi, 70-79*

Changing Family Care Dynamics: "And that was the olden days when daughters and daughters-in-law used to massage the mother-in-law with oil; now who even touches the body? Any daughter or daughter-in-law?" , *Female, Bihar, Sitamarhi, Parihar 70-79*

Food in Displacement Camp: "(Family displaced by landslide – experience of getting food in camp) ..We liked it. Don't think anything like that. We just ate whatever we got greedily" - *Female, Keralam, Wayanad, Muttil, 80+*

Demographic Analysis

Findings Segmented by Gender

Females (60–80+, Intact Capacity/ Caregivers)

- Serve as the functional core of the domestic care network. They absorb multi-generational labour, including cooking, cleaning, and managing grandchildren, which frees younger daughters-in-law or sons for wage labour.
- When their husbands fall ill, active senior women step forward as primary caregivers, pushing their own physical limits and neglecting their health to protect the family budget.
- Internalize emotional distress and anxiety, processing feelings of loneliness through deep immersion in domestic chores and religious practices
- Hold significant authority over daily domestic decisions, dietary choices, and religious ceremonies, but have minimal input regarding high-value financial investments or property sales
- Experience frequent but emotionally complex interactions within the kitchen and domestic spaces. These interactions are highly at risk to daily friction with daughters-in-law over household management and child-rearing choices.
- Gender disparity in coping with heat: For instance, they perceive that men can go anywhere outside and drink something cold or do something, but women don't have such choices.

Males (60–80+, Intact Capacity/ Caregivers):

- Act as the household's external representative. They manage interactions with local markets, secure credit from agricultural or medical shops, and navigate local government departments.
- Focus heavily on securing the financial credit required to manage health emergencies, often placing their land or future crop yields as collateral to pay for treatment.
- Express loneliness through social withdrawal. They often spend hours outside the home in local public squares or tea shops, seeking the peer companionship that is missing within their households.
- Retain formal legal and economic authority over family assets, but face a gradual erosion of operational control as younger sons take over physical management of the farms or businesses
- Experience fewer daily words. Their interactions are concentrated during meal times or around economic planning sessions, which can lead to feelings of social isolation even within a crowded house

Findings Segmented by Age Group

Younger Old (60–69):

- Generally integrated into active family operations. Their support network is latent; they require almost no physical care and are net contributors to the family's economic survival.
- Generally resilient during crises, often stepping up to help younger family members pack, move, or secure the household during floods or storms.
- Report relatively high emotional resilience, as they maintain active peer networks and feel useful within the family structure
- Maintain a strong, decisive voice in both domestic and economic matters, frequently acting as the final decision-maker for the family.
- Communication is active and dynamic. They are routinely consulted on major family milestones, marriages, and local social disputes.

Mid Old (70–79):

- The care dynamic begins to shift. While they remain mobile, they start relying on family members for complex external tasks, transportation to distant hospitals, and managing modern digital systems.
- Highly at risk to extreme weather, such as intense heatwaves or cold snaps, which can trigger sudden health complications and strain family resources.
- Experience a notable rise in anxiety and vulnerability, realizing that their functional years are drawing to a close and fearing a future loss of independence.
- Shift into a secondary, advisory role. Their inclusion remains intact for traditional social customs but is often bypassed during urgent economic adjustments.
- Interactions begin to decrease in quality. Younger family members show less patience with sensory declines, such as mild hearing loss, causing seniors to slowly withdraw from casual family conversations.

Oldest Old (80+):

- Dependence on family and external support increases even further. For those without children or whose children have migrated, issue is more critical
- Some of them feel that they are being heard but decisions are made predominantly by younger family members
- Highly at risk to extreme weather, such as intense heatwaves or floods; and greater dependence on external emergency help

Cohort: Impaired Senior citizen (60-80+)

The impairment category includes both men and women aged 60–80 years Impairments include mobility impairments, visual impairment, hearing loss, chronic pain, multiple impairments, and age-related functional decline.

Family Support Systems and Care Networks

Family remains the primary care source, but support is inconsistent and frequently inadequate. Many participants reported having to manage daily activities independently despite severe impairments. Adult children often provide only financial assistance or pension collection rather than caregiving.

Lack of Caregiving Support: "No one helps us, …. We have to do our own work. No one helps us, …, neither sons nor daughters-in-law." *Older Female with Impairment Andhra Pradesh, Anantapur*

Maintaining well-being in old age: "We work with cows here, work with buffaloes. We don't do anything, just cow and farming work... The mind also stays a bit fresh, sitting at home gets boring. Not just sitting completely, we keep doing a little bit, right?" - *Older Male with Impairment Gujarat, Rajkot, Derdi,*

Navigating Daily Activities alone despite impairment: "There is difficulty. It takes a little while. Then I go and sit for a while. Then I come back and do it. And that's how I do each task" *Older Female with Impairment, Keralam, Wayanad, Meppadi*

Family Support & Living Arrangements: "My sons and daughters got married and moved far away to live separately. Only the two of us are here." *Older Male with Impairment, Tamil Nadu, Ramanathapuram, Narippayu*

Caregiving Burden: "My husband has been bedridden like this for 15 years. Everything is done at the same spot... he even uses the toilet on the bed itself... everything... I have to do it." *Caregiver Spouse of Older Male with Impairment, Maharashtra, Nandurbar, Sarangkheda*

Living Alone & Desire for Care Support: "I am alone, , others have daughters-in-law at home, this and that. I live alone. If an ashram opens somewhere, I would go there." - *Older Female with Impairment, Uttarakhand, Rudraparyag, Ukhimath Parakundi*

Frequency and Quality of Family Interactions

Interactions are often transactional and linked to pensions or material resources rather than emotional care. Many impaired older persons reported minimal everyday engagement from family members. Migration of younger generations further reduces contact and support.

Mobility and Community Indifference: “if any children are passing by and we ask them to turn us this way or that way, no one listens. ... We have to go ourselves; our own legs are our only support” *Older Female with Impairment, Andhra Pradesh, Anantapur*

Living Arrangements & Support: “They look after me, everyone looks after me. It is just that I live separately” *Older Male with Impairment. Karnataka, Kolar, Budikote*

Erosion of Traditional Practices and Community Values: "Earlier, people were good. There was a sense of love, right? Everyone used to eat together. ... Now the new daughters-in-law have come. They stay in a corner now. If they get a little time, they use the phone." - *Older Female with Impairment, Uttarakhand, Rudraparyag, Ukhimath Parakundi*

Voice, Inclusion, and Participation in Family Life

Physical impairment often translates into reduced participation in household decisions and community activities. Dependence on others for mobility, finances, and accessing services limits agency and voice. Respondents frequently described feeling forgotten by both families and institutions.

Physical limitations and daily activities: “I didn't eat food with my own hands; the daughter and daughter-in-law feed me” *Older Female with Impairment, Sitamarhi, Parihar, Kanhwa*

Family's perception and treatment of older persons with impairment: "The older persons... the family members say, 'It would be better if they died.' They keep saying such things. ... No one wants to take care of them. ... Once we are bedridden and trouble starts.” *Older Male with Impairment, Gujarat, Rajkot, Derdi.*

Emotional Well-being, Loneliness, and Respect

Isolation, neglect, dependency, and declining physical function contribute significantly to emotional distress. Participants often expressed resignation and self-reliance rather than expectations of care. Many older persons described feeling forgotten, burdensome, or invisible within families and governance systems.

Financial Assistance Needs: "If there is some money, we can manage like this somehow. Isn't it?" *Older Female with Impairment Keralam, Wayanad*

Despair and Resignation: "Now death is almost here... when God calls, it will come, right? We'll see then!" *Older Male with Impairment, Maharashtra, Nandurbar, Sarangkheda block.*

***Social confinement due to disability**: "I don't go anywhere. I stay at home, and after home, I go to the mosque, that's it. Yes, I don't go outside of this." - Older Female with Impairment, Sitamarhi, Parihar, Kanhwa, block.*

Changing Family Relationships and Crisis Support

Climate shocks and impairment interact to intensify dependence and vulnerability. During crises, impaired older persons often struggle to evacuate, access healthcare, or secure assistance. Families may provide temporary support, but many respondents reported having to rely on themselves. The decline of traditional family caregiving norms was evident across multiple states.

Family support during disasters and Reluctance to evacuate: "We have no one… We hesitate to leave the house, thinking someone might steal something, so we don't go," *Older Female with Impairment, Odisha, Gajpati, Chandiput block, Female*

Community Support During Crises: "There are definitely people among us who go to help. My son goes to help with everything. They are voluntary organizations, aren't they? If there's something like that anywhere, like if soil caves in, even if it's ours, they'll come quickly and clear it if called." *Older Female with Impairment, Keralam, Wayanad, Meppadi block.*

Community Support During Crises: "Well, the help is like, if someone gets sick or there is some trouble, then they will help. What else will people do? Everyone is doing their own thing. ... for someone who doesn't have it, they give it. They do provide it." - *Older Male with Impairment, Uttarakhand, Rudraparyag, Ukhimath Parakundi block.*

Impact of vision loss on daily life and dependence: "Nothing is visible, cannot do work, potholes are not visible. ... Now I have become dependent on others. If the children feed us, we eat, otherwise that's it." – *Older Male with Impairment, Madhya Pradesh, Ratlam, Birmawal block.*

Demographic Analysis

Findings Segmented by Gender

Females with impairment

- More likely to report abandonment and caregiving deficits.

Males with impairment

- More likely to discuss economic strain and loss of authority within the family.

Cohort: Widow (60-80+)

The widow cohort consists entirely of women aged 60–80+ years. Widowhood is often accompanied by poverty, social isolation, declining health, climate vulnerability, and weak institutional support.

Family Support Systems and Care Networks

Family support for widows is highly uneven. While a minority continue to receive assistance from children or grandchildren, many live alone or experience only intermittent support. Migration, alcoholism, remarriage of spouses, family conflict, and poverty weaken traditional care arrangements. Widows frequently rely on informal neighborhood support rather than consistent family caregiving. Several widows described situations where children lived separately, provided only pension-related assistance, or neglected daily caregiving needs altogether.

Family Support for IADL in case of Need: "They help with all the work. When we fall ill or have a fever, they bring us food and water. They help with all the chores." *Widow, Odisha, Bolangir*

Living Alone & Cooking Challenges " One has to cook for one person. We eat then. If there are no vegetables, we even eat with curd. If there's a family, we cook everything. But we who live alone, what can we cook and eat." *Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem*

Lack of Family Support & Resilience "What else can I do... there is no one to provide for me as my son is a drunkard. The son-in-law is a drunkard... there is no one else to provide... God is with me but I have to provide for the kids who play at home." *Widow, Tamil Nadu , Namakkal*

Elderly Care & Family Support: "I stay alone, daughter-in-law and two children, everyone, the family is in Mumbai,... I am not with anyone... I had one son, that son has passed away. The daughter-in-law is there, but she is not well... how will she look after? The children are small, where will she look after..." *Widow, Karnataka, Yadgir, Balichakkar*

Extreme Vulnerability and Coping: "I have no one, neither did I have children, nor is my husband around, I am alone. ... I just beg and eat in the village." - *Widow, Bihar, Madhubani Madhepur, Pachahi*

Family support during illness: "My children are doing it, both children are looking after me. Sons are also looking after, daughter-in-law is also looking after." - *Widow, Uttarakhand, Uttrakashi, Ladari*

Frequency and Quality of Family Interactions

Many widows maintain only occasional contact with children. Interactions are often functional rather than emotionally supportive. Several widows reported that children visit infrequently or only for pension collection. Others reported living separately despite having adult sons in the same village. The quality of interactions is shaped by

economic dependency, household tensions, and migration. Emotional support is frequently absent even where physical proximity exists.

Changing Living Arrangements: " I was at my daughter's house until now. ... I am with my son now." *Widow, Keralam, Kollam, Pathanapuram*

Conditional interactions by Children: "If we have ten rupees, they will come calling us 'Amma', otherwise they will just leave. ... Only if we give one or two out of what we have, they come and go." - *Widow, Tamil Nadu, Namakkal, Alamedu*

Voice, Inclusion, and Participation in Family Life

Widows frequently occupy a marginal position within households and communities. Their opinions are often ignored in both family decision-making and local governance. Economic dependence further limits their bargaining power and participation. Many widows reported being excluded from community meetings and lacking channels to express concerns or influence decisions affecting their lives.

Voice Not Heard: "We don't get a chance, there the big people are sitting, who will let us speak… Even if we say the right thing, nobody understands. It remains as it is, nobody even lets us speak " *Widow, Madhya Pradesh, Ratlam*

Exclusion from Employment: "We don't go for wage work. No one takes us, …. Our bodies aren't up to it. Sometimes in the fields, those who might take us say, 'If we take you, with your broken hands and legs, your limping and back pain, who will take you?" *Widow, Karnataka, Yadgir, Balichakkar*

Isolation leading to Extreme self-reliance despite disability: "No, I do my own work and eat. …, clean the utensils, feed the livestock... My leg is broken. I don't go anywhere. My leg broke, I fell in the courtyard... No one does it. Who would do it for me?" - *Widow, Bihar, Madhubani Madhepur, Pachahi*

Daily chores and farming work of a widow: "I cook at home, make roti, make vegetables, then make lunch. Then I go to the field, these days we cut wheat, did that. I do everything. Then in the evening I cook food, then eat, then also have to wash dishes... I do all that." - *Widow, Uttarakhand, Uttrakashi, Ladari*

Emotional Well-being, Loneliness, and Respect

Loneliness is one of the defining features of widowhood. The Participants described profound isolation, emotional neglect, insecurity, and feelings of abandonment. Widowhood is often experienced as a long-term erosion of social identity and respect. The report notes metaphors such as "standing under a tree whose leaves have fallen" to describe emotional emptiness after losing a spouse.

Feeling of Loneliness: "I am alone. I have a daughter... I got my daughter married and sent her away. Because of that, I became alone." - *Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem*

Feeling of Ignored and not respected: "Earlier things used to get adjusted, now adjustment doesn't happen. Earlier, they used to give large amounts of money and respect. Now no one gives money or respect" - *Widow, MP, Ratlam, Rawti*

Vulnerability of Widowhood: "No matter how many children give... it won't be the same. When my husband was alive, no matter how it was, it was fine. Now, with our children, we feel like we are standing under a tree whose leaves have fallen." - *Kerala, Kollam, Pathanapuram*

Changing Family Relationships and Crisis Support

Climate shocks, migration, poverty, and social change have altered family relationships substantially. Traditional expectations that children will care for ageing parents are increasingly unreliable. Widows often describe themselves as surviving through self-reliance rather than family protection. Crisis support frequently comes from neighbours, informal networks, or religious faith rather than family members or formal institutions. Some widows reported exploitation by relatives after disasters, including land grabbing and misappropriation of compensation payments.

Informal Older Persons Care and Family Support. "They help with all the work. When we fall ill or have a fever, they bring us food and water." *Widow, Odisha, Bolangir district.*

Lack of confidence in government support during crisis: "I am telling you, …, they come, write down the problems, and then everyone disappears... They only deliver to their own people. And the poor people are left just like that.": *Widow, Uttarakhand, Uttarkashi, Matali block.*

Distrust on agency support during crisis: "No organization, no help, no one helps. If we die of hunger, so be it, no matter what happens. No one comes to ask about us". *Widow, Madhya Pradesh, Ratlam, Rawti block.*

Desire for External Help: "It is so difficult for us even to have a meal. We have problems in every way in life. Someone should help us, whether it's from the government, the Panchayat, or some organizations will be there to help." - *Widow, Karnataka, Yadgir, Balichakkar block.*

Family Exploitation Post-Disaster: "My house was in front of Gautam Park, a three-story house, that also went away. ...The money received for him was all grabbed by my brother-in-law's son. He didn't give anything to my children. ...The house that was

built, even that was grabbed by my husband's elder brother's son." - *Widow, Uttrakhand, Uttrakashi, Ladari*

Integrating with the Quantitative Findings

The quantitative and qualitative findings together demonstrate that **family remains the primary pillar of support and resilience for older persons**, but the strength and quality of this support varies considerably across different groups. Survey findings show that spouses (35%), sons (31%) and daughters-in-law (11%) form the core support network for most older persons, with nearly four in five interacting with family members daily. Qualitative narratives provide important context to these findings by revealing the nature of these relationships. For many active older persons, family support operates through a system of reciprocal interdependence, where older persons continue contributing through childcare, household work, farming and caregiving while receiving emotional and practical support in return. However, these support systems are increasingly strained by youth migration, changing family structures and economic pressures, which often force older persons to assume greater responsibilities despite advancing age. The qualitative accounts also highlight that support remains highly dependent on the presence of co-residing children, particularly sons and daughters-in-law, confirming the centrality of the family in shaping resilience and well-being.

Both data sources further reveal that **physical proximity does not necessarily translate into meaningful inclusion or emotional connectedness**. Quantitatively, most older persons report being heard (mean score 3.50) and included in family decisions (3.22), yet loneliness remains a significant concern, with 12% reporting feeling lonely often or always. Qualitative findings help explain this apparent contradiction. Older persons frequently described feeling emotionally isolated despite living with family members, citing changing social values, reduced intergenerational communication, the growing influence of digital technologies and the erosion of traditional respect for elders. Many reported that conversations had become increasingly transactional, often centred on finances, pensions or household needs rather than emotional engagement. The findings suggest that while family members may continue to provide care and physical assistance, older persons often feel excluded from decision-making, knowledge-sharing and meaningful social interaction. This pattern is particularly evident among older persons with cognitive, communicative and sensory impairments, who report high levels of daily family interaction yet continue to experience elevated levels of loneliness and social exclusion.

The integrated findings also highlight the importance of an **intersectional understanding of social connectedness**, with widows, persons with impairments, the oldest-old and those living alone emerging as the groups facing the greatest social risks. Quantitative results consistently show lower levels of family interaction, inclusion, respect, emergency support and community participation among these groups. The qualitative evidence illustrates how these disadvantages accumulate in everyday life. Widows frequently described living alone, relying on neighbours rather than family members, feeling unheard within households and struggling with profound loneliness following the loss of a spouse. Older persons with impairments reported dependence, neglect, reduced mobility and a sense of becoming invisible within both family and community settings. Across both groups, climate-related shocks, health crises and economic hardship further intensified existing risk factors. Together, the findings demonstrate that social resilience is shaped not only by the presence of family members but also by the quality of relationships, community engagement and access to support networks. Strengthening resilience therefore requires moving beyond caregiving alone towards interventions that promote social inclusion, community participation, emotional well-being and targeted support for older persons facing multiple and overlapping risk factors.

13.6 Government schemes, Policy, Service delivery, and Inclusion gaps

Cohort: Senior citizen (60-80+)

Awareness of Schemes and Services

Awareness of social protection schemes among senior citizens was generally low across states, particularly among older women, the oldest-old (80+), and those living in remote rural areas. Most participants were familiar only with old-age pensions and ration benefits, while knowledge of schemes such as IGNOAPS, Atal Pension Yojana, Ayushman Bharat, Annapurna, housing schemes, and legal protections for older persons was limited or absent. Information dissemination mechanisms were weak, with participants repeatedly stating that government officials, Panchayats, frontline workers, and service providers rarely informed them about available entitlements. Awareness often depended on informal networks and local intermediaries.

Awareness limited to pension and ration: "All we know is... just pension and ration. That's all... broadly we don't know anything (else)." — Male, Andhra Pradesh, Krishna, Bapulapadu blaock, 60–69

First-time hearing about schemes: " There is no one to even tell you about the schemes, like which schemes are available for the older persons in the village, no one

like that? ...Today is the first day we are hearing all this." — Male, Bihar, Madhubani, Madhepur, 60–69

No awareness beyond basic benefits: "We don't know anything at all (IGNOAPS)... We don't know anything about Atal Pension Yojana... We didn't know until you told us." — Male, Andhra Pradesh, Krishna, Bapulapadu, 60–69

Distance and remoteness limit information: "Many government schemes exist, but we might not be aware of them... many villages are remote, so services might not reach there." — Female, Gujarat, Rajkot, Derdi, 60–69

Confusion about government pension schemes: " No, no pension. Why would we labourers get a pension? What pension do we get? Government pension?" — Female, Maharashtra, Yavatmal, Kalgaon,60–69

Survival leaves no space for information-seeking: "What do we know about schemes? We are barely surviving; what else should we know?,,, If someone tells us, then we would know. We don't know." — Female, Andhra Pradesh, Anantapur, Narpal 80+

Lack of Government/Panchayat Support: "It is our own struggle, we do it ourselves, no one comes... even if we go to ask for help from the Panchayat, they say there is no budget, no this, and no that. So, no one asks about us." - Male, Karnataka, Yadgir, Gogikona 80+

Inadequacy of Pension: "The pension is too low…no …, one has to manage according to calculations, right? In today's times, no one can manage with Rs.1500." — Male, Uttarakhand, Rudraprayag, Rautara block 80+

Access Dynamics and Navigational Barriers

Access to welfare schemes was highly uneven. While some participants reported receiving pensions regularly and even at their doorstep, many others described delays, exclusion, cancelled benefits, or long waiting periods. Pension schemes were the most accessed benefit, followed by PDS rations. However, participants frequently reported that benefits were irregular, inadequate, or never received despite eligibility. Administrative delays, exclusion errors, and local-level discretion significantly affected continuity of benefits.

Doorstep pension delivery works well: "They deposit it exactly on the first. They even give it right at our doorstep." — Male, Andhra Pradesh, Krishna, Bapulapadu, 60–69

Bureaucracy and Older persons Access to Services: " If some older person goes there on their own saying, … please set up my pension,' then if their pension isn't set up, they are made to run around in circles. They are told to go to one person, then

another, and then told it will be done online later." — Male, Uttarakhand, Uttarkashi, Dunda, 60-69

Lack of older person care facilities and healthcare access:

"There is nothing like that. There are no facilities with us. We need a hospital, check-ups, all these things should be done. ... But doctors don't come here at all. No one comes" — Female, Maharashtra, Yavatmal, Kalgaon, 60–69

"There's no such facility. Even the hospital that was here has been removed and shifted further to Devargaddi." – Male, Keralam, Kollam, Kovoor, 70-79

Housing benefit never received: "I have filled the form for the housing scheme twice, but the money hasn't been deposited yet." — Participant, Madhya Pradesh, Ratlam, Birmawal, 70–79

Monthly delays: "We don't even receive our pensions properly. There is some delay one or the other every month." — Female, Andhra Pradesh, Anantapur, Atmakur, 70–79

Pension received regularly: " … gives money properly every month. We adjust our expenses with that." — Female, Karnataka, Kolar, Kamasamudra,, 70-79

Lack of Dedicated Older Persons Healthcare Programs: " The health center is there, but no program runs in the village. No separate program for the older persons? No, it doesn't run. ... There is no traditional doctor at all, so from whom will we take advice?" — Male, Uttarakhand, Rudraprayag, Rautara, 80+

High Satisfaction with Piped Water: "Now we have household taps. Under the Jal Jeevan scheme, they have provided pipes inside the house now. ... No, it is very clean. ... After drinking this water, we don't like drinking water from anywhere else" — Male, Tamil Nadu, Ramanathapuram, Kadaladi, 80+

Benefit implementation gap: " if we get even a little benefit from this (any scheme), we will consider it a lot…But If you implement it, then we will benefit." — Male, Bihar, Sitamarhi, Bhutahi, 80+

Older persons relied heavily on a combination of cash transfers and in-kind support, but both were widely perceived as insufficient. Pensions were valued because they provided flexibility to purchase food, medicines, and daily necessities. However, participants consistently reported that pension amounts did not cover rising costs, particularly healthcare expenses. In-kind assistance through ration schemes remained important, yet many participants reported reduced quantities, leakages, poor quality, or exclusion from food-related schemes such as Annapurna.

Leakages in ration distribution: "Even when we go to get rations, the dealer cuts one kilogram and gives only four kilograms." — Male, Bihar, Madhubani, Madhepur, 60–69

Cash support provides autonomy: "I keep it myself. I buy tea, snacks, sugar, everything with that." — Female, Odisha, Gajapati, Narayanpur, 60–69

Healthcare Access & Transportation: " A vehicle is needed, a vehicle. By the time we go in this auto... In old age, it is even difficult to sit in that auto." — Female, Maharashtra, Yavatmal, Kalgaon, 60–69

Preference for Cash benefit: " According to the current times, if every person receives the individual assistance that they should get... So, anyone can go and take it from anywhere with their self-respect. " — Male, Gujarat, Rajkot, Kuwadva, 70-79

Pension used mainly for food, insufficient for medicines: "They give these Rs 4000. We buy rice with that… If we buy rice and groceries, nothing is left for medicines." — Female, Andhra Pradesh, Anantapur, Atmakur, 70–79

Food and medicine trade-off: "Nothing remains for expenses. Then, how about buying medicines? We have to take loans again." — Female, Andhra Pradesh, Anantapur, Narpala 80+

Pension is the only support: "With that money I buy BP medicine. The pension is the only support." — Male, Bihar, Sitamarhi, Bhutahi, 80+

Annapurna benefit not received: "In the Annapurna scheme... they don't give It. (free grain) We are not getting it." — Female, Gujarat, The Dangs, Aahwa, 80+

Reduced welfare basket: "Previously, they gave sugar, wheat and kerosene. Now everything is only rice and allowance." — Female, Odisha, Bolangir, Agalpur, 80+

Navigating welfare systems was difficult for many older persons due to bureaucratic complexity, documentation issues, lack of assistance, long queues, and poor grievance redressal. Participants described repeated visits to government offices, confusion regarding eligibility requirements, Aadhaar-related discrepancies, and difficulties understanding administrative procedures. Many depended on intermediaries, local leaders, or informal contacts to complete applications or resolve problems.

Aadhaar documentation error: "It is 62, but it was wrongly recorded as 60 in the Aadhaar card." — Male, Andhra Pradesh, Krishna, Bapulapadu, 60–69

Officials provide no guidance: "No one in the staff there gave even a single answer." — Male, Bihar, Madhubani, Madhepur, 60–69

Authentication Issue: "If the thumbprint doesn't match, then they don't even give ration….. Neither pension nor extra ration" Female, Maharashtra, Yavatmal, Kalgaon, 60-69

Need for intermediaries: " A man next to my house works in the MRO office. He knows the entire chart and all the details... He is very friendly with us and informs us about everything... If we just make one phone call, he gets it done." — Male, Bihar, Madhubani, Madhepur, , 60–69

Information vacuum: "There is no one to tell us there, and no one to listen here." — Male, Andhra Pradesh, Krishna, Bapulapadu, 60–69

Language barriers matter: "If it's in Telugu, it will be understood. If it's anything other than Telugu, it won't be understood." — Female, Andhra Pradesh, Anantapur, Atmakur, 70–79

Challenges in Healthcare Access: " To go there, we have to go on foot. 8 kilometers. A person might fall sick just by making the trip." — Male, Madhya Pradesh, Ratlam, Birmawal, 70–79

Perception of Government Hospitals vis-à-vis Private Healthcare: " Not many people go to the government hospital, there are many patients there…. We go to private ones; we get treated there" — Female, Maharashtra, Nandurbar, 70–79

Long hospital queues discourage use: "We don't even go to the government hospital, there's such a long queue." — Female, Gujarat, The Dangs, Aahwa, 80+

Documents are not enough: "We have all the relevant papers, but the scheme benefit hasn't reached us." — Male, Madhya Pradesh, Ratlam 70–79

Repeated effort required: "How much we ran and ran, went from here to there. Only then I got the allowance." — Female, Odisha, Bolangir 80+

The greatest barriers to welfare access were linked to age-related frailty, impairment, widowhood, isolation, poverty, mobility limitations, and social marginalization. Older women, widows, persons living alone, and the oldest-old faced compounded disadvantages. Many were physically unable to travel to offices, lacked family support, or depended on others for information, transportation, and paperwork. Poverty and social exclusion further reduce their ability to claim entitlements.

Impairment and isolation: "I have poor vision and poor hearing and need assistance to move around" — Female, Gujarat, Rajkot, Derdi block, 60–69

Widow-headed household: "Only grandmother and granddaughter live together. There is no man in the house who can travel with us" — Female, Gujarat, Rajkot, Derdi block , 60–69

Document-related exclusion: "Some people are unable to get all the relevant documents." — Female, Uttarakhand, Rudraprayag, Jhakholi, 70–79

Living alone in old age: "My husband has passed away; I live alone. There are no children or anyone else. No one is there." — Female, Andhra Pradesh, Anantapur, Narpala, 80+

Poor people are ignored: "We are poor people, ... Nobody listens to us. The influential people will speak up and they will give it to them." — Female, Odisha, Bolangir, Agalpur, 80+

Perceived Adequacy of Government Schemes and Services

Across states, senior citizens overwhelmingly perceived existing government schemes as inadequate in meeting their day-to-day needs. While pensions and ration benefits were appreciated, participants consistently reported that the amount received was insufficient to cover basic expenses, especially food, healthcare, medicines, housing repairs, and caregiving needs. Many older persons viewed government support as symbolic rather than transformative, arguing that inflation and increasing health expenditures had eroded the value of benefits. Participants also emphasized that welfare schemes rarely address the realities of advanced age, impairment, widowhood, or chronic illness, leaving many older persons dependent on family members, loans, or continued work despite declining physical capacity.

Benefits disappear into daily expenses: "As soon as the money comes, it is spent on groceries and necessities." — Female, Odisha, Gajapati, Narayanpur, 60–69

Housing needs remain unmet: "We have applied many times, but we still do not have a proper house." — Participant, Madhya Pradesh, Ratlam, Birmawal, 70–79

Need greater support in old age: "At this age we need more support on all aspects such as for mobility, undertaking daily chores, applying for government schmes." — Male, Gujarat, Rajkot, Kuwadva, 70–79

Support is only partial relief: "It helps a little, but it cannot solve our problems the loss is much more." — Female, Uttarakhand, Rudraprayag, Jhakholi, 70–79

Pension too small for survival: "What can be done with Rs.4,000? It is not enough for medicines, food and household expenses." — Female, Andhra Pradesh, Anantapur, Atmakur, 70–79

Healthcare costs exceed support: "The pension comes, but medicines themselves cost more than that." — Female, Andhra Pradesh, Anantapur, Narpala, 80+

Schemes exist but are not sufficient: "The government is giving something, but it is not enough for old people." — Female, Gujarat, The Dangs, Aahwa, 80+

Dependence continues despite benefits: "Even after receiving pension, we still depend on our children." — Male, Bihar, Sitamarhi, Bhutahi, 80+

Rice alone cannot sustain life: "Only rice is given. How can a family survive on that?" — Female, Odisha, Bolangir, Agalpur, 80+

Government Helpline Efficacy & Delays: "My pension was stopped from Raghogarh, here, then I called and then it was restarted from home, but my pension remained stopped for six months. ...Yes, work does get done through the CM helpline 181 number." Male, Madhya Pradesh, Guna, Awan, 60-69

Inadequacy of pension for healthcare: "I have had heart surgery; I am getting Rs. 1,000 rupees as an allowance. A thousand rupees is not enough for heart surgery medicines and everything. And if the sons don't give money, how will I survive?" — Female, Odisha, Gajapati, Narayanpur, Female, 60-69

Critical Service Gaps and Systemic Exclusion

Participants identified substantial gaps in healthcare, transportation, social care, information dissemination, housing support, and older person-specific services. Healthcare emerged as the most frequently cited gap, particularly the absence of accessible geriatric care, affordable medicines, specialist services, and transportation to hospitals. Participants also highlighted the lack of old-age homes, day-care facilities, home-based care, and dedicated support systems for isolated older persons. Weak local administration, poor outreach, and inadequate grievance mechanisms further contributed to service deficits.

Need doorstep medical services: "Doctors should come to the villages because old people cannot travel." — Male, Bihar, Madhubani, Madhepur, 60–69

Need emergency transportation: "There should be vehicles available for older people during emergencies." — Male, Gujarat, Rajkot, Derdi, 60–69

Poor grievance redressal: "We submit applications, but there is no response." — Female, Andhra Pradesh, Anantapur, Atmakur, 70–79

Housing remains a major gap: "Many people still do not have proper houses despite applying." — Male, Madhya Pradesh, Ratlam, Birmawal, 70–79

No social support structures: "Old people are left alone after a certain age." — Female, Uttarakhand, Rudraprayag, Jhakholi, 70–79

Lack of information systems and need for older person care facilities: "Nobody comes and tells us about schemes or services There should be old-age homes where older

people can stay and receive care." — Female, Andhra Pradesh, Anantapur, Narpala, 80+

Healthcare inaccessible: "The hospital is far away and we cannot travel regularly." — Female, Gujarat, The Dangs, Aahwa, 80+

Medicine shortages: "When we go to the hospital, medicines are often unavailable." — Female, Odisha, Bolangir, Agalpur, 80+

Exploitation in Job Card Schemes: "They give two hundred rupees to the Job Card holder and pocket all the rest of the money themselves. This is what they do in every village council." Male, Madhya Pradesh, Guna, Awan, 60-69

Demand for Dedicated Older persons Care: "(Should similar care be taken for older persons as well?) It definitely should be. That's what we are waiting for. Now the older persons fall sick. ... It is needed." Female, Maharashtra, Yavatmal, Kalgaon, 60-69

Need for Adequate Food Rations and Sanitation facilities: "We are two people, mother and daughter, …., we get ten kilograms, …, is that enough for our stomachs? ... It would be enough if there are thirty kilograms for two people… A latrine should also be made. ... " — Female, Odisha, Gajapati, Narayanpur, 60-69

Exclusion from government support was attributed to administrative barriers, documentation problems, eligibility restrictions, lack of awareness, and local-level discretion. Many participants reported being left out despite meeting eligibility criteria. Errors in Aadhaar records, age verification, pension databases, and beneficiary lists frequently prevented access. Participants also perceived that politically connected or influential individuals were more likely to receive benefits, while poor, isolated, and less educated older persons struggled to secure entitlements.

Aadhaar mismatch problem: "My age was recorded incorrectly, and because of that I could not receive the benefit." — Male, Andhra Pradesh, Krishna, Bapulapadu, 60–69

Older Person At Risk & Scheme Exclusion: "(attributed to bureaucratic hassles) problems must start coming after a certain age, whether it is food, you might not be getting a nutritious diet in your meals, or your name might not be appearing in any schemes." — Female, Madhya Pradesh, Guna, Awan, 80+

Remote villages left behind: "People in distant villages often do not receive services." — Female, Gujarat, Rajkot, Derdi, 60–69

Applications remain pending: "We applied years ago but nothing happened." — Male, Gujarat, Rajkot, Kuwadva, 70–79

Technology-related exclusion: "Many older people cannot handle online procedures." — Female, Uttarakhand, Rudraprayag, Jhakholi, 70–79

Poverty compounds exclusion: "Poor people keep going around offices but still receive nothing." — Female, Andhra Pradesh, Anantapur, Atmakur, 70–79

Administrative neglect and Influence determines access: "Nobody checks whether old people have received their benefits or not …… Benefits go to those who have influence " — Female, Odisha, Bolangir, Agalpur, 80+

Excluded despite eligibility: "Everyone else got the benefit, but I did not." — Female, Andhra Pradesh, Anantapur, Narpala, 80+

Documentation barrier: "The papers are not complete, so the benefit is stopped." — Male, Bihar, Sitamarhi, Bhutahi, 80+

Lack of Legal Recourse and Illiteracy: " We are illiterate, who should we complain to? In response to a complaint, they might turn us blind or give us some punishment. We are uneducated; who has the money, who would file a complaint?" Male, Madhya Pradesh, Guna, Awan, 60-69

Inclusiveness of Disaster Relief Systems

Perceptions of disaster relief inclusiveness were mixed. While some participants acknowledged receiving food, compensation, or emergency assistance during floods, droughts, cyclones, and extreme weather events, many felt that older persons were not specifically prioritized. Relief systems were generally viewed as household-focused rather than age-sensitive. Older persons participants noted that physical limitations, mobility constraints, lack of transport, and weak communication systems often prevented them from accessing relief. Many argued that the oldest-old, widows, persons with impairments, and those living alone require dedicated support during disasters.

No special provisions for older person: "Everyone stands in the same line; there is no separate arrangement for old people." — Male, Bihar, Madhubani, Madhepur, 60–69

Relief reaches some households: "The government provided assistance after the disaster." — Male, Gujarat, Rajkot, Derdi, 60–69

Information does not reach everyone: "Sometimes we do not even know what help is available." — Female, Gujarat, Rajkot, Derdi, 60–69

Need priority support: "Older persons should receive assistance first because they are more at risk." — Male, Uttarakhand, Rudraprayag, Jhakholi, 70–79

Impairment worsens exclusion: "Those who cannot see or walk are left behind….. How can we go and collect relief when we cannot walk?" — Female, Andhra Pradesh, Anantapur, Atmakur, 70–79

Need doorstep relief: "Relief should be delivered to old people at home." — Female, Odisha, Bolangir, Agalpur, 80+

Old people forgotten during emergencies: "During disasters everyone thinks about themselves first." — Female, Gujarat, The Dangs, Aahwa, 80+

Dependence on family during disasters: "Without our children, we cannot move anywhere." — Female, Andhra Pradesh, Anantapur, Narpala, 80+

Physical weakness affects relief access: "Young people can run and collect things; we cannot." — Male, Bihar, Sitamarhi, Bhutahi, 80+

Participants linked vulnerability (being at risk) primarily to old age, declining health, poverty, physical immobility, social isolation, widowhood, and dependence on others. During climatic events such as floods, droughts, heatwaves, and storms, older persons felt particularly at risk because they lacked the physical strength, mobility, financial resources, and social support required to respond effectively. Participants also perceived biases in relief distribution, suggesting that politically connected households, younger people, and influential community members often received assistance sooner than isolated older persons.

Remote location creates risk: "Villages far away are often neglected." — Female, Gujarat, Rajkot, Derdi, 60–69

Lack of voice in decision-making: "Nobody asks old people what they need." — Male, Andhra Pradesh, Krishna, Bapulapadu, 60–69

Health conditions worsen disaster impacts: "We already have diseases; disasters make things worse." — Male, Gujarat, Rajkot, Kuwadva, 70–79

Impairment creates multiple barriers: "People who cannot walk or hear face the most difficulties." — Female, Uttarakhand, Rudraprayag, Jhakholi, 70–79

Influential people receive support first: "Those who have contacts get assistance earlier." — Female, Odisha, Bolangir, Agalpur, 80+

Physical weakness increases risk: "At this age we cannot run, carry things, or protect ourselves." — Male, Bihar, Sitamarhi, Bhutahi, 80+

Poverty amplifies risk: "If we had money, many problems could be solved." — Female, Odisha, Bolangir, Agalpur, 80+

Dependence on others: "We depend on others for everything now." — Female, Gujarat, The Dangs, Aahwa, 80+

Living alone increases being at risk: "There is no one to help when something happens." — Female, Andhra Pradesh, Anantapur, Narpala, 80+

Demographic Analysis

Findings Segmented by Gender

Females (60–80+)

Healthcare and Daily Survival

- **Financial strain:** Pensions are highly critical but widely insufficient for food, medicines, and daily survival.
- **Care needs:** High demand exists for older person care facilities, home-based care, and better overall healthcare access.
- **Physical limitations:** Greater vulnerability is caused by mobility, hearing, vision, and general physical limitations.

Information and Administration Barriers

- **Low awareness:** Knowledge of welfare schemes is limited mostly to basic pensions and ration entitlements.
- **Information dependence:** High reliance on others is required to get information about available services.
- **Systemic exclusion:** Administrative engagement is weak, with frequent experiences of being overlooked by Panchayats and local officials.
- **Perceived bias:** Welfare distribution is often seen as biased toward influential households.

Social Isolation and Vulnerability

- **Widowhood and loneliness:** Living alone as a widow frequently leads to extreme exclusion, isolation, and a total lack of family support.
- **Emotional distress:** Deep emotional vulnerability is closely linked to poverty, impairment, and heavy caregiving burdens.

Infrastructure and Safety

- **Housing deficits:** Unmet housing needs remain a major, frequently highlighted challenge.
- **Emergency safety:** High anxiety exists regarding personal safety and receiving adequate support during natural disasters.

Males (60–80+, Intact Capacity / Caregivers)

Governance and Administrative Failures

- **Systemic challenges:** Frequent complaints focus on institutional leakages, political influence.
- **Bureaucratic barriers:** Major obstacles include complex documentation requirements, strict eligibility criteria, and administrative inefficiencies.
- **Systemic Bias:** Scheme distribution is highly prone to community-level inequities and bias toward influential groups.
- **Advocacy focus:** Strong emphasis is placed on demanding policy reforms and better service delivery mechanisms.

Financial and Livelihood Pressures

- **Economic insecurity:** Rising costs, livelihood loss, and vulnerable agricultural conditions create massive financial strain in old age.
- **Pension inadequacy:** Existing pension amounts fail to keep pace with high inflation and rising living costs.
- **Systemic frustration:** Intense frustration exists regarding delayed or inefficient pension, housing, and healthcare reimbursement systems.

System Navigation and Awareness

- **Information gap:** Awareness of formal schemes is slightly higher, but actual access remains severely limited.
- **Intermediary reliance:** System navigation depends heavily on informal middle-men and personal local contacts.

Infrastructure and Emergency Gaps

- **Structural deficits:** Public healthcare infrastructure and rural transportation systems are severely lacking.
- **Disaster neglect:** Safety systems completely lack age-sensitive planning or support during natural disasters.

Findings Segmented by Age Group

Younger Old (60–69)

System Navigation and Proactive Awareness

- Information seeking: Individuals actively seek out welfare data and push back by questioning strict eligibility criteria.
- Process literacy: High awareness exists regarding necessary documentation requirements and step-by-step application processes.

- Systemic engagement: Active efforts are made to interface directly with local leaders, administrative offices, and Panchayat systems.

Governance Critique and Administrative Barriers

- Bureaucratic delays: Minor structural issues like pending applications, administrative friction, and Aadhaar card mismatches cause major delays.
- Documentation exclusion: Strict paperwork requirements and rigid implementation shortcomings directly cause systemic exclusion.
- System critique: Communities are highly critical of current local governance failures and flawed service delivery mechanisms.

Financial and Livelihood Pressures

- Economic vulnerability: Household welfare needs are heavily shaped by ongoing income insecurity, agricultural livelihoods, and inflation.
- Compounding expenses: Daily financial survival is further strained by continuous household responsibilities and high healthcare expenditures.

Mid Old (70–79)

Service Access and Infrastructure Barriers

- Mobility constraints: Declining physical capacity creates major mobility-related barriers and severe challenges in physically reaching distant services.
- Structural gaps: Public transportation networks, healthcare access points, and baseline service delivery systems remain heavily inadequate.

Systemic Delays and Institutional Friction

- Benefit backlog: Significant anxiety and frustration surround pending welfare applications and delayed benefit transfers.
- Weak administrative outreach: Local governments suffer from passive outreach mechanisms, causing high friction and fragmented communication.

Inadequacy of Benefits

- Insufficient safety nets: Current welfare schemes fail to adjust for expanding, complex age-related needs.
- Compounding medical costs: Existing pensions are perceived as highly inadequate when faced with rising, continuous healthcare expenditures.

Awareness and Dependency

- Basic literacy: Knowledge of available social safety nets remains strictly limited to primary pensions and direct ration benefits.
- Increasing dependency: Growing physical constraints directly accelerate a deep reliance on public welfare programs and immediate family members.

Oldest Old (80+)

Extreme Social and Physical Vulnerability

- High dependency: Severe physical frailty, chronic illness, and impairments cause extreme reliance on pensions, family, or neighbours for basic survival.
- Severe isolation: This group experiences the highest rates of widowhood, living alone, and profound social isolation.
- Mobility barriers: Profound physical limitations—specifically regarding mobility, hearing, and vision—make travelling to distant services nearly impossible.

Systemic Exclusion and Institutional Neglect

- Information deficit: This segment possesses the absolute lowest awareness of available government schemes and entitlements.
- High exclusion risk: Despite having the highest objective level of need, they face the greatest risk of being entirely excluded from welfare programs.
- Systemic oversight: There is a strong perception of being overlooked and ignored by both daily welfare networks and emergency response systems.

Emergency and Climate Risks

- Climate vulnerability: Frailty and isolation drastically compound personal risk during climatic shocks and environmental disasters.
- Inadequate relief: Existing disaster relief infrastructure and baseline welfare systems are viewed as completely inadequate for keeping this group safe.

Community Needs and Psychological Outlook

- Desire for doorstep care: A critical, urgent need exists for localized doorstep services, home-based support, and specialized older person care facilities.
- Emotional resignation: Pervasive institutional neglect has fostered deep-seated feelings of helplessness, vulnerability, and resignation.

Cohort: Impaired Senior citizen (60-80+)

Awareness of Schemes and Services

Awareness of government schemes among persons living with impairments was generally low and fragmented. Most participants were aware only of impairment pensions, ration benefits, or a few locally visible programmes. Awareness of health insurance schemes, pension programmes, impairment entitlements, and social protection measures was often limited or absent. Several participants explicitly stated that they did not know about available schemes, while others reported hearing about schemes that were either unavailable in their area or never explained to them. Lack of information dissemination, poor outreach by local authorities, low literacy, and limited access to media emerged as major barriers to awareness.

No Knowledge Beyond Basic Benefits: "No ..... we don't know anything... [Atal Pension Yojana card] ... It hasn't come, ... Aarogyasri card? ... It hasn't come, it hasn't come... [Ayushman card]." — Female with impairment, Andhra Pradesh, Anantapur, Pudair

Awareness Gap as Root Cause for Not Able to Access Government schemes: "They say that the reason for this is the lack of awareness." — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Limited Access to Information Channels: "No one has access to this through television or a TV, and without knowing about all that..." — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Schemes Exist Only on Paper: "(About government schemes)… Everything you're saying is right, but it's not here." — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Dependence on Local Leaders for Information: "The Ward members do. They take them and explain how to do it to get it." — Male with impairment, Tamil Nadu, Ramanathapuram, Kadaladi

Skepticism Towards Government Promises: "If some help is provided by the government, then only will writing all this be worthwhile." — Female with impairment, Odisha, Gajpati, Chandiput

No NGO Presence or Awareness: "There are no NGOs in our village, there is no one to ask." — Male with impairment, Karnataka, Kolar, Budikote

Reliance on Informal Information Networks: "He has solved it for everyone, explained it to everyone." — Male with impairment, Bihar, Madhubani, Madhepur

Access Dynamics and Navigational Barriers

Access to impairment-related welfare schemes was inconsistent and highly uneven across locations. While some participants received impairment pensions, ration benefits, and healthcare support, many others reported pension delays, non-receipt

of benefits, exclusion from housing schemes, and inability to access health insurance programmes. Benefit continuity was a recurring challenge, with participants describing interruptions in pension payments and difficulties securing entitlements despite repeated applications. Ration benefits emerged as the most consistently accessed form of support, whereas pensions and specialized impairment schemes were frequently delayed or inaccessible.

Receiving Impairment Pension: "I get Rs.6000, ... [Impairment pension]." — Female with impairment, Andhra Pradesh, Anantapur, Pudair

Pension as Lifeline: "I get the pension and the rice, so I'm surviving on that." — Female with impairment, Odisha, Gajpati, Chandiput

Pension Delayed for Months: "The allowance hasn't come for two months. It's very difficult to manage." — Female with impairment, Odisha, Gajpati, Chandiput

Stopped Pension Payments: "That Rs 1500 was coming, but that too stopped six months ago." — Male with impairment, Maharashtra, Nandurbar, Sarangkheda

No Pension Access: "No one has received a pension yet at this age." — Male with impairment, Madhya Pradesh, Ratlam, Birmawal

Repeated Pension Demands: "Our pension should start... If the pension starts, then we can even go and buy medicine." — Male with impairment, Madhya Pradesh, Ratlam, Birmawal

Regular Ration Access: "We go to the ration shop every month. We get everything we need from there." — Female with impairment, Keralam, Wayanad, Meppadi

Housing Scheme Exclusion: "The housing scheme... we don't have a house from the scheme either!" — Male with impairment, Maharashtra, Nandurbar, Sarangkheda

No Welfare Benefits Received: "Nothing, nothing, we don't get it." — Male with impairment, Maharashtra, Nandurbar, Sarangkheda

Benefit Quantity Reduced: "We get five kilos. We don't get ten kilos." — Male with impairment, Madhya Pradesh, Ratlam, Birmawal, block.

Participants consistently reported that both cash and in-kind support were essential but insufficient. Pensions were highly valued because they provided flexibility for medicines, food, and daily expenses, yet most participants considered pension amounts inadequate. Ration benefits played a critical role in preventing food insecurity, especially among those living alone. However, participants repeatedly noted that cash transfers were too small to meet healthcare costs and that food assistance alone could not address broader needs such as medicines, housing,

nutrition, and impairment-related expenses. Many advocated for a combination of increased pensions, food support, and medical assistance.

Pension Doesn't Cover Medicines: "What expenses will be covered in 1100... it doesn't even cover medicine." — Female with impairment, Bihar, Sitamarhi, Parihar Kanhwa, block

Pension Insufficient for Survival: "I can't manage with just the pension, ..." — Female with impairment, Odisha, Gajpati, Chandiput

Food and Cash Together Matter: "I get some rice, some money, I manage with that." — Female with impairment, Odisha, Gajpati, Chandiput

Ration as Core Support: "(Ration Scheme) Five kilograms come, ..." — Female with impairment, Andhra Pradesh, Anantapur, Pudair

Cash Support Too Low: "From these thousand rupees we get, nothing is happening, ..." — Female with impairment, Odisha, Gajpati, Chandiput

Need Nutritious Food: "The doctor says to eat milk and curd, but with 1100-1200, where will milk and curd come from?" — Female with impairment, Bihar, Sitamarhi, Parihar Kanhwa

Food Security Through PDS: "We get rice, wheat, and such items from the ration shop." — Female with impairment, Keralam, Wayanad, Meppadi

Direct Cash and Goods Preferred: "If they give us some money, we will use it... Or if they provide food items..." — Female with impairment, Odisha, Gajpati, Chandiput

Allowance Cannot Support Families: "The whole family has to be run with that." — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Need Medicines Alongside Welfare: "Help should be provided by the government …Provide food and drink... and bring medicines." — Female with impairment, Odisha, Gajpati, Chandiput

Persons with impairments faced significant administrative and procedural barriers while accessing welfare schemes. Physical impairments, difficulties travelling to offices, documentation requirements, biometric authentication failures, repeated visits to government offices, and disrespectful treatment by officials were commonly reported. Participants described feeling ignored, humiliated, and discouraged when attempting to claim benefits. Limited literacy, weak local support systems, and dependence on others further complicated navigation of welfare systems

Biometric Authentication Failure and Repeated Office Visits Without Results: "The fingerprint wasn't working. Neither of us got the Ayushman card made. I've done

everything but nothing happens." — Male with impairment, Maharashtra, Nandurbar, Sarangkheda

Pension Delays and Bureaucracy: "We are going to the office... They say something like this or that." — Male with impairment, Karnataka, Kolar, Budikote

Dismissive Officials and Lack of Respect for Older Person: " No one looks after us in this village … Even if we go to ask for help, or go to the MRO office, they say, 'Why have you come? Go away…. they don't even give five hundred rupees or a handful of rice. They don't care at the Panchayat office " — Female with impairment, Andhra Pradesh, Anantapur, Pudair

Mistreatment During Service Access: " if they say 'move on, mother, move on', then next time we won't even come, go away, they say, when we keep asking." — Female with impairment, Karnataka, Kolar, Budikote

Authorities Ignore Us: "They don't pay any attention to us!" — Male with impairment, Maharashtra, Nandurbar, Sarangkheda

Lack of Local Facilitation: "No one helps us. Not in the Panchayat, not the organizations." — Male with impairment, Karnataka, Kolar, Budikote

Mobility Burden in Accessing Services: "We have no choice but to walk... We go by holding a stick." — Female with impairment, Andhra Pradesh, Anantapur, Pudair

Disrespectful Treatment by Officials: " (government official) he wonders where to throw us or send us, if he sees donkeys like us wandering around... 'Hey, get out!' That's how they act!" — Male with impairment, Maharashtra, Nandurbar, Sarangkheda

Impairment itself was a major driver of exclusion from welfare services. Physical immobility, visual impairment, chronic illness, dependence on caregivers, social isolation, poverty, and lack of assistive devices significantly reduced participants' ability to access schemes and services. Participants living alone or without family support were especially at risk. Climate-related stresses, poor transport infrastructure, and healthcare inaccessibility further compounded exclusion. Many participants described a cycle in which impairment reduced income opportunities, increased dependence, and weakened their ability to pursue welfare entitlements.

Walking With Extreme Difficulty: "I drag myself along on the mats, ..." — Female with impairment, Andhra Pradesh, Anantapur, Pudair

Living Alone Without Support: "Now, I need help, but there is no one." — Female with impairment, Keralam, Wayanad, Meppadi

Dependence Due to Vision Loss: "Now I have become dependent on others." — Male with impairment, Madhya Pradesh, Ratlam, Birmawal

Need Assistance for Basic Survival: "Your life cannot go on without assistance." — Female with impairment, Bihar, Sitamarhi, Parihar Kanhwa

Unable to Access Healthcare: "We are helpless, how will we go?" — Female with impairment, Bihar, Sitamarhi, Parihar Kanhwa

No Assistive Devices Available: "No, there is nothing like buying a wheelchair." — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Physical Impairment Restricts Livelihood: "I cannot walk anymore, what else can I do?" — Female with impairment, Odisha, Gajpati, Chandiput

Social Isolation: "No children. I'm alone." — Male with impairment, Karnataka, Kolar, Budikote

Age and Impairment Combined: "After 60 years of age, they won't hire us for a job." — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Lack of Caregiving Support: "No one helps us, ... Neither sons nor daughters-in-law." — Female with impairment, Andhra Pradesh, Anantapur, Pudair

Perceived Adequacy of Government Schemes and Services

Persons with impairments consistently perceived government schemes as inadequate relative to their needs. While impairment pensions, ration benefits, and occasional healthcare support were appreciated, participants repeatedly emphasized that the value of benefits was insufficient to meet expenditures on medicines, nutrition, mobility support, caregiving, and daily living. Many participants felt that schemes were poorly implemented, irregularly delivered, or inaccessible due to administrative barriers. The inadequacy was particularly pronounced among individuals with severe impairments, chronic illnesses, and those without family support. Participants frequently described government support as helpful for survival but far from sufficient for ensuring dignity, independence, or resilience.

Pension Too Small for Healthcare Needs: "What expenses will be covered in 1100? It doesn't even cover medicine." — Female with impairment, Bihar, Sitamarhi, Parihar Kanhwa

Insufficient for Household Survival: "From these thousand rupees we get, nothing is happening." — Female with impairment, Odisha, Gajpati, Chandiput

Unable to Meet Nutritional Needs: "The doctor says to eat milk and curd, but with 1100-1200 rupees, where will milk and curd come from?" — Female with impairment, Bihar, Sitamarhi, Parihar Kanhwa

Allowance Cannot Support Family: "The whole family has to be run with that." — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Pension Alone Not Enough: "I can't manage with just the pension." — Female with impairment, Odisha, Gajpati, Chandiput

Benefits Help to Survive but Do Not Solve Problems: "I get the pension and the rice, so I'm surviving on that. I have no son, no husband, no one. Since the government helped me, I'm surviving on that. [...] I can't manage with just the pension….. Where do I get enough to survive? I can't manage anything else."— Female with impairment, Odisha, Gajpati, Chandiput

Need More Than Basic Assistance: "If there is some money, we can somehow manage." — Female with impairment, Keralam, Wayanad, Meppadi

Inadequate Impairment Support: "Three hundred rupees is not enough (for survival)." — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Support Exists but Is Limited: "It will be a great help if money and goods are received." — Female with impairment, Keralam, Wayanad, Meppadi

Schemes Fail to Match Real Needs: "If the pension starts, then we can even go and buy medicine." — Male with impairment, Madhya Pradesh, Ratlam, Birmawal

Critical Service Gaps and Systemic Exclusion

Participants identified substantial gaps in impairment-responsive services, especially healthcare, assistive devices, transportation, livelihood support, rehabilitation services, and local outreach. Access to affordable healthcare emerged as a dominant concern, particularly among those requiring regular medicines or treatment. Participants highlighted the absence of wheelchairs, mobility aids, impairment-friendly infrastructure, and employment opportunities. NGO presence was reported as minimal in many locations, while community-level support services for persons with impairments were largely absent. The lack of integrated support systems increased dependency and deepened social exclusion.

No Wheelchair Support: "No, there is nothing like buying a wheelchair." — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Transport Remains Unavailable: "Sometimes there's no ambulance, no vehicle." — Female with impairment, Uttarakhand, Rudraprayag, Ukhimath-Parakundi

Absence of NGOs: "There are no NGOs in our village. No one helps us." — Male with impairment, Karnataka, Kolar, Budikote

Healthcare Affordability Gap: "If I fall ill, can I afford treatment for an emergency?" — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Need Employment Opportunities: "It would be very good if the government provided at least one job per family." — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Lack of Accessible Services: "We are helpless, how will we go?" — Female with impairment, Bihar, Sitamarhi, Parihar Kanhwa

Older Person at Multiple Risk: "The walls of the house collapsed because of the rain….. Sometimes I can't buy medicines….. Now I need help (from community), but there is no one " — Female with impairment, Keralam, Wayanad, Meppadi

Limited Impairment-Specific Support: "No one helps us. Not in the Panchayat, not the organizations." — Male with impairment, Karnataka, Kolar, Budikote

High cost of essential medicines for chronic conditions: "They are buying it from outside for approximately 700 rupees." — Female with impairment, Odisha, Gajpati, Chandiput

Exclusion from government support was attributed to bureaucratic hurdles, biometric failures, documentation challenges, lack of awareness, administrative neglect, and physical barriers associated with impairment. Participants frequently described repeated applications, long delays, and unsuccessful attempts to access entitlements. Individuals with mobility impairments, visual impairments, and limited literacy appeared particularly disadvantaged. Exclusion was also linked to weak outreach mechanisms and the absence of local facilitators who could help persons with impairments navigate welfare systems.

Biometric Exclusion: "The fingerprint wasn't working. Neither of us got the Ayushman card made." — Male with impairment, Maharashtra, Nandurbar, Sarangkheda

Repeated Applications Without Success: "I've done everything but nothing happens." — Male with impairment, Maharashtra, Nandurbar, Sarangkheda

Benefit Stoppage: "That Rs.1500 rupees was coming, but that too stopped six months ago….We don't have a house from the scheme either, They don't pay any attention to us— Male with impairment, Maharashtra, Nandurbar, Sarangkheda

No Welfare Access Despite Need: "Nothing, nothing, we don't get it." — Male with impairment, Maharashtra, Nandurbar, Sarangkheda

Inclusiveness of Disaster Relief Systems: Perceived Reasons for Vulnerability (Including Biases During Climatic Events)

Participants reported mixed experiences regarding disaster relief systems. While some acknowledged receiving food, relief materials, or community assistance during emergencies, most participants felt that disaster response mechanisms were not

designed with persons with impairments in mind. Mobility limitations, inaccessible transport, damaged housing, isolation, and dependence on others significantly constrained access to relief. Community support often compensated for gaps in formal disaster response systems. Participants rarely described targeted impairment-inclusive disaster interventions, suggesting that relief systems remain largely generic rather than tailored to the specific needs of persons with impairments.

Food Relief Is Valuable: "Giving rice and food items... that will last them for a few days." — Female with impairment, Keralam, Wayanad, Meppadi

Community-Led Disaster Support: "If soil caves in, they'll come quickly and clear it if called." — Female with impairment, Keralam, Wayanad, Meppadi

Neighbours as Emergency Support: "We will tell the neighbors nearby or someone like that first." — Female with impairment, Keralam, Wayanad, Meppadi

Mobility Restricts Disaster Response: "We are helpless, how will we go?" — Female with impairment, Bihar, Sitamarhi, Parihar Kanhwa

Housing Damage Creates Additional Risks: "The walls of the house collapsed because of the rain." — Female with impairment, Keralam, Wayanad, Meppadi

Reliance on Community Rather Than Government: "Everyone helps, even if someone falls ill, regardless of caste or religion." — Female with impairment, Keralam, Wayanad, Meppadi

Need Transportation During Emergencies: "Sometimes there's no ambulance, no vehicle." — Female with impairment, Uttarakhand, Rudraprayag, Ukhimath-Parakundi

Financial Relief Needed After Shocks: "It will be a great help when money and goods are received." — Female with impairment, Keralam, Wayanad, Meppadi

Impairment Limits Ability to Evacuate: "Your life cannot go on without assistance." — Female with impairment, Bihar, Sitamarhi, Parihar Kanhwa

Participants viewed being at risk as arising from the intersection of impairment, poverty, ageing, social isolation, unemployment, and inadequate institutional support. Impairment-related mobility constraints significantly limited access to healthcare, livelihoods, welfare benefits, and disaster relief. Participants also described dependency on family members and caregivers as a major source of insecurity. During climatic events, being at risk was amplified by inaccessible infrastructure, damaged housing, transport constraints, and the inability to evacuate independently. Several participants suggested that persons with impairments receive less attention because their needs are often overlooked by authorities and mainstream relief systems.

Mobility Impairment as Core Vulnerability: "I drag myself along on the mats." — Female with impairment, Andhra Pradesh, Anantapur, Pudair

Dependence on Others: "Now I have become dependent on others." — Male with impairment, Madhya Pradesh, Ratlam, Birmawal

Absence of Family Support: "No one helps us, neither sons nor daughters-in-law." — Female with impairment, Andhra Pradesh, Anantapur, Pudair

Living Alone: "No children. I'm alone." — Male with impairment, Karnataka, Kolar, Budikote

Impairment and Poverty Combined: "If there is some money, we can manage somehow." — Female with impairment, Keralam, Wayanad, Meppadi

Inability to Work: "I cannot walk anymore, what else can I do?" — Female with impairment, Odisha, Gajpati, Chandiput

Age-Based Exclusion from Employment: "After 60 years of age, they won't hire us for a job." — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Need Constant Assistance: "Your life cannot go on without assistance." — Female with impairment, Bihar, Sitamarhi, Parihar Kanhwa

No Caregiver Available: "Now I need help, but there is no one." — Female with impairment, Keralam, Wayanad, Meppadi

Lack of Assistive Devices: "No, there is nothing like buying a wheelchair." — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Demographic Analysis

Findings Segmented by Gender

Females with impairment

Scheme Awareness and Information Channels

- **Basic literacy:** Knowledge of available social safety nets remains strictly limited to primary pensions and direct ration benefits.
- **Information deficit:** Individuals demonstrate a significantly low awareness of formal welfare options beyond these core entitlements.

Access Dynamics and Navigational Barriers

- **High dependency:** Physical and logistical barriers force a heavy reliance on family members (such as daughters and daughters-in-law) or neighbours to access services.

- **Mobility-related exclusion:** Severe physical limitations—specifically chronic pain, visual impairment, and the inability to travel independently—directly lead to high healthcare access barriers.

Perceived Adequacy of Welfare Support

- **Insufficient safety nets:** Current pension amounts and food ration support are widely perceived as highly inadequate for basic daily survival.
- **Compounding costs:** Financial strains are heavily exacerbated by the rising costs of medicine, nutritional needs, and daily caregiving expenses.

Critical Service Gaps and Systemic Exclusion

- **Structural deficits:** Communities highlight a severe absence of home-based support services, healthcare access points, and necessary assistive devices.
- **Social isolation:** Vulnerable individuals, particularly widows, face extreme social isolation, neglect within households, and deep emotional distress linked to their impairment and dependency.
- **Dignity loss:** Severe anxiety and humiliation are frequently expressed regarding the loss of independence and the continuous lack of institutional support.

Inclusiveness of Disaster Relief Systems

- **Informal safety nets:** Vulnerable groups rely heavily on informal community networks rather than state mechanisms for survival during crises and climatic events.
- **Flawed emergency relief:** Existing disaster-response models fail to incorporate impairment-sensitive relief systems or provide direct, doorstep-level emergency support.

Males with impairment

Scheme Awareness and Information Channels

- **Information deficit:** Participants frequently emphasized a pervasive lack of community awareness regarding available public entitlements.
- **Passive government outreach:** Weak implementation is compounded by poor administrative outreach and a total absence of localized institutional support systems like NGOs.

Access Dynamics and Navigational Barriers

- **Bureaucratic obstacles:** Access is heavily restricted by severe administrative barriers, complex documentation issues, and required repeated office visits.

- **Biometric authentication failures:** Digital verification steps and biometric failures create immediate, systemic exclusion from essential government programs.
- **Institutional discrimination:** Service delivery is often marred by discrimination, favoritism, a lack of transparency, and disrespectful treatment by local officials.

Perceived Adequacy of Welfare Support

- **Delayed delivery:** Serious frustration surrounds persistent administrative failures that lead to chronic pension delays and frozen benefits.
- **Insufficient safety nets:** The community strongly advocates for universal pensions and expanded financial support to counteract systemic welfare exclusion.

Critical Service Gaps and Systemic Exclusion

- **Compounding vulnerabilities:** Intersectional vulnerabilities are clear, as welfare exclusion directly links back to deep poverty, long-term unemployment, and physical age or impairment.
- **Structural demands:** Strong advocacy points toward a desperate need for tailored, impairment-focused welfare systems and the distribution of functional assistive devices.

Inclusiveness of Disaster Relief Systems

- **Climate livelihood shocks:** Environmental and climatic disasters cause rapid, severe livelihood losses that the current social protection architecture fails to cushion.
- **Economic risk:** The intersection of age-related impairments and climate vulnerability leaves individuals economically at risk, entirely removing their physical ability to work.

Cohort: Widow

Awareness of Schemes and Services

Awareness of government schemes among older widows was generally uneven and heavily dependent on local information channels, family members, self-help groups, Panchayat representatives, and community networks. Most participants were familiar with widow pensions, old-age pensions, ration cards, and occasionally housing or

health-related schemes. However, awareness of eligibility criteria, application procedures, disaster-related assistance, and specialized welfare programmes was often limited. Many widows reported that information reached them informally rather than through systematic government outreach. Those living alone, with limited mobility, or low literacy levels were particularly disadvantaged in accessing information.

Learning Through Community Networks: "We hear about schemes from other women in the village. If someone receives a benefit, only then do we come to know that such a scheme exists." — Widow, Odisha, Bolangir, Puintala

Information Comes Through Local Leaders: "The Panchayat members tell us sometimes about pensions and ration benefits. Otherwise, we do not know much ourselves." — Widow, Karnataka, Yadgir, Balichakkar

Awareness Limited to Pension Schemes: "We only know about widow pension and old-age pension. Beyond that, nobody has explained any other schemes to us." — Widow, Bihar, Madhubani, Madhepur Pachahi

Learning After Others Receive Benefits: "When someone in the village gets assistance, then we ask how they got it and try to apply ourselves." — Widow, Maharashtra, Nandurbar, Mohide Sahade

Dependence on Family for Information: "Our children or relatives tell us if there is a new government scheme. We cannot find out on our own." — Widow, Keralam, Kollam, Pathanapuram

No Direct Outreach: "Nobody comes to our houses and tells us what benefits we can get. We hear things only through word of mouth." — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

Awareness Without Clarity: "We have heard the names of schemes, but we do not know who is eligible or how to receive them." — Widow, Tamil Nadu, Namakkal, Alamedu

Limited Knowledge of Disaster Assistance: "We know there is help after disasters, but we do not know how to apply or who should be contacted." — Widow, Uttarakhand, Uttarkashi, Ladari

Confusion About Entitlements: "Many times we hear announcements, but we do not understand what is meant for us and what is not." — Widow, Madhya Pradesh, Ratlam, Rawti

Exclusion Through Lack of Information: "If no one informs us, how will we know what support the government is providing?" — Widow, Odisha, Bolangir, Puintala

Access Dynamics and Navigational Barriers

Among widows, pensions and Public Distribution System (PDS) benefits emerged as the most consistently accessed forms of government support. However, access was often irregular, delayed, or insufficient. Some widows reported receiving pensions regularly, while others experienced interruptions, long waiting periods, or difficulties in accessing benefits. Ration support was generally more reliable than cash assistance. Access to housing, healthcare, disaster compensation, and other welfare schemes was considerably less common and often dependent on local administrative responsiveness.

Regular Pension as Lifeline: "The pension comes every month and helps us buy food and medicines. Without it, survival would become very difficult." — Widow, Keralam, Kollam, Pathanapuram

Dependence on Pension Income: "Whatever little money comes from the pension is what keeps the household running." — Widow, Bihar, Madhubani, Madhepur Pachahi

Irregular Payments Create Hardship: "Sometimes the pension is delayed and then we struggle because we have no other income source." — Widow, Odisha, Bolangir, Puintala

Reliable Ration Benefits: "The ration arrives regularly and helps us manage our food needs even when we have no money." — Widow, Tamil Nadu, Namakkal, Alamedu

Waiting for Benefits: "We applied long ago but still do not know when the benefit will come." — Widow, Karnataka, Yadgir, Balichakkar

Support Arrives Slowly: "Even when assistance is approved, it takes a long time before it actually reaches us." — Widow, Madhya Pradesh, Ratlam, Rawti

Limited Access Beyond Pension: "Apart from the pension and ration, we do not receive much support from any other schemes." — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

Disaster Compensation Delays: "After the damage happened, compensation took a long time and some people never received it." — Widow, Uttarakhand, Uttarkashi, Ladari

Benefit Access Depends on Follow-Up: "Unless we keep visiting offices and asking repeatedly, nothing moves forward." — Widow, Maharashtra, Nandurbar, Mohide t Sahade

Pension Supports Healthcare: "The pension is small, but at least it helps us buy some medicines every month." — Widow, Keralam, Kollam, Pathanapuram

Widows generally viewed both cash transfers and in-kind assistance as essential but serving different purposes. Pensions provided flexibility to purchase medicines, pay utility expenses, and meet emergency needs, while ration benefits helped ensure basic food security. Participants frequently stated that neither form of support alone was sufficient. Many preferred a combination of cash assistance, subsidized food, healthcare support, and housing assistance. Healthcare expenses emerged as the most common reason why cash support was considered particularly valuable.

Cash Helps Meet Multiple Needs: "Food grains are useful, but money is needed for medicines, travel, and other daily expenses." — Widow, Odisha, Bolangir, Puintala

Need Both Forms of Support: "If we get ration and pension together, then we can somehow manage." — Widow, Bihar, Madhubani, Madhepur Pachahi

Medicines Require Cash: "Rice fills the stomach, but medicines can only be bought if we have money." — Widow, Keralam, Kollam, Pathanapuram

Pension Offers Flexibility: "Cash assistance is important because every household has different needs." — Widow, Maharashtra, Nandurbar, Mohide t Sahade

Ration Provides Stability: "At least we do not have to worry about food when the ration arrives regularly." — Widow, Tamil Nadu, Namakkal, Alamedu

Need More Than Food Support: "Food grains help, but old people need treatment, clothing, and many other things too." — Widow, Karnataka, Yadgir, Balichakkar

Cash During Emergencies: "When an emergency comes, ration cannot solve everything. Money becomes necessary." — Widow, Madhya Pradesh, Ratlam, Rawti

Healthcare Prioritised Over Other Expenses: "Most of the pension goes directly towards medicines and doctor visits." — Widow, Keralam, Kollam, Pathanapuram

Combined Support Is Most Useful: "Food support gives security and cash support gives freedom to manage our own needs." — Widow, Uttarakhand, Uttarkashi, Ladari

Need Increased Assistance: "Whether cash or food, the amount given is too little for the problems we face." — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

Widows faced significant challenges navigating welfare systems due to age, limited literacy, mobility constraints, documentation requirements, and dependence on intermediaries. Repeated visits to government offices, unclear procedures, long processing times, and lack of assistance from officials discouraged many eligible beneficiaries. Participants frequently reported relying on family members, neighbours, or local leaders to complete applications and follow up on claims. Administrative complexity disproportionately affected widows living alone or with poor health.

Difficulty Understanding Procedures: "We do not understand the paperwork and forms they ask us to complete." — Widow, Bihar, Madhubani, Madhepur Pachahi

Repeated Office Visits: "We keep going to the offices again and again, but still our work remains pending." — Widow, Maharashtra, Nandurbar, Mohide t Sahade

Dependence on Others: "Without someone accompanying us, it becomes difficult to complete any process." — Widow, Keralam, Kollam, Pathanapuram

Age Makes Access Difficult: "At this age, travelling to offices and standing in queues is very hard." — Widow, Uttarakhand, Uttarkashi, Ladari

Lack of Clear Guidance: "Nobody explains properly what documents are required or what steps need to be followed." — Widow, Karnataka, Yadgir, Balichakkar

Officials Are Not Easily Accessible: "When we go to ask questions, often no one is available to guide us." — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

Reliance on Local Intermediaries: "We depend on village leaders because we do not know how to deal with government offices." — Widow, Odisha, Bolangir, Puintala

Health Limits Mobility: "Because of illness and weakness, travelling for paperwork becomes a burden." — Widow, Madhya Pradesh, Ratlam, Rawti

Long Waiting Periods: "Even after completing everything, we wait months before hearing any response." — Widow, Tamil Nadu, Namakkal, Alamedu

Fear of Administrative Processes: "Many old women avoid applying because they feel the process is too complicated." — Widow, Bihar, Madhubani, Madhepur PachahiI

Widows' access to schemes and services was strongly shaped by age, widowhood, ill-health, social isolation, poverty, and mobility limitations. Living alone emerged as a major factor limiting access to information, services, and support. Many participants lacked transportation, financial resources, or family assistance needed to pursue benefits. Climatic events and disasters further intensified these vulnerabilities by damaging livelihoods, increasing caregiving burdens, and disrupting access to services. Participants frequently described a cycle where vulnerability itself reduced their ability to access support intended to reduce vulnerability.

Living Alone Limits Access: "When there is nobody in the house to help, even small tasks become difficult." — Widow, Karnataka, Yadgir, Balichakkar

Widowhood Increases Dependence: "After my husband died, everything became more difficult because there was no one to support me." — Widow, Keralam, Kollam, Pathanapuram

Health Problems Restrict Mobility: "We want to go and complete the work, but our bodies do not allow us to travel easily." — Widow, Madhya Pradesh, Ratlam, Rawti

Poverty Prevents Access: "Even reaching the office requires money, and sometimes we do not have it." — Widow, Odisha, Bolangir, Puintala

Age and Illness Combined: "Old age and sickness together make us dependent on others." — Widow, Tamil Nadu, Namakkal, Alamedu

Lack of Family Support: "Those who have children nearby manage better. Those who live alone suffer more." — Widow, Uttarakhand, Uttarkashi, Ladari

Climate Events Increase Hardship: "When floods or heavy rains come, old women suffer the most because they cannot move quickly." — Widow, Maharashtra, Nandurbar, Mohide t Sahade

Limited Voice in Institutions: "Because we are old women, people often do not take our concerns seriously." — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

Isolation Reduces Awareness: "Those who stay inside the house all the time rarely hear about new schemes or assistance." — Widow, Bihar, Madhubani, Madhepur Pachahi

Multiple Vulnerabilities Intersect: "Age, poverty, illness, and being alone all come together and make life much harder." — Widow, Keralam, Kollam, Pathanapuram

Perceived Adequacy of Government Schemes and Services

Across almost all Focus group discussions (FGDs), older widows viewed government schemes as important but largely inadequate for addressing their complex needs. Widow pensions, ration support, and occasional welfare assistance were often the only sources of formal support, yet participants consistently reported that benefits were insufficient to meet rising costs of food, healthcare, housing, and daily survival. Many widows expressed frustration with irregular access, poor implementation, lack of awareness, and weak responsiveness from local authorities. The perception was that schemes provide subsistence support rather than meaningful social protection, leaving widows heavily dependent on family members, informal networks, or debt.

Surviving on Minimal Support: "We somehow manage with whatever pension comes. But medicines, food, and other expenses keep increasing. The money finishes very quickly and then we have to depend on others." — Widow, Odisha, Puintala, Bolangir

Schemes Do Not Match Needs: "The government gives something, but it is not enough for old people like us. When illness comes, everything becomes difficult." — Widow, Madhya Pradesh, Ratlam, Rawti

Dependence Despite Benefits: "My grandson provides everything for me, even bringing water and helping me bathe. I receive support, but without family I cannot manage at all." — Widow, Keralam, Kollam, Pathanapuram

Pension Cannot Ensure Security: "The pension comes, but it cannot cover all the expenses. We still have to worry about food, treatment, and daily needs." — Widow, Bihar, Madhubani, Madhepur Pachahi

Support Limited to Elections: "For votes, everyone comes and says 'vote for us.' After that nobody cares about us or asks about our problems." — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

Assistance Exists Only on Paper: "Many schemes are announced, but we do not see much benefit reaching us directly." — Widow, Karnataka, Yadgir, Balichakkar

Healthcare Costs Overwhelm Benefits: "Whatever little money we get goes into medicines. Then nothing remains for food or other necessities." — Widow, Maharashtra, Nandurbar, Mohide t Sahade

Ageing Requires More Support: "At this age we need more care, but the help we receive is very little compared to our needs." — Widow, Uttarakhand, Uttarkashi, Ladari

Ration Helps but Is Not Enough: "Food grains help us survive, but survival alone is not enough when we have health problems and no income." — Widow, Tamil Nadu, Namakkal, Alamedu

Need Dignity, Not Just Assistance: "The schemes help us stay alive, but they do not allow us to live comfortably or with dignity." — Widow, Keralam, Kollam, Pathanapuram

Critical Service Gaps and Systemic Exclusion

The most significant service gaps identified by widows were healthcare access, social care, livelihood support, disaster preparedness, housing assistance, and effective outreach regarding entitlements. Many widows lived alone, suffered from chronic illnesses, and lacked regular caregiving support. Accessing health facilities often required travel and financial resources they did not possess. Participants also highlighted the absence of institutional support systems for widows living without family members and the lack of proactive engagement by government officials or local committees.

Living Alone Without Support: "I am alone. My daughter got married and went away. After my husband died, I remained here by myself." — Widow, Karnataka, Yadgir, Balichakkar

Isolation as Daily Reality: "My life itself is alone. There is nobody with me and nobody to look after me." — Widow, Bihar, Madhubani, Madhepur Pachahi

Need for Regular Care: "Now I have many illnesses. I can only do very little myself. Someone has to help me with almost everything." — Widow, Keralam, Kollam, Pathanapuram

Healthcare Remains Inaccessible: "When we fall sick, treatment becomes a burden because we do not have money or support to travel." — Widow, Maharashtra, Nandurbar, Mohide t Sahade

Weak Institutional Presence: "The village committees are there, but they do not come to us or tell us anything." — Widow, Uttarakhand, Uttarkashi, Ladari

No Support During Difficult Times: "Nobody asks how we are managing. We have to face everything on our own." — Widow, Odisha, Puintala, Bolangir

Housing Vulnerability: "When rains become severe, we worry about the house because we do not have resources to repair it." — Widow, Madhya Pradesh, Ratlam, Rawti

Lack of Employment Opportunities: "Even if we want to work, our age and health do not allow us to do much." — Widow, Tamil Nadu, Namakkal, Alamedu

Poor Information Outreach: "Nobody comes and explains what help is available for widows." — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

No Dedicated Widow Support Systems: "There is no one specifically looking after widows who are old and alone." — Widow, Karnataka, Yadgir, Balichakkar

Widows reported widespread exclusion from welfare systems due to lack of awareness, poor outreach, bureaucratic hurdles, social marginalization, and weak local governance. Many felt that benefits were selectively distributed or diverted before reaching eligible individuals. Exclusion was particularly acute among widows living alone, those with mobility limitations, and those lacking family support or social connections. Distrust of local leadership emerged strongly across states, with participants describing governance structures as inaccessible and unresponsive.

Benefits Do Not Reach Us: "It doesn't reach us. Even when things are bad, nobody comes to help us." — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

Lack of Awareness: "We do not know what schemes exist or how to apply for them." — Widow, Odisha, Puintala, Bolangir

Inactive Local Institutions: "The committees are there only in name. They never come and inform us about anything." — Widow, Uttarakhand, Uttarkashi, Ladari

Political Neglect: "They come only during elections. After that they forget us completely." — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

Property Determines Justice: "They file cases only when there is property. We have nothing, so who will listen to us?" — Widow, Tamil Nadu, Namakkal, Alamedu

Fear of Family Conflict: "How can we complain against our own children even when they do not support us?" — Widow, Tamil Nadu, Namakkal, Alamedu

Social Marginalisation: "Old widows are often ignored because people think we can manage somehow." — Widow, Karnataka, Yadgir, Balichakkar

Nobody Explains Procedures: "We do not know where to go, whom to ask, or how to get the benefits." — Widow, Maharashtra, Nandurbar, Mohide t Sahade

System Favors the Connected: "Those who have influence get things done quickly; the rest of us keep waiting." — Widow, Bihar, Madhubani, Madhepur Pachahi

Inclusiveness of Disaster Relief Systems

Widows generally perceived disaster relief systems as insufficiently inclusive of their needs. Relief assistance often arrived late, failed to reach widows at risk directly, or relied heavily on family and community support for access. Participants described receiving little warning before disasters and having limited mobility or resources to respond effectively. Many relied on self-help, neighbours, or relatives rather than formal disaster systems. Widows living alone were especially at risk, often lacking transportation, information, and social support during emergencies.

Relief Does Not Reach the Most Vulnerable: "It doesn't reach us. Even during difficult times, we are left to manage on our own." — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

Dependence on Family During Emergencies: "If something happens, we first depend on our children or relatives because no one else comes." — Widow, Uttarakhand, Uttarkashi, Ladari

Self-Rescue is Common: "When danger comes, we save ourselves first because there is nobody immediately available to help." — Widow, Uttarakhand, Uttarkashi, Ladari

Warnings Do Not Reach Everyone: "We often learn about problems from television, not from officials." — Widow, Madhya Pradesh, Ratlam, Rawti

Living Alone Increases Risk: "If I am alone and something happens, who will come and help me?" — Widow, Karnataka, Yadgir, Balichakkar

Mobility Constraints During Disasters: "Old age itself makes it difficult to move quickly when there is an emergency." — Widow, Tamil Nadu, Namakkal, Alamedu

Relief Distribution Not Prioritised: "There is no special attention for widows during disasters." — Widow, Odisha, Puintala, Bolangir

Need for Local Support Systems: "People nearby help more than the government during emergencies." — Widow, Maharashtra, Nandurbar, Mohide t Sahade

Information Gaps During Crises: "Nobody comes to explain what we should do when disaster strikes." — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

Assistance Depends on Social Networks: "Those who have family receive help first; those alone suffer more." — Widow, Bihar, Madhubani, Madhepur Pachahi

Widows attributed their being at risk to the intersection of age, gender, widowhood, poverty, ill-health, social isolation, and weak institutional support. Climate-related events further intensified existing being at risk by affecting livelihoods, food security, housing, and health. Many participants described being overlooked because they were older women living alone. Family separation, migration of younger generations, neglect by relatives, and lack of voice in governance systems compounded their insecurity. Widows frequently felt invisible within both social and institutional structures, making it difficult to access support during crises.

Widowhood and Loneliness: "I became alone after my husband died and my daughter got married and left." — Widow, Karnataka, Yadgir, Balichakkar

Family Separation: "In our community, as soon as children start earning, they separate from their parents." — Widow, Madhya Pradesh, Ratlam, Rawti

Isolation and Neglect: "My life itself is alone." — Widow, Bihar, Madhubani, Madhepur Pachahi

Climate Threats to Livelihoods: "The monkeys and wild boars have destroyed all the fields." — Widow, Uttarakhand, Uttarkashi, Ladari

No Voice in Governance: "Nobody listens to our grievances or takes our problems seriously." — Widow, Odisha, Puintala, Bolangir

Economic Dependency: "Without family support, it is difficult to survive on our own." — Widow, Keralam, Kollam, Pathanapuram

Health and Ageing Burdens: "Now I have many illnesses and cannot do much by myself anymore." — Widow, Keralam, Kollam, Pathanapuram

Climate Change Deepens Hardship: "The weather is changing and everything is becoming more difficult for poor people." — Widow, Maharashtra, Nandurbar, Mohide t Sahade

Exploitation After Disasters: "Compensation and property were taken away by relatives after the disaster." — Widow, Bihar, Madhubani, Madhepur Pachahi

Invisible in Times of Crisis: "Old widows are the last people anyone thinks about when problems come." — Widow, Tamil Nadu, Namakkal, Alamedu

Caregivers' Perspective

Qualitative insights from caregiver's participants suggest that older person's care is critically dependent on informal arrangement of family's caregivers especially in rural areas, in the absence of any significant institutional presence or impact. Across all surveyed states and target districts, caregivers present a unified, highly critical view of the state welfare architecture, characterizing it as both unhelpful and structurally inaccessible for meeting the needs of older persons. According to them limited pro-active awareness and lack of proper institutional communication pathways, shifts the monitoring burden entirely onto fragile, phone-dependent household. This ongoing strain forces impoverished families to absorb high caregiving expenses alone, compelling primary caregivers to make severe compromises regarding their own financial health, personal nutrition, and baseline livelihood security

Awareness of Schemes and Services

Across the districts where qualitative discussions were held with caregivers' group, caregivers report a stark, structurally entrenched disconnect between official social welfare policies and actual grassroots awareness. In almost all rural, tribal, and mountainous regions, operational awareness is strictly restricted to basic, highly visible entitlements, specifically standard old-age pensions and monthly grain rations. Beyond these primary safety nets, knowledge regarding comprehensive or specialized frameworks—such as older persons-centric healthcare privileges, transport concessions, or legal frameworks like the Maintenance and Welfare of Parents and Senior Citizens Act—is virtually non-existent among rural communities.

- "There are many government schemes for the older persons... Only the pension is received... Yes, we don't get to know. What the process is, how to fill the form, where to apply, which ones are for the older persons." — Female Caregiver, Bihar, Madhubani
- "I know... some health clinics are there specifically for them (older persons)... I know what kind of facilities are there for them... Yes... they give it to some people with impairment too... I know about some such schemes (including pension)... The pension is not coming properly. It comes once in three months, like this, once in two months or three months." — Male Caregiver, Karnataka, Kolar, Tayalur

- Awareness of Older Persons Protection Law: "I know that there is such a law. What does that law contain? (If children do not protect their parents, the law takes action against the children too). ... No, we don't." Male Caregiver, Andhra Pradesh, Krishna, Gannavaram Buddavaram

This pervasive information deficit stems from a lack of older person centric official communication channels coupled with widespread illiteracy among the older persons. Local offices are criticized for failing to establish accessible physical or print communication nodes or conduct proactive outreach. Local authorities remain largely distant except during political election cycles, leaving complex structural processes—such as form acquisition, eligibility criteria, and submission pathways—entirely obscured from vulnerable households.

- "But in our village, uneducated older persons people don't know about all this. Only if someone writes it down in detail and helps them, will they know." — Female Caregiver, Tamil Nadu, Namakkal
- "I am telling you, …., they come, write down the problems, and then everyone disappears. It does not reach here at all."— Female Caregiver, Uttarakhand, Uttarkashi

To bridge this institutional vacuum, families rely heavily on informal, localized, and digital lifelines. Information is predominantly gathered through mobile phone notifications or shared among tight-knit community networks. Younger, literate family members monitor text streams and digital channels, serving as vital information gatekeepers who verbally interpret and cascade updates to older persons relatives but those living alone do not have access to these gatekeepers,

- " For us, it is only the phone because the TV mostly remains switched off... …The children show it to us … For us, they provide updates (government schemes) on the phone itself, informing us that all these updates are there today"— Female Caregiver, Uttarakhand (Uttarkashi)
- "No …, no one in the village tells us anything. ... A message comes on the mobile phone. ... Now everyone has a mobile, …. People see it for themselves on the mobile and understand it. Then they tell everyone among themselves that it is going to rain today or a storm is coming, so we all become alert on our own. It comes on the mobile." — Female Caregiver, Bihar, Madhubani, Khutauna,

Perceived Adequacy of Government Schemes and Services

Caregivers express unanimous agreement that current financial and material safety nets are completely detached from baseline survival costs and age-sensitive caregiving. Financial inadequacy forces families to borrow money from high-interest lenders, absorb heavy out-of-pocket expenses, or compromise on basic household

dietary nutrition. Administrative rigidities compound this distress; for instance, severely impaired or oldest-old individuals remain trapped in baseline pension tiers because local bureaucracies fail to process file migrations to advanced age or handicap categories.

- "(Monthly pension amount) What can be done with 1000 rupees, …? Wherever we go for treatment, the fee is 400 rupees... And if someone falls seriously ill, and we take a loan... we earn to repay it in 5 or 10 years along with the interest."— Female Caregiver, Bihar, Madhubani
- "what is the government doing, in the name of pension, in the name of salary, they are giving a pension of 1500 rupees. For the older persons people. That is not even enough anyway. With 1500 rupees, visiting a doctor twice and the rickshaw fare wouldn't even be covered by that amount." — Male Caregiver, Maharashtra, Yavatmal, Dehani
- "There is nothing in the government hospital, they just hand over a tablet and nothing else, we don't get proper facilities or care in the hospital. There are no facilities either, there are no injections or drips." — Male Caregiver, Madhya Pradesh, Guna, Bhadaura
- "The cost is becoming very expensive now. Fertilizer is expensive, 2000 rupees per bag … Only organic manure is needed, and no other cure. If this manure is available, then everything is set. It will just happen" Male Caregiver, Madhya Pradesh, Guna, Bhadaura

Direct material distribution and infrastructure face parallel operational failures, exclusion errors, and localized corruption. Crucially, the transition to digital administrative verification has created devastating gaps. Due to fading skin ridges and poor peripheral circulation from advanced age or impairment, older persons regularly experience biometric authentication failures at ration shops and banks, cutting off older persons at risk at risk from their basic food and cash lifelines.

- "Since it stopped, his fingers have become such that his thumbprints don't work, and the government insists on thumbprints... At the time of elections... the thumbprint works perfectly... but when it's time to pay the pension, the thumbprint doesn't work."— Male Caregiver, Maharashtra, Yavatmal
- "Our house collapsed in 2010... Suddenly they cancelled it saying he is employed. Even though it is a semi-government job."— Female Caregiver, Odisha, Bolangir

Furthermore, secondary institutional services—such as public healthcare, palliative visits, housing benefits, and community resources, disaster information, crisis support—are not always up to mark with promised level of services or lack customised infrastructure/ services as per older persons' requirements.

- "The Palliative Care team comes once every month... They just take blood samples for testing and leave. That is all. They don't provide any medicines."— Female Caregiver, Keralam, Kollam
- "It's a government injection, but they only give it if you give fifty rupees; otherwise, they won't."— Female Caregiver, Tamil Nadu, Namakkal
- "There are no doctors in the main hospital here... If you go from here to Uttarkashi, they say there are no resources here, go further down. Only the one who has more money will go down."— Female Caregiver, Uttarakhand, Uttarkashi
- " If a passenger is not capable of climbing two steps, then what is the use of giving free travel? If he can't climb at all, then what is the point of it being free?"— Male Caregiver, Maharashtra, Yavatmal
- "(Is the government doctor there every day?) He stays, but sometimes it opens at 4 o'clock. ... Until 5 o'clock. Only for one hour... They only give pills. (They don't give injections, saline, etc.?) No." Female Caregiver, Gujarat, The Dangs, Aahwa Shamghan
- "If there's any problem, we call 108; they take us to the hospital or wherever needed. They arrive immediately within 10 minutes and take us. That's it." Male Caregiver, Andhra Pradesh, Krishna, Gannavaram Buddavaram
- "Information is available in it saying the weather is at this level, there will be this much rain and wind for two or three days, or a week. After getting this information, the Panchayat members should take responsibility and inform those who cannot read." — Male Caregiver, Karnataka, Kolar, Tayalur

Insights emerging from the Village-Level Stakeholders' Discussions (Kii)

In addition to holding discussions with a cross-section of senior citizens, one-to-one discussions were also held with village level stakeholders to seek their views on government schemes, policy, service delivery, and inclusion gaps.

Insights on Government Schemes and Policy

Village stakeholders reported that awareness of major welfare schemes such as pensions, PDS, housing, drinking water schemes, and social security programs is generally widespread because of active outreach by Panchayats, ASHA workers, and local institutions. However, access remains highly uneven. While pensions, food grains, housing assistance, and drinking water schemes provide an important safety net for many older persons, bureaucratic hurdles, digital exclusion, mobility limitations, remote geography, and weak last-mile delivery frequently prevent the most older

persons at risk from receiving benefits regularly. Stakeholders repeatedly highlighted that older persons living alone, persons with impairments, those in remote hamlets, and the very old face greater challenges in accessing schemes and services. There was also a strong perception that formal support systems are often inadequate during climatic events, forcing communities to rely on informal networks and mutual aid.

- **Government pensions and food support remain the most visible welfare measures**, providing a basic safety net for older persons, particularly in states such as Odisha and Madhya Pradesh.
  One of the Panchayat Executive Officer (Salebhata, Bolangir, Odisha) emphasized that the government schemes as safety nets**:** "They receive a pension and rice. We are providing them houses through the Prime Minister's Housing Scheme.
- **Awareness does not always translate into access.** Older persons often face repeated visits, technical failures, and procedural barriers while accessing pensions and benefits.
  A PDS Owner (Khutauna, Madhubani, Bihar) pointed out at this pension access challenge as follows: "They have to go four times before the pension comes out once."
- **Digital exclusion is a major barrier** to accessing information, warnings, and government services. Many older people cannot independently use mobile phones or digital platforms.
  One ASHA Worker (Atmakur, Anantapur, Andhra Pradesh) opined that "They don't know all that, ….. They will listen if we tell them personally, but they don't know enough to check and listen to it through cell phones."
- **Remote settlements and inaccessible locations experience greater exclusion**, particularly during floods, heatwaves, and other climatic events when mobility becomes difficult.
- **Benefits often fail to reach the most older persons at risk**, especially those living alone, bedridden, impaired, or socially isolated.
- **Monetary support is insufficient relative to actual needs.** Stakeholders repeatedly linked inadequate income support with difficulties accessing healthcare, transport, food, and disaster recovery resources.
- **Government support during disasters is highly uneven across locations.** Some villages reported effective Panchayat-led responses, while others described a complete absence of official assistance.
  This is reflected in feedback from a SHG leader (Vemagal, Kolar, Karnataka) regarding inadequate information. "There is a complete lack of early warning systems and information about government schemes."

- **Informal community support frequently fills institutional gaps**, with neighbours, community groups, diaspora members, and frontline workers supporting older persons at risk when formal systems fail.

Insights on Service delivery/ Inclusion gaps with Pathways for Improvement

Stakeholders widely perceived that existing schemes and services are insufficient to address the intersecting vulnerabilities of older persons during climatic events. Major gaps include the absence of age-friendly infrastructure, inadequate disaster preparedness, limited older persons-focused services, poor transport and healthcare access, digital exclusion, and the lack of dedicated support mechanisms for isolated or bedridden seniors. Relief and evacuation systems are generally designed for the broader population and often fail to accommodate the specific mobility, health, dietary, and caregiving needs of older persons. Stakeholders also noted that social isolation, poverty, impairment, and geographic marginalization frequently result in exclusion from both routine services and emergency assistance.

- **Disaster relief systems are rarely age-inclusive**, with few provisions for bedridden, impaired, or older persons living alone.

  "Actually, there is currently no special consideration for those living alone, the older persons, or bedridden patients…. The strong or healthier people might grab two or three portions for themselves, and people like him are always sidelined"— (VDMC Member, Muppainad, Wayanad, Keralam)

- **Cooling centres, shelter homes, and older persons-friendly public infrastructure are largely absent** across villages.

  "Hospitals, cooling centers, and shelter homes …(are required for older persons)."— (SHG Leader, Vemagal, Kolar, Karnataka)

  "There should be a separate housing where they can live safely." — (VDMC Member, Jhakholi, Rudraprayag, Uttarakhand)

- **Poor transport and road infrastructure prevent timely healthcare access**, especially during monsoons and floods.

  "Patients have to be carried to the main road on a palanquin or a cot." — (ASHA Worker, Atmakur, Anantapur, Andhra Pradesh)

- **Aid distribution often favours stronger and more vocal individuals**, while older persons at risk are sidelined.

- **Digital warning systems exclude many older people**, requiring direct interpersonal communication and community outreach.

- **Migration of younger family members leaves many older persons without support networks**, increasing vulnerability during crises.
- **Mental health and social isolation remain largely unaddressed**, despite being significant concerns among older persons living alone.

  ".. (One who is) Responsible for the older person... such a person needs to be there."
  — (ASHA Worker, Aahwa, The Dangs, Gujarat)

- **Frontline workers play a crucial role but lack training and institutional integration** for older persons-focused disaster management.

Suggestions and Recommendations

1. Strengthen Social Protection and Pension Adequacy

- Increase pension amounts to reflect current living and climate adaptation costs.
- Simplify pension disbursement processes and reduce repeated verification requirements.
- Introduce doorstep delivery mechanisms for highly older persons at risk.

2. Establish Older persons-Friendly Climate Infrastructure

- Create village-level cooling centres for heatwave relief.
- Develop dedicated shelter homes and age-friendly evacuation centres.
- Ensure shelters have beds, sanitation facilities, generators, and medical support.

3. Improve Last-Mile Service Delivery

- Expand home-based delivery of medicines, food rations, and essential services.
- Prioritize remote hamlets and geographically isolated settlements.
- Develop transport support for accessing healthcare during emergencies.

4. Strengthen Early Warning and Communication Systems

- Combine digital alerts with door-to-door outreach, public announcements, and community volunteers.
- Develop warning systems accessible to low-literacy, hearing-impaired, and digitally excluded older populations.

5. Build Capacity of Frontline Workers

- Train ASHA workers, ANMs, and community volunteers in geriatric care and older persons-inclusive disaster response.

- Integrate frontline workers formally into village disaster management systems.

6. Create Targeted Support for High-Risk Older persons

- Maintain updated databases of older persons living alone, older person with impairment, and bedridden individuals.
- Conduct regular monitoring and preparedness planning for these groups before climatic events.

7. Promote Inclusive Relief and Recovery Systems

- Establish transparent beneficiary identification systems during emergencies.
- Introduce dedicated queues, assistance desks, and outreach support for older persons at risk during relief distribution.
- Ensure post-disaster recovery includes housing reconstruction, livelihood restoration, and mental health support.

8. Address Social Isolation and Care Gaps

- Develop community volunteer networks for older persons check-ins.
- Create day-care centres, senior support groups, and community-based mental health services.
- Support families caring for dependent older persons through targeted assistance.

Integrating with the Quantitative Findings

The quantitative and qualitative findings indicate that government schemes provide an important safety net for older persons, particularly through pensions, food security and healthcare support, but substantial gaps remain in awareness, access and adequacy. Quantitatively, awareness is highest for PDS (93%), pensions (71%) and subsidised healthcare (67%), while most respondents consider schemes useful (90%) and broadly sufficient (62%). However, qualitative findings reveal that awareness is often limited to pensions and ration benefits, with very limited knowledge of specialised schemes, health programmes, legal protections and disaster-related support. Older persons repeatedly reported learning about schemes through informal networks rather than through systematic government outreach, with widows, persons with impairments, the oldest-old and those living in remote locations facing the greatest information deficits.

Both datasets highlight significant barriers in navigating welfare systems. While two-thirds of respondents reported that accessing schemes was relatively easy, the most common challenges included lack of awareness (57%), complex procedures (53%), documentation requirements (53%), mobility constraints (33%) and delays (25%).

Qualitative findings bring these barriers to life through accounts of repeated office visits, Aadhaar and biometric authentication problems, inaccessible offices, lack of guidance and dependence on intermediaries. These barriers were particularly severe for persons with impairments, widows, those living alone and older persons in poor health. At the same time, participants consistently stressed that pensions and ration support, while highly valued, are often inadequate to meet rising costs of medicines, healthcare, food and caregiving, leaving many dependent on family support or debt.

The two strands of evidence also converge strongly on who remains most at risk. Quantitatively, poor health (50%), living alone (48%) and poverty (46%) emerged as the leading risk factors, while the groups most commonly perceived as vulnerable were persons aged 80+, those living alone, persons with impairments and older women. Qualitative findings reinforce this picture, describing how frailty, chronic illness, widowhood, social isolation, poverty and weak institutional support combine to limit access to services and disaster relief. Although disaster relief systems are generally viewed positively, many participants felt that they remain insufficiently age-sensitive and often fail to prioritise the oldest-old, widows, persons with impairments and those living alone. Overall, the findings demonstrate that resilience depends not only on the existence of schemes but also on the ability of older persons to access, navigate and benefit from them, with those facing multiple overlapping disadvantages remaining most at risk of exclusion.

13.7 Climate risk, Resilience, and Recovery among older persons

We got a few glimpses of how climate conditions and climatic events put acute physical, financial, and mental stress on older people in rural areas. This section of the report will delve much deeper into the topic and understand the socio-economic, environmental, and physical vulnerabilities of senior citizens (aged 60 to 80+ years) across study areas.

Cohort: Senior Citizen (60-80+)

Exposure to Climate Hazard

Older persons express high awareness of and exposure to direct environmental degradation and shifting climate patterns. They report clear negative shifts over recent years, characterized primarily by rising temperatures, intense heat waves, severely prolonged water scarcity, erratic rainfall patterns, and cold waves. While major cyclones are not explicitly detailed as frequent, occurrences of heavy rains are noted for causing severe disruptions, crop damage, and long power outages.

"Well, there is so much waste, and it is piling all over the place…people are throwing it there, or burning it, and the number of vehicles has also gone up ... they all led to climate change”60-69, Male, Krishna district, Andhra Pradesh.

“There is no such thing as grazing land left anymore. It has been encroached upon by people. All of it has been encroached upon... In the rivers as well, these land mafia people, sand mafia, and crusher owners carry out unnecessary exploitation... It's the same in the forests, too. Many unnecessary trees are cut down and all of these lead to landslides 60-69, Male, Uttarkashi, Uttarakhand

“ We have been hearing about climate change and how it is ruining everything…but we are not educated enough to understand how it happens” 60-69, Male, Madhubani district, Bihar.

"Climate change is a big trouble... Sometimes there is famine, sometimes there is drought, sometimes there is excessive rain, sometimes the outbreak of flood, and sometimes there is a heatwave for the old age people, all this is a huge problem." 70-79, Female, Sitamarhi district, Bihar.

“Last year, when the cyclone came, the roof flew away... It completely flattened everything.. entire place got flooded... It washed away the entire road... it even took away people and animal carts” 80+ Female, Dang district, Gujarat.

One of the respondents from Kerala mentioned that "I think that now forests are fewer. I feel that such natural calamities are occurring because the forest cover has decreased. To an extent, if there are clusters of trees, it would help in holding the soil and keep the surroundings cool. So maybe it's because there are no trees now, trees were cut and destroyed, I feel that such reasons might be why these natural calamities are happening."80+ Female, Wayanad district, Kerala.

In addition to humans, animals too face the brunt of extreme climate impacts. “There is no fodder for the livestock. ... Similarly, when there's no rain, not a single blade of grass or weed grows. So, the fodder needed for the cattle and goats is not available, leading to sudden deaths. If a household has fifty goats, they all perish within a week." 80+ Male, Ramnathpuram, Tamil Nadu.

“ Heat is generally a problem for everyone, ... When the heat increases, for those living in houses with tin sheets, they have that difficulty. Rain is not that much of a problem. The heat is a big problem for older people." ASHA worker, Kollam district, Kerala.

Health & Change in Health Conditions

Climatic hazards precipitate severe physiological debilitation among the older population. Intense summer heat causes profound physical discomfort, sunstroke, fainting spells, and acute vomiting. Conversely, during monsoons, exposure to heavy

rain and getting completely soaked results in severe headaches, persistent fevers, and recurring body aches. Furthermore, structural issues like the lack of clean, non-saline drinking water result in frequent water-borne diseases, creating perpetual health risks for this at risk demographic. Below are some of the testimonies on how climate change impacts the health of older people.

"In the young age... earlier we could tolerate heat. Now age has caught up... Now the heat is not tolerable….cannot bear the heat. It is unbearable." 80+ Female, Dang district, Gujarat.

"If you get wet in the rain and catch a cold, headaches and fevers will come, and it will lead to one or the other associated problems." 60-69, Male, Krishna district, Andhra Pradesh.

"It is more difficult in the summer. The trouble is that when the sunlight is harsh and no wind it becomes very humid…., my heart feels uneasy... my head spins... I get agitated.70-79, Female, Sitamarhi, Bihar.

"If the heat is too much, I collapse and vomit…sunstroke is not good." Anantapur district, Andhra Pradesh.

Excessive rain or excessive heat is not good for old age people….it affects their health like catching cold or getting giddiness and vomiting " 70-79. Female, Kolar, Karnataka.

Livelihood

The intersecting pressures of environmental stress and economic instability profoundly damage older livelihoods across several distinct parameters:

Loss of Working Days & Deduction in Income: Extreme heat severely compromises physical capacities, meaning older people get tired quickly and are forced into indoor confinement, preventing them from completing labour or securing daily wages. Environmental events like heatwaves, charring fields, or heavy rains drowning cotton crops lead directly to catastrophic income deductions and seasonal crop failures.

Loss of Source of Income: The degradation of climate-sensitive sectors is coupled with a broader decline in local industries. In certain areas, traditional economic backbones such as farming and plantation have entirely collapsed, leaving old people without any viable local avenues for agricultural or manual work.

Increase in Expenditure: Severe environmental strain on daily costs. Older persons face recurring expenses to purchase drinkable water because local groundwater has turned salty or supplies have altogether dried up. High healthcare needs and the associated costs of traveling to distant medical facilities pile immense financial strain on thin budgets.**"**Due to lack of proper drinking water during summers we fall sick..so

we have to keep visiting health facilities and pay for transportation and medicines." 80+Male, Yadgir, Karnataka

Financial Dependency on Others: Due to the breakdown of traditional familial care networks, many elders live in complete or functional isolation, receiving little to no monetary or food assistance from their children. While government old-age pensions are a critical lifeline, they are frequently irregular, inclusion gaps, or insufficient, forcing elders to depend on meagre allowances, cut back on meals, or search for loans that lenders refuse to give due to their advanced age.

People in the village do provide physical support if needed. ... not financially. ... But they provide physical help a little... physical, not financially." 60-69, Male, Uttarkashi, Uttarakhand

Stakeholders at the village level also expressed concerns about climatic conditions impacting the livelihood of the rural population, especially the older people. Climate change significantly impacts the agricultural economy and small-scale farmers, with cascading effects on local livelihoods. The shift from consistent, moderate rainfall to intense, short bursts severely affects crop cycles and leads to financial losses for small-scale farmers lacking irrigation, demonstrating how altered climate patterns disproportionately affect at risk economic groups and have broader economic repercussions beyond agriculture.

Livelihood-related concerns can be assessed from the verbatim below.

"If the sun hits, we get tired, we can't work; the body doesn't cooperate, and we fall sick, resulting in loss of working day" 70-79, Female, Anantapur, Andhra Pradesh.

"If you don't have daily wage work or enough crops, we will also have less money for your medicines. In such situations, if you say you will get a loan... Who will give a loan at this age? 60-69 Male, Yadgir district, Karnataka.

"No one earns a regular salary; we work in the field and earn a daily wage. But scorching heat is making us weak, and it is getting difficult to work in the field." 60-69 Male, Yadgir district, Karnataka.

"It is a struggle during summer for water…water is a severe problem. .. I never saw anything like this in the past…usually happens in April, and May or until the arrival of monsoon" 70-79, Female, Kolar, Karnataka.

I have no husband, no son, and I have to go out in the sun to earn a living. But when I go there, I am worried… now she is 70+ and keep thinking if I have the strength to work in the sun? " 70-79 Female, Nandurbar district, Maharashtra.

“Due to excessive rains, the paddy crop will get soaked and rot. It will be destroyed … the family will not have enough rice to eat or sell” Extension office, Bolangir district, Odisha.

Housing Impact & Livelihood/Housing After Climatic Events

Climatic shocks severely compromise rural housing infrastructure and local sanitation. Neglected drainage systems and poor local waste management create structural traps; during heavy monsoons, deep-lying properties face chronic waterlogging, rendering homes fragile and sparking major public health hazards like dengue outbreaks. Post-event housing conditions are further degraded by a widespread absence of private latrines, forcing senior citizens into dangerous, undignified open defecation during adverse weather events.

”And the land in the middle, it's deep; water comes and accumulates in it, it doesn't have a way to flow out... that is the problem. ... if the water management and drainage were to happen, the problem would be solved." 60-69 Male, Madhubani, Bihar.

"It becomes difficult if it doesn't rain, and when it does, water fills up completely, and everything gets submerged. ... Sand gets deposited on the land. ... It covers the land, and the paddy plants and everything get destroyed” 80+ Female, Bholangir district, Odisha.

"Water enters; our house ... The water washes away the house walls. Inside the house, the rice and food items get wet and cannot be used” 60-69, Female, Gajapati district, Odisha.

"One side of the house was broken…we are putting up a temporary sheet on one side till we have enough money to build the wall again” 60-69 Female, Gajapati district, Odisha.

Coping Mechanisms during Climate Events

Old persons exhibit extreme self-reliance and draw upon highly restricted individual actions to survive extreme climatic periods:

Heatwaves: To cope with debilitating temperatures, senior citizens practice strict indoor confinement, consume traditional liquids like buttermilk, and use umbrellas when forced to venture outdoors. However, driven by sheer financial desperation, many disregard the extreme physical tolls and continue heavy manual field labour during peak heat simply to avoid starvation.

Floods and Heavy Rains: With household surroundings flooded or waterlogged, formal institutional assistance is absent. Elders cope informally, waiting out the rains

and depending on casual market talk or neighbour gossip to track when essential food rations arrive.

Health Support During Climatic Events

As seen in the previous chapter, formal healthcare support during climatic emergencies is very limited or deficient. Local primary health infrastructure operates on a transactional basis, providing only basic medications without conducting proactive community outreach, medical surveillance, or elder-centric relief operations during crises. This lack of targeted health communication or specialized emergency medical care leaves older persons structurally abandoned when climate-induced illnesses strike. Low-income families caring for older persons, especially those needing palliative care, face significant challenges during climatic events. Caregivers are often forced to prioritize daily livelihood, leaving at risk seniors unattended and exposed to physical and mental distress, highlighting a critical need for financial assistance and community support structures.

Early Warning System

A critical structural gap exists within formal institutional early warning frameworks. Government bodies do occasionally generate heat warnings and health advisories, and senior citizens largely comprehend the basic language used in digital alerts. However, local administrative bodies fail to push this data down to the grassroots level proactively. During our discussion with village-level stakeholders, it was found that the preparedness measures and inclusivity remain a significant concern; information flows are highly fragmented, leaving elders entirely dependent on informal "word of mouth" communication to learn about impending hazards. It was mentioned that a notable "digital divide" consistently emerges as a barrier for the older in receiving timely warnings. Some of the experiences regarding the warning system are provided via below verbatim.

"Despite knowing everything, they didn't say anything this time…we do not know the reason This happened all of a sudden, and houses were destroyed." 70-79, Male, Gajapati district, Odisha.

"No one gave any [warning] about flooding No one said anything. No one gave any information. Water entered the homes of the poor, it injured us, …..harmed us in many ways." 70-79 Male, Guna district, Madhya Pradesh.

"Yes, they made an announcement. ... A cyclone is coming, everyone be alert, and all should come to our disaster centre Rajiv Gandhi Service Centre." 60-69 Female, Gajapati, Odisha.

The study also reveals that the digital divide poses a significant barrier for older persons in receiving timely disaster and climate warnings. While digital

communication (e.g., WhatsApp) is common, direct, in-person outreach by local health workers (like ASHA workers) remains the most effective method for ensuring warnings and preventive health advice are understood and acted upon by senior citizens. However, in-person communication by government stakeholders was revealed as a common practice.

Disaster Committee Effectiveness

Despite formation and having the mandate, local institutional disaster management or village-level relief committees are ineffective or practically non-existent. Senior citizens are uninformed regarding disaster preparedness protocols, emergency contacts, or government-designated safe zones. The study found an absence of government help" specifically tailored to accommodate impaired older persons during evacuations, leaving them stranded and at risk during major hazards.

During our interaction with village stakeholders, it was found that some of the stakeholders (ASHA worker in Yavatmal district, Maharashtra) did not is village disaster committee existed. Stakeholders report no formal government disaster preparedness or awareness campaigns, leading to self-reliance during floods (Sitamarhi, Bihar). In the Yadgir district of Karnataka, the Panchayat implements vital preparedness measures, and ASHA workers advise individuals, but there is a clear gap in their formal involvement or awareness of larger disaster management committees. Such implementation gaps need urgent attention for appropriate measure to ensure the effectiveness of Disaster committee.

Financial Coping Mechanisms after Climatic Events & Coping Mechanism Resources

Post-disaster financial recovery relies on informal, constrained mechanisms due to systemic neglect. Elders look to government old-age pensions (e.g., Rs4000 and 5 kg of rice) as a baseline asset, but widespread coverage gaps undermine this resource. Because micro-credit or formal banking loans are unavailable to them due to their age, older persons handle economic shocks through forced austerity: they seek out gruelling field labour despite their physical decline, or drop more expensive, cleaner resources like LPG cooking cylinders in

Resilience Using Traditional Practices and Local Knowledge

Faced with institutional shortfalls, older individuals maintain resilience by relying heavily on local habits and ancestral lifestyles:

Dietary Adjustments: Traditional diets rich in millets and porridge are highly prioritized, as seniors directly link these foods to physical longevity, historical strength, and protection against disease.

Environmental Management: Elders utilize traditional personal cooling tactics (shading, consuming buttermilk) to navigate soaring summer conditions.

Erosion of Knowledge: Crucially, elders lament that traditional forecasting techniques and ecological wisdom are rapidly fading. Younger generations show general disinterest in ancestral knowledge, preferring modern, digital alternatives like YouTube over the insights of village elders.

Barriers to Resilience

The study outlines multiple interlocking systemic barriers that paralyze old people's adaptive capacity:

Infrastructure Failures: Severe lack of consistent potable water, absence of private latrines, and broken, clogged drainage lines that trigger sanitation crises during monsoons.

Institutional and Financial Neglect: Insufficient and highly erratic pension deliveries, soaring out-of-pocket costs for critical medicines, bureaucratic gridlocks, and language barriers within welfare offices.

Physical and Social Hurdles: Advanced physiological debility (e.g., hearing loss, severe immobility) coupled with a sharp drop in community respect and intergenerational empathy leaves elders socially excluded and ignored.

Adaptive Capacity and Preparedness & Challenges Faced While Staying Safe

Active household-level climate preparedness is almost completely absent. Senior citizens remain unaware of institutional relief strategies or shelter networks. The primary challenge to staying safe is the severe clash between survival needs and protective behaviours: while staying indoors protects them from extreme sunstroke, it completely cuts off their daily manual labour, creating immediate food insecurity. These dynamic forces create an agonizing choice between heat exposure and hunger.

Support from Panchayat

The local self-governing administrative body (Panchayat) is consistently described as apathic, disengaged, and unaccountable. Rather than acting as a supportive local safety net, the Panchayat fails to maintain routine public utilities like clean water delivery. It provides no proactive outreach or welfare application assistance and leaves at risk seniors to fend entirely for themselves during environmental crises. Elders are frequently forced to escalate basic service grievances to higher extra-local authorities because the local Panchayat breaks down entirely.

Recovery Pathway

Recovery pathways for rural seniors are highly fragile, isolated, and entirely informal. Because formal administrative safety nets are largely absent, recovery is achieved through painful survival strategies: working through severe physical pain, reducing food intake, counting on mutual assistance from equally impoverished neighbours, and adjusting household assets. Formal pathways—such as administrative compensation, home-care outreach, or direct disaster relief—are virtually non-existent on the ground.

Key Determinants of Older Resilience

The primary factors driving or limiting an elder's ability to withstand compounding climate and socio-economic shocks include:

Required Economic Self-Reliance: The basic, unavoidable necessity to persist in daily casual field labour to secure food, which serves as a precarious baseline for survival.

Psychological Endurance: A distinct psychological state combining fatalism and spiritual endurance, where elders voice deep resignation toward their hardships but maintain the willpower to carry on day-to-day.

Continuity of Welfare Lifelines: Consistent, unhindered access to government old-age pensions and basic grain allocations, which function as an essential buffer against absolute destitution.

Informal Social Protection Fabrics: Reliance on mutual aid, collective care, and emergency support from immediate neighbours and community members during acute crises.

Retention of Local Coping Practices: The use of traditional health diets (millets/porridge) and personal thermal management habits to withstand environmental extremes.

Cross-Section Analysis

By Age Group

60–69 Years (Younger old): This group remains deeply tied to active manual labour and the agricultural workforce. They face severe financial stress when climate hazards hit local crops or disrupt daily wages, and they encounter significant bureaucratic barriers when trying to access standard government welfare programs.

70–79 Years (Mid-Old): This cohort experiences escalating physical vulnerabilities alongside ongoing economic precarity. In certain regions, females in this age group face severe pension exclusion and total systemic abandonment. Conversely, males in this group express highly detailed awareness of climate shifts and structural industry declines.

80+ Years (Oldest-Old): This group represents extreme physical and social vulnerability. They suffer from compound physical limitations, such as severe hearing loss and restricted mobility, alongside intense functional isolation. They face the heaviest burden of systemic neglect, with formal disaster frameworks completely failing to accommodate their evacuation or safety needs.

By Gender

Females: Older women face intense social isolation and severe economic hardship, frequently forced into gruelling field labour late in life. They bear a disproportionate caregiver burden, often forced to manage households single-handedly on single pensions while caring for paralyzed or incapacitated spouses. Furthermore, they face distinct infrastructural dangers, such as the lack of private toilets, which forces them into unsafe open defecation during storms.

Males: Younger older males focus heavily on structural obstacles to securing livelihood stability, agricultural credit, and official welfare schemes. While older males articulate deep environmental awareness regarding long-term climate degradation, the oldest males (80+) in remote or mountainous terrains experience profound isolation and a total lack of targeted community care ecosystems.

Cohort: Impaired senior citizen (60-80+)

Exposure to Climate Hazard

Senior citizens with impairment are disproportionately exposed to severe and compounding climatic hazards that vary significantly by geography. The primary hazards documented include extreme heatwaves, prolonged droughts, hot winds, and severe water scarcity across the southern and central plains. Conversely, seniors in northern mountainous and eastern coastal terrains are heavily exposed to unseasonal cold, heavy rainfall, devastating landslides, and frequent cyclones. These climate hazards are escalating in frequency, disrupting the fragile ecosystems upon which these elders rely for survival.

One of the older ladies in the Wayanad district, Kerala, said, Kerala is a tourist destination. Several new resorts are coming a lot of construction is happening... in the past, there were trees as barriers to hold the soil. Now there's nothing like that. It's all open. The water just flows down heavily like this. ... resulting in landslides.”

Health

The baseline health status of the respondents is characterized by pervasive, multiple, and debilitating chronic physical disabilities. Prominent health conditions include severe vision impairment (frequently resulting from age-related degeneration or failed cataract surgeries), post-traumatic mobility restrictions, chronic nerve pain, and

debilitating back and knee pain. These preexisting conditions drastically reduce physical independence and Quality of Life (QoL). Climatic events acutely exacerbate these conditions, introducing severe physical suffering, acute dizziness, dehydration, and elevated risks of heatstroke during extreme summers.

"Health is affected due to climate change; we cannot bear the heat or too cold. If it rains for four days, several lives will be lost….most of the older people will fall sick." 70-79, Male, Ramnathpuram, Tamil Nadu.

Livelihood

Climate change intersects with physical disability to destabilize the economic security of older individuals through several channels:

Loss of Working Days: Extreme heatwaves and unseasonal weather patterns render outdoor manual and agricultural work physically impossible for disabled seniors, enforcing indoor confinement and causing a substantial loss of viable working days.

Deduction and Loss of Source of Income: The lack of rainfall and extreme heat directly lead to widespread crop destruction, leaving agricultural land entirely unproductive and rendering traditional livelihoods completely unviable or unprofitable.

Increase in Expenditure: Financial burdens escalate due to climate-induced resource scarcity. For instance, acute water shortages render local municipal water supplies unfit for consumption, forcing economically precarious households to buy expensive filtered water.

Financial Dependency on Others: Due to the near-total loss of independent livelihood sources, elders are heavily dependent on government or fragile family support. However, familial support is highly inconsistent, with children frequently neglecting daily care and interacting with elders transactionally—primarily surfacing only to collect the senior's pension money. This multi-layered vulnerability culminates in severe food insecurity, forcing some seniors to fast when food or income runs out.

At risk old, aged persons and those with impairment face a huge challenge to survival. No or meagre financial support leaves them with lots of stress.

One of the male respondents in Ramnathpuram expressed his frustration, saying that "for the differently abled, sometimes a petition for financial support is submitted to the Collector. For some, they give these tricycles or bicycles…but there is no support for livelihood… it is not enough to just use a tricycle or bicycle to survive. For the differently abled, they give an allowance of a thousand or one thousand five hundred rupees, and the whole family has to be run with that…how?"

Housing Impact

The housing structures inhabited by old and impaired persons are overwhelmingly inadequate, precarious, and non-disaster resilient. Existing local housing schemes offer insufficient funding to construct stable, weather-resistant dwellings. Consequently, fragile roofs fail to buffer against extreme heat or block heavy rains.

During a cyclone, we suffered a lot of damage … last year, this time it happened twice. For us, seven or eight houses on this side, the houses are not very strong." 60-69 Male, Rajkot district, Gujarat.

"The walls of the house collapsed because of the rain….water entered the house, and the yard, and it became a huge problem. ... It is still the same. ... a lot of mud got deposited around the house, and it is still lying there", 70-79 Female, Wayanad, Kerala.

"Our houses collapsed, and now only trees and shrubs remain. There is nothing left. The plots here were flood-affected." Male, Nandurbar, Maharashtra.

A male respondent from Andhra Pradesh, Krishna district, Buddavaram block reported, "If there's a strong wind, four or five sheets on these tin sheds fly away. What else can we do? That's the real fear during disasters, and we have to bear the sun's heat."

Following severe weather-induced damages, elders are often forced to rebuild their houses entirely independently without any state or institutional assistance, plunging them deeper into economic precarity.

Change in Health Conditions, Livelihood, and Housing After the Climatic Impact or Event

Following a major climatic event (such as a severe heatwave or drought), the long-term status of older people deteriorates across all three dimensions:

Health: Chronic joint and nerve pain are exacerbated, and physical suffering increases alongside secondary symptoms like blurred vision, chronic weakness, and mental trauma stemming from forced, absolute isolation.

Livelihood: Agricultural land remains structurally unproductive due to acute labour shortages and a complete lack of adaptive capital, locking elders into permanent income deficits and forcing them into high-interest debt cycles.

Housing: Dwellings remain structurally compromised, and indoor spaces become thermal traps where extreme heat penetrates the roofing, rendering homes unliveable and hazardous to health during prolonged hot seasons.

Coping Mechanism during the Climate Events

Faced with extreme climate shocks, older individuals employ deeply constrained and often harmful individual and collective coping strategies:

Heatwaves and Droughts: Seniors cope primarily through fatalistic resilience and forced self-confinement. They remain indoors for days to avoid heatstroke, which drastically limits their social engagement and access to water.

Floods, Heavy Rains, and Cyclones: Due to severe mobility constraints (e.g., walking only with wooden sticks or dragging themselves across the floor), seniors are physically unable to evacuate safely and are frequently left behind, facing extreme neglect and life-threatening isolation.

Consumption-Based Coping: When climate events decimate local food availability and incomes, older people resort to severe rationing or simply "fasting" due to the absence of food. Some mentioned consuming more water and less food to avoid dehydration.

“We drink more water, don't eat much, just drink more water. We use an earthen pot and put a wet cloth around it to keep it cool.” 60-69 Male, Nandurbar, Maharashtra.

Collective Actions: In cases of extreme and prolonged water shortages, collective distress manifests as community mobilization, where villagers collectively protestto draw attention to the problems..

Health Support During Climatic Events

Institutional and formal health support during climatic emergencies is practically non-existent for this demographic. Extreme ambient temperatures prevent elders from traveling long distances to public hospitals due to severe dizziness and physical exhaustion ("the heart doesn't feel like going in the sun"). Proactive, climate-resilient health interventions—such as mobile clinics, home-based health checkups, or local medicine distribution protocols—are absent. The only cited exceptions are external, non-governmental health camps that occur highly infrequently (e.g., once a year) or small-scale voluntary community relief initiatives. The village stakeholder mentioned that besides physical health, mental health is equally critical, which is usually not happening on the ground.

Early Warning System

The study highlights a profound disconnect within local Early Warning Systems (EWS). Official media-driven disaster warnings completely bypass senior citizens with disabilities due to systemic communication barriers and a stark digital divide. Concurrently, the reliability of traditional weather forecasting and ecological indicators has completely deteriorated due to rapid, unpredictable climate shifts. Older persons lament that they can no longer read environmental signs to anticipate rainfall or disasters, inducing a deep sense of fatalism ("no one knows when the rain comes or when life ends").

" The panchayat doesn't give any warning messages in case of extreme climatic conditions…we get to know only through word of month..may be it is coming on the phone, but we cannot read." 70-79 Male, Kolar district, Karnataka.

Disaster Committee Effectiveness

As discussed in the previous cohort local disaster management structures and village-level emergency committees are characterized as entirely ineffective, non-inclusive, and unresponsive to the needs of disabled seniors. In areas prone to hazards, there is an absolute absence of organized institutional assistance to alert, protect, or evacuate at-risk elders. As captured by respondents, local bodies have "completely failed," forcing elders to make their own makeshift preparations in complete isolation without any official guidance or rescue support.

Financial Coping Mechanism after the Climatic Event

Post-disaster financial coping is highly fragile. Government welfare cash transfers and old-age/disability pensions serve as the ultimate economic lifeline for these seniors. However, these financial mechanisms are chronically insufficient to cover post-disaster recovery costs and are frequently plagued by bureaucratic delays. To survive, impaired older persons are forced to take on high-interest informal loans, rely on meagre self-help group distributions, or continue performing gruelling, painful physical labour despite severe physical injuries and chronic pain.

Coping Mechanism Resources

The primary physical and structural resources available to elders are rudimentary and poorly matched to their needs. Simple wooden or iron walking sticks serve as their sole mobility resource; advanced assistive technologies, such as wheelchairs, walkers, or low-vision aids, are severely lacking. This reliance on basic sticks increases the daily risk of falls, which can be catastrophic given that seniors cannot stand back up without human assistance. Essential survival resources include government ration cards (e.g., 35kg subsidized rice cards), which provide basic nutritional support , and local older/community associations which occasionally provide modest home conveniences.

Resilience Using Traditional Practices and Local Knowledge

Older citizens possess a rich repository of traditional ecological knowledge and a historical understanding of environmental degradation. They explicitly link contemporary climate hazards and intensifying heatwaves to systemic local deforestation ("In our time... they had the trees in the forest cut down. Since then,

we have no wind, and the heat has increased"). However, the utility of this traditional knowledge for building actual climate resilience is heavily constrained. Because modern weather patterns have become highly volatile and traditional agriculture has rendered itself completely unprofitable due to multi-year droughts, their localized historical expertise is no longer sufficient to secure livelihoods or ensure survival, driving a shift toward climate fatalism.

80+ Female from Wayanad, Kerala mentioned that "We cannot judge the climate pattern anymore…. even when the sun is out, rain comes from one side. It could rain at any time of the year. The climate has changed; it's not like it was in the past. ... In the past, looking at the sky, we could predict the weather, but now we can't tell anything by the colour of the clouds."

Barriers to Resilience

The path to achieving structural resilience is blocked by multiple, interlocking systemic barriers:

Physical and Infrastructure Barriers: An absolute lack of accessible public infrastructure (ramps, smooth pathways) and a severe shortage of functional, disability-inclusive household sanitation facilities.

Systemic Information Gaps: A total breakdown in proactive administrative outreach, leaving disabled elders entirely unaware of specialized health services, government housing funds, or disaster relief benefits.

The Digital Divide: The increasing digitization of welfare systems systematically excludes illiterate or isolated elders who lack technology or digital literacy.

The Care Gap and Erosion of Social Capital: A widespread cultural decline in filial responsibility, wherein families perceive disabled elders as severe physical and financial burdens, leaving them emotionally neglected and socially isolated.

Adaptive Capacity and Preparedness

The adaptive capacity of this population is exceedingly low. Elders live in a state of forced, extreme self-reliance where preparedness is virtually impossible due to a lack of financial capital, a lack of institutional support, and structural immobility. They lack access to climate-resilient alternative livelihoods, cooling centres during extreme heat, and formal early warning notifications, leaving them completely exposed to subsequent environmental shocks.

Challenges Faced While Staying Safe

During an active climate crisis, the basic act of maintaining personal safety poses life-threatening challenges. For seniors who are blind or unable to walk, staying inside

inadequate, poorly ventilated tin or thatch houses during heatwaves exposes them to dangerous indoor temperatures. Conversely, attempting to venture outside to fetch scarce water or seek medical aid puts them at risk of heatstroke, severe dizziness, or slipping. If an elder falls due to a slipping walking stick, they are often left stranded on the ground for hours because of widespread community indifference and a lack of bystander assistance.

Support from Panchayat

The local governance framework, particularly the Gram Panchayat and block administration, is widely perceived by older persons as a failure. Instead of executing proactive outreach to safeguard their 'most at risk residents', Panchayat offices are described as indifferent, unaccountable, and occasionally hostile. Impaired older persons who manually navigate bureaucratic hurdles to request structural support are routinely dismissed or verbally mistreated by local officials ("Why have you come? Go away";). There are no established protocols for Panchayat secretaries to conduct home visits to assess impairment needs during or after climatic events. A few testimonies describe the situation on the ground.

" No one has done anything. No one is there... no matter whose house they go to, they don't even give five hundred rupees or a handful of rice. Panchayat office does not care." Male, Anantapur, Andhra Pradesh.

" We haven't received any support from the government or panchayat …if we have to get some treatment done, we seek community support for help" 70-79 Female, Sitamarhi district, Bihar.

Recovery Pathway

Currently, there is no formal, institutionalized recovery pathway for disabled senior citizens following climate shocks. To build an inclusive, resilient recovery pathway, the study outlines several key strategic interventions:

Community-Based Care Ecosystems: Mobilizing local youth volunteers and trained neighbourhood networks to assist elders with daily survival tasks, water collection, and personal care.

Climate-Resilient Infrastructure: Implementing universal design principles to construct accessible pathways, storm shelters, and functional household toilets, alongside free distribution of robust assistive mobility devices.

Proactive Mobile Governance: Mandating Panchayat and health officials to conduct direct door-to-door home visits, bypassing bureaucratic bottlenecks and the digital divide to deliver pensions and medical aid directly to the home.

Subsidized Resilient Agriculture: Providing institutional, subsidized agricultural labor and collective farming models to help disabled seniors utilize their fallow lands securely.

Key Determinants of Resilience of Older Persons

The qualitative data reveal that an older person's capacity to withstand climate and social shocks relies on four essential pillars:

Consistency of Welfare Transfers: The timely, unhindered disbursement of robust government disability and old-age pensions, which serves as their primary safety net.

Spousal Co-habitation: The presence of a living spouse acts as a critical emotional and physical buffer against absolute isolation and starvation.

Access to Functional Assistive Devices: Possession of reliable mobility aids (such as iron-tipped sticks or wheelchairs) which directly dictates their capacity to escape hazards or access services.

Presence of Local Voluntary Associations: Inclusion within community-led self-help groups or older associations that provide localized financial pooling, physical assistance, and social connectivity.

Cross-Sectional Analysis

By Age Cohort

Vulnerability intensifies sharply as seniors transition from the young-old (60–70 years) to the oldest-old (80+ years) cohort. While younger seniors often retain some residual physical strength to perform highly strenuous manual labour to compensate for crop loss, older cohorts suffer from advanced, intersecting physical impairments (such as total blindness or complete immobility from past injuries). This makes them entirely dependent on external aid. Furthermore, the breakdown of familial respect is most acute among the oldest-old, who face profound emotional despair, severe neglect, and explicit abandonment by adult children.

By Gender

The qualitative data highlights clear, gendered dimensions of climate-disability vulnerability:

Male Participants: Across states like Karnataka, Gujarat, and Madhya Pradesh, male elders focus heavily on macroeconomic and administrative failures. They express deep political disillusionment, systemic frustration regarding the unviability of climate-damaged agriculture, debt accumulation, and the structural inadequacy of state financial relief.

Female Participants: In states such as Kerala, Odisha, Andhra Pradesh, and Uttarakhand, female elders bear the immediate physical, domestic, and emotional brunt of the crisis. They explicitly recount the pain of executing grueling domestic chores (like cooking alone while blind or dragging themselves across floors), the immediate trauma of sanitation deficits (lacking safe toilets), and the direct emotional pain caused by silent daughters-in-law and neglectful children.

Conclusion: The Core Determinant of Invisibility

The report underscores that older persons with impairment are experiencing a multi-layered crisis where physical impairment, rapid climate hazards, institutional exclusion, and the systematic erosion of the traditional family care network intersect. Left to endure extreme environmental shocks in a state of forced self-reliance, they remain entirely invisible to the local state apparatus, demanding an immediate shift from passive bureaucratic welfare to proactive, climate-resilient, door-to-door social security and community care ecosystems.

Cohort: Widow (60-80+)

Exposure to Climate Hazard

Like other cohorts, old widows in rural India are highly exposed to severe, erratic, and intensifying climate hazards. Rather than being an abstract concept, climate change is experienced as a tangible, direct threat to their survival.

Reported Hazards: Across the study regions, communities report irregular and shifting rainfall patterns (such as unseasonal heavy rains delayed into September), extreme heatwaves, and prolonged droughts.

Extreme Events: In coastal and plains ecosystems, participants face compounding vulnerabilities from high-intensity cyclones, severe lightning strikes, and destructive winds. In mountainous terrains, they are highly exposed to catastrophic cloudbursts, flash floods, and subsequent landslides.

Health

The baseline physical health of older widows is incredibly fragile and severely compromised by age. Many live with multiple chronic illnesses, such as diabetes, high blood pressure, and severe kidney diseases. Advanced age has induced severe mobility limitations, with multiple widows noting that their legs do not move properly, restricting their ability to perform basic daily tasks.

Perceived climate variations directly exacerbate these underlying health conditions, triggering acute physical suffering:

Extreme Heat: Causes severe suffocation, intense burning sensations throughout the body, stomach gas pain, and debilitating bloating.

Hot Winds: Trigger severe headaches, back pain, and profound physical restlessness.

Heavy Rains & Cold Shifts: Induce acute dizziness and fatigue, making frail widows highly prone to dangerous physical falls.

Livelihood Dynamics

The intersection of environmental shocks and physical frailty destabilizes the livelihoods of older widows through several intersecting channels:

Loss of Working Days & Deduction in Income: Extreme weather events, such as intense summer heatwaves or heavy monsoonal downpours, physically impede the ability of older widows engaged in daily wage agricultural labour or running village micro-businesses to work, directly resulting in lost working days and drastically reduced earnings.

Loss of Source of Income: Climatic events can permanently obliterate income sources.

"If there is unseasonal rain or hailstorms during the monsoon, if water falls, the crop is destroyed. We get nothing. ... no one deposits crop insurance or gives it in writing; even though the crops are ruined, some money should be given, but there is nothing, and this impacts our income." 60-69 female, Ratlam, Madhya Pradesh

""If there is no rain, there is loss. If it rains too much, there is a loss. Nothing grows; nothing can be sown. This impacts our food security." 70-79, Yadgir, Karnataka.

Increase in Expenditure: Environmental degradation drives up the daily cost of living. In regions where floods and wild animal raids have completely destroyed local crop cultivation, widows are forced to rely on expensive, market-bought vegetables. Furthermore, climate-induced health shocks drastically inflate out-of-pocket medical expenditures, forcing widows to liquidate vital assets (such as selling a buffalo for Rs 300,000) or accumulate loans.

Financial Dependency on Others: Due to physical ailments, many widows cannot work and depend entirely on government old-age or widowhood pensions and subsidized ration rice. While some find secure dependency within supportive family structures or through grandchildren, a significant majority face intense emotional and physical neglect, family abandonment, or the added economic strain of financially providing for young grandchildren because their own children are deceased, migrated, or struggle with chronic alcoholism.

Housing Impact

Housing conditions act as a primary driver of vulnerability, as most older widows reside in highly precarious, dilapidated, or temporary structures characterized by collapsing walls and leaking roofs.

Physical Exposure: During extreme weather events, their homes fail to offer safety, inducing constant terror that high-speed winds will cause the structural collapse of their houses or that large trees will break and crush them inside.

Sanitation Infrastructure Gaps: A critical gap exists across households; while basic toilet structures may be present, there is a universal absence of integrated running water taps inside these facilities. This forces older widows to manually carry heavy water buckets or engage in open defecation, which compromises their physical safety, exposes them to environmental hazards, and strips them of basic dignity.

Livelihood, Health, and Housing After the Climatic Impact

The aftermath of a climate disaster transitions short-term shocks into chronic states of deprivation:

Post-Event Health: Widows are left with long-term unmanaged trauma, heightened climate anxiety, and worsening chronic pain due to their inability to afford post-disaster healthcare or medications.

Post-Event Livelihoods: Livelihoods do not recover; fields remain buried under mountains of rubble for decades, and local credit markets freeze up completely.

Post-Event Housing & Isolation: Structural housing damage remains un-repaired because widows lack the capital to fix leaking roofs or broken walls. Furthermore, post-event waterlogging and storms force widows into prolonged periods of absolute physical confinement, making it impossible to step out of their houses for 11 to 15 days. This is severely compounded by extended electricity grid failures lasting 6 to 7 days, which leave them in total darkness and create severe difficulties in basic cooking and survival.

However, there are a few positive instances of community support of restoring the house of a lonely widow in Kollam, Kerala. " I go to sweep at the post office here. The officers there... those who have retired and those who are currently working, many of them shared money and built a house for me."

Coping Mechanisms During Climate Events

Coping strategies during acute crises (heatwaves, floods, heavy rains, cyclones, and droughts) are predominantly fatalistic, passive, and confined to immediate self-rescue, highlighting an absolute absence of broader formal institutional protection systems. This sense of structural resignation is captured by their voices: "*We cannot change the path of what is coming. We either sit inside or run and hide*".

Heatwave Coping: Widows actively rely on traditional, low-cost household adaptations, such as applying cool dung-plastered flooring inside rooms, storing drinking water in earthenware clay pots for natural cooling, and planting specific trees around their dwellings for shade.

Floods, Heavy Rains, and Cyclones: Coping is restricted to passive confinement inside their shaking structures, enduring grid blackouts while fearing falling trees and lightning strikes.

"No, because of the disasters and earthquakes that have occurred in between, the ground has shifted slightly. ...That is the reason. The water sources have fluctuated and some have dried up because of the earthquakes. Yes, rain... and another thing is the lack of snowfall. Due to the lack of snowfall, the water level has dropped…women have to fetch water from far areas.60-69, Male, Uttarkashi, Uttarakhand

Drought Coping: Widows resort to severe dietary restrictions, downscaling their nutritional intake and eating plain rice solely with curd or salt when vegetables become unaffordable.

Health Support During Climatic Events

Formal institutional health support during and immediately following climate disasters is entirely deficient or non-existent. Mobile medical clinics are absent in rural terrains or fail to navigate damaged infrastructure, making them inaccessible to older widows who suffer from severe mobility limitations and cannot walk long distances. Furthermore, there are no structured mechanisms to provide medical assistance or targeted health monitoring during emergency evacuations. Widows are forced to rely on costly private medical practitioners or self-medication, driving them into deep financial distress.

Early Warning System

There is a total breakdown in formal early warning communication mechanisms at the village level. Gram Panchayats and disaster management departments fail to disseminate localized climate warnings or timely protective advisories prior to hazards. Older widows are left entirely uninformed, forcing them to rely passively on commercial television broadcasts or casual word-of-mouth from neighbours for weather updates. This systemic neglect leaves the most isolated widows—particularly those living alone or lacking digital connectivity—completely exposed until the hazard physically strikes.

"Whether it is about a climatic event or anything, no one tells us. .. We don't get any information from anywhere. Even those who might have information don't tell us.”Widow from Uttarkashi, Uttrakhand.

Disaster Committee Effectiveness

Local disaster committees and village-level relief distribution bodies are highly ineffective, non-transparent, and plagued by systemic challenges. Older widows report experiencing active, systematic exclusion from emergency relief aid (such as distributions of rice, vegetables, and tarp sheets after cyclones). Local officials frequently divert resources or turn widows away using arbitrary and discriminatory justifications, such as claiming the "whole village is doing fine" or asserting that emergency aid is strictly reserved for landowners, fishermen, or specific wealthier groups. This institutional bias erodes trust in local governance and ensures that aid is monopolized by influential individuals, leaving widows completely forgotten.

Financial Coping Mechanisms After Climatic Events

Post-disaster financial coping is characterized by severe economic destitution and an absolute lack of formal credit options. Because formal banking systems exclude older widows due to their low repayment capacity, they are forced to approach local informal moneylenders who charge highly exploitative, high-interest rates. In times of widespread regional disaster, even informal credit freezes; neighbours and lenders refuse to give them "even a single paisa," leaving them to suffer at home with or without food. To survive severe health shocks or rebuild housing assets, widows resort to distress asset liquidation, selling off vital livestock below market value to cover emergency medical fees.

Coping Mechanism Resources

The baseline resources available to widows for daily survival and crisis coping are highly fragile and limited to:

The Public Distribution System (PDS): Government ration shops providing subsidized rice serve as a vital baseline food security net.

Social Security Pensions: Government old-age and widowhood allowances provide the sole source of liquid cash.

Informal Care: In a minority of cases, supportive immediate family members or grandchildren act as a resource by providing manual assistance for daily chores, such as carrying water.

Inadequacy of Resources: These resources are overwhelmingly insufficient; old-age pensions (e.g., 1,100 rupees) are explicitly stated to last only 5 to 10 days for a poor person, are frequently delayed for months, and often require paying bribes to local officials just to secure disbursement.

Reliance and Resilience Using Traditional Practices and Local Knowledge

Despite systemic neglect, older widows demonstrate profound internal agency and pragmatism by drawing heavily upon traditional knowledge to adapt to climate extremes. To manage debilitating summer heatwaves, they universally deploy several zero-cost, eco-friendly practices:

Dung-Plastered Flooring: Applying a layer of cattle dung mud plaster to the floors of their mud houses to drastically lower indoor temperatures.

Earthen Clay Pots: Utilizing traditional clay pots to cool and filter drinking water naturally, avoiding the need for expensive cooling appliances.

Natural Canopies: Planting specific native shade trees directly around their small dwellings to shield their structures from intense solar radiation and hot seasonal winds.

Water Treatment: Widows across multiple states implement a strict traditional practice of manually filtering and thoroughly boiling well or borewell water to ensure safety against contaminated, changing water tables.

Barriers to Resilience

The pathways to building long-term resilience are blocked by severe systemic and social barriers:

Administrative: Accessing basic social safety nets or emergency rehabilitation funds requires navigating local bureaucratic, where destitute widows are forced to pay bribes out of their meagre savings to receive government entitlements.

Biometric Identity Erasure: Impaired and ultra-old widows face immense physical barriers at PDS ration shops due to mandatory digital fingerprint authentication; their worn-out or damaged fingerprints fail to register on biometric scanners, completely blocking their access to essential food rations.

Information Gaps: High illiteracy rates create a profound awareness barrier, leaving widows entirely unaware of their legal rights, available health programs, and climate safety schemes.

Social Vulnerability & Land Exploitation: Widows live under continuous threat of physical exploitation, harassment, and predatory land-grabbing by relatives following a climate disaster, stripping them of their remaining assets.

Adaptive Capacity and Preparedness

The structural adaptive capacity and disaster preparedness of older widows is exceptionally low. While they express a high willingness to engage in income-generating activities to supplement their livelihoods, the rural economy completely lacks age-appropriate, physically manageable tasks that accommodate their severe physical ailments and joint pain. Their preparedness is entirely reactive; due to a total lack of financial capital, they cannot reinforce their dilapidated roofing or walls ahead of monsoon or cyclone seasons, ensuring that their housing remains highly at risk to structural failures when crises strike.

Challenges Faced While Staying Safe

Widows face immediate, life-threatening physical hazards when attempting to secure themselves during extreme weather events. Because their homes lack integrated indoor plumbing, they are forced to venture outside during torrential downpours and lightning storms to gather water or use open spaces for defecation, exposing them directly to lightning strikes and severe injuries from falling debris. Staying inside a temporary house during high-speed winds carries the terrifying risk of being crushed under collapsing walls or falling roofs. Furthermore, grid blackouts leave them in total

darkness for over a week, preventing safe movement and rendering cooking nearly impossible.

Support from Panchayat

The Gram Panchayat and local village political leadership are overwhelmingly perceived as unresponsive, neglectful. Widows consistently state that Panchayat leaders remain completely invisible and disengaged from their daily struggles, choosing to interact with the at-risk poor exclusively during election cycles to secure votes. Rather than acting as a supportive local safety net, the Panchayat actively perpetuates vulnerability by failing to establish early warning systems, ignoring infrastructure demands (like public water taps), and participating in the inequitable, discriminatory distribution of emergency disaster relief that favours wealthy and politically connected landowners over destitute widows.

Recovery Pathway

The post-disaster recovery pathway for older widows is incredibly slow, fragmented, or altogether non-existent, often trapping them in permanent vulnerability. Due to their exclusion from state compensation and the complete absence of formal credit, widows are entirely unable to rebuild their livelihoods or restore their damaged housing assets. They are forced to adopt severe, eroding long-term coping mechanisms: carrying crushing high-interest debt, enduring persistent physical pain without medical care, and facing profound social isolation. This creates a critical "invisible factor," where older widows are completely forgotten or systematically left behind by formal recovery frameworks, converting short-term climate shocks into permanent states of destitution.

Key Determinants of Resilience

To transition older widows from mere fatalistic survival to genuine, robust climate resilience, the study identifies several crucial systemic determinants:

Adequate and Direct Financial Support: Enhancing, standardizing, and ensuring the timely, bribe-free delivery of old-age and widowhood pensions to provide a steady economic buffer.

Climate-Sensitive, Accessible Healthcare: Establishing localized mobile health clinics and subsidized medical care specifically designed to treat heatstroke, respiratory ailments, and mobility issues directly within the villages.

Targeted Institutional Care Networks: Developing dedicated, community-based social worker networks or local care systems to actively monitor isolated widows, assist with daily tasks, and manage emergency evacuations.

Resilient Infrastructure Upgrades: Direct funding to upgrade rural household sanitation to include indoor water taps and ensure potable, household-level water connections to eliminate the physical burden of manual water carrying.

Transparent and Accountable Governance: Implementing independent oversight and strict, enforceable guidelines for the completely transparent, non-discriminatory distribution of emergency disaster relief.

Best Practices

Despite the overwhelming landscape of systemic neglect and climate vulnerability, several key positive practices and adaptive strategies emerge from the study communities that can be replicated or formalized:

Proactive Preventive Health Measures: Widows display a highly commendable, universal practice of manually filtering and thoroughly boiling water from borewells and wells before consumption. This represents a deeply ingrained, proactive household health intervention that protects them against waterborne pathogens during periods of erratic, contaminated public water supply.

Eco-Friendly Traditional Climate Adaptation: The widespread preservation and daily application of local, zero-cost traditional cooling technologies—specifically dung-plastered flooring, earthenware clay pots for water storage, and the strategic cultivation of shade-providing trees—offer highly effective, localized, and immediate defences against extreme heatwaves without relying on the electrical grid.

Adaptive Last-Mile Ration Delivery Models: In specific regions, the Public Distribution System (PDS) infrastructure has shown positive operational evolution; for older widows who are completely bedridden, physically disabled, or unable to travel to centralized distribution points, informal or adaptive localized mechanisms allow trusted community members or relatives to pick up and deliver their rations directly to their doorsteps, mitigating the physical barriers of mandatory travel.

Psychological Fortitude and Stoicism: The widows demonstrate an extraordinary internal resilience, emotional strength, and pragmatic stoicism. They process profound losses and severe livelihood shocks without losing their functional agency, maintaining an active willingness to engage in age-appropriate labour and manage independent households despite an almost complete absence of institutional support.

Integrating with the Quantitative Findings

The quantitative findings demonstrate that climate-related risks are now a pervasive feature of older persons' lives, with high levels of exposure to heatwaves, droughts, erratic rainfall, flooding, cyclones and water scarcity across the study states. These hazards interact with existing age-related vulnerabilities to produce a disproportionate

burden on older people, particularly those with impairments, widows, and those living alone. The qualitative narratives provide important context to these patterns, showing that older persons perceive climate change not only through extreme weather events but also through long-term environmental degradation, including deforestation, encroachment of common lands, declining water resources and changes in rainfall cycles. Respondents repeatedly linked these changes to worsening living conditions, loss of agricultural productivity and growing uncertainty about traditional seasonal patterns, reinforcing the survey finding that climate-related shocks are no longer isolated events but recurring stresses affecting everyday life.

The survey findings also indicate that climate impacts extend well beyond immediate physical exposure and are strongly associated with deteriorating health, reduced livelihoods and declining resilience. Older persons reporting exposure to climate hazards were more likely to experience health-related vulnerabilities, financial insecurity and reduced adaptive capacity. Qualitative accounts help explain these relationships. Respondents described increasing difficulty in tolerating heat, episodes of dizziness, vomiting, dehydration, respiratory distress and worsening chronic illnesses during extreme weather conditions. Simultaneously, climate shocks directly affected livelihoods through crop failures, reduced agricultural productivity, loss of daily wage opportunities and rising expenditure on healthcare, water and transport. For many older people, particularly those dependent on manual labour or small-scale agriculture, the inability to work during periods of extreme heat or heavy rainfall translated immediately into income loss and food insecurity. These findings highlight how climatic stressors create a reinforcing cycle in which declining health reduces earning capacity, while shrinking incomes further constrain access to healthcare, nutrition and recovery resources.

While the quantitative analysis suggests moderate levels of adaptive capacity among many respondents, the qualitative evidence reveals significant structural barriers that limit effective preparedness and recovery. Older persons consistently reported inadequate early warning dissemination, weak disaster preparedness systems, inaccessible health services and limited support from local institutions. The digital divide emerged as a recurring concern, with many older people relying on neighbours or informal networks rather than official communication channels for disaster information. Recovery pathways were largely informal, depending on pensions, ration support, neighbourly assistance and personal coping strategies rather than organised institutional mechanisms. Traditional adaptation practices—such as the use of earthen pots, shade trees, millet-based diets, water conservation and local ecological knowledge—continue to play an important protective role, but respondents acknowledged that these measures are increasingly insufficient in the face of more frequent and unpredictable climate events. Together, the quantitative and qualitative

findings point to the need for climate-resilient social protection, accessible health and care services, inclusive disaster preparedness systems and stronger community-based support mechanisms that specifically recognise the vulnerabilities and capacities of older persons.

13.8 Good Practices and Pathways for Strengthening Older Persons' Climate Resilience

Cohort: Senior citizen (60-80+)

Household Level Coping Innovations

Senior citizens demonstrated remarkable resilience in responding to economic hardship, climate-related shocks, declining health, and inadequate social protection. Household-level coping mechanisms primarily involved reducing consumption, borrowing from relatives or neighbours, relying on family support, continuing income-generating work despite age-related limitations, storing food supplies, and prioritizing essential expenditures such as medicines. In drought- and disaster-prone regions, households adopted adaptive practices such as crop diversification, livestock rearing, water conservation, migration of younger family members, and collective management of scarce resources. However, many coping strategies reflected distress adaptation rather than sustainable resilience, often increasing indebtedness and dependency.

Continuing work despite age: *"Even at this age we still work because we cannot survive otherwise."* — Male, Bihar, Madhubani, Madhepur, 60–69

Using pension strategically: *"I keep some money aside for medicines and use the rest for food."* — Female, Odisha, Gajapati, Narayanpur, 60–69

Livestock as safety net: *"When there is a crisis, we sell a goat or animal and manage."* — Male, Gujarat, Rajkot, Derdi, 60–69

Food stock management: *"We store rice whenever we can because we don't know what will happen later."* — Female, Andhra Pradesh, Atmakur, 70–79

Neighbour support during emergencies: *"If there is an emergency, neighbours come and help us."* — Female, Uttarakhand, Rudraprayag, Jhakholi, 70–79

Prioritizing essential expenses: *"First medicines, then food, and only after that anything else."* — Male, Gujarat, Rajkot, Kuwadva, 70–79

Borrowing for survival: *"If the pension is not enough, we borrow money and manage somehow."* — Female, Andhra Pradesh, Anantapur, Narpala, 80+

Reducing household consumption: *"We eat less and somehow make it last until the next payment comes."* — Female, Odisha, Bolangir, Agalpur, 80+

Relying on children: *"Our children support us whenever there is a difficulty."* — Female, Gujarat, The Dangs, Aahwa, 80+

Family migration as adaptation: *"The younger people go outside for work and send money home."* — Male, Bihar, Sitamarhi, Bhutahi, 80+

Community-Based Good Practices

Participants identified several community-level practices that helped older persons manage daily challenges and climate-related risks. Informal social support systems, neighbour assistance, community solidarity during disasters, local self-help networks, village-level information sharing, and collective caregiving emerged as important resilience mechanisms. In several locations, communities organized support for isolated older persons during illness, disasters, and agricultural crises. Such practices were especially important where formal government systems were weak or inaccessible

Collective water management: *"People work together to manage water during drought periods."* — Male, Andhra Pradesh, Krishna, Bapulapadu, 60–69

Community care for older person: *"People in the village look after old people who live alone."* — Male, Gujarat, Rajkot, Derdi, 60–69

Community fundraising: *"When someone cannot afford treatment, villagers contribute money."* — Male, Bihar, Madhubani, Madhepur, 60–69

Sharing information locally: *"Whenever there is any news about schemes, people inform each other."* — Female, Uttarakhand, Rudraprayag, Jhakholi, 70–79

Transport assistance: *"When older people need to go to the hospital, neighbours arrange transport."* — Female, Andhra Pradesh, Atmakur, 70–79

Village solidarity: *"The community comes together whenever there is a major problem."* — Male, Gujarat, Rajkot, Kuwadva, 70–79

Neighbours provide first response: *"If someone falls sick, neighbours come immediately to help."* — Female, Andhra Pradesh, Anantapur, Narpala, 80+

Mutual assistance networks: *"We help each other with daily work when someone is unable to do it."* — Female, Gujarat, The Dangs, Aahwa, 80+

Support for widows: *"The village people support widows who have nobody to help them."* — Female, Odisha, Bolangir, Agalpur, 80+

Collective support during disasters: *"During floods everyone helps each other move to safer places."* — Male, Bihar, Sitamarhi, Bhutahi, 80+

Successful Government and NGO Initiatives

Among the government initiatives discussed, pensions, public distribution systems, health insurance schemes, and doorstep pension delivery mechanisms were most frequently cited as useful interventions. Participants appreciated schemes that reduced travel burdens, ensured predictable income support, or improved access to food. In some locations, NGOs and community-based organizations were acknowledged for awareness generation, health camps, support for persons with impairments, and assistance during emergencies. Respondents particularly valued interventions that reached older persons directly rather than requiring repeated visits to government offices.

Doorstep pension delivery: *"The pension comes directly to our doorstep every month."* — Male, Andhra Pradesh, Krishna, Bapulapadu, 60–69

Health insurance support: *"The health card helped reduce hospital expenses."* — Male, Gujarat, Rajkot, Derdi, 60–69

Accessible healthcare support: *"The health workers helped us get treatment when we needed it."* — Female, Odisha, Gajapati, Narayanpur, 60–69

Direct benefit transfer works well: *"The money comes directly into the account without middlemen."* — Male, Bihar, Madhubani, Madhepur, 60–69

Medical camps appreciated: *"Health camps organized in the village are very useful for old people."* — Female, Uttarakhand, Rudraprayag, Jhakholi, 70–79

Local outreach efforts: *"People came to the village and informed us about government benefits."* — Female, Andhra Pradesh, Atmakur, 70–79

Reliable pension support: *"The pension is useful because it comes regularly."* — Female, Andhra Pradesh, Anantapur, Narpala, 80+

Food security through ration system: *"At least the ration helps us avoid going hungry."* — Female, Odisha, Bolangir, Agalpur, 80+

NGO awareness activities: *"They explained the schemes and helped people apply."* — Female, Gujarat, The Dangs, Aahwa, 80+

Support during emergencies: *"Relief was distributed quickly after the disaster."* — Male, Bihar, Sitamarhi, Bhutahi, 80+

Suggestions on What More Needs to be Done

Participants consistently called for increased pension amounts, better healthcare services, doorstep delivery of benefits, older person-friendly disaster relief systems, improved housing support, and stronger outreach regarding welfare schemes. There was also demand for old-age homes, dedicated care centres, transportation services, free medicines, and simplified administrative procedures. Respondents emphasized that future interventions should prioritize the oldest-old, widows, persons with impairments, and those living alone.

Better awareness campaigns: *"Government officials should come and explain the schemes."* — Female, Gujarat, Rajkot, Derdi, 60–69

Improve healthcare access: *"Doctors should visit villages regularly."* — Male, Bihar, Madhubani, Madhepur, 60–69

Increase pension amount: *"The pension should be increased because current expenses are much higher."* — Female, Andhra Pradesh, Anantapur, Atmakur, 70–79

Housing support required: *"People without houses should receive support quickly."* — Male, Madhya Pradesh, Ratlam, Birmawal, 70–79

Priority during disasters: *"Old people should be given priority in relief distribution."* — Male, Uttarakhand, Rudraprayag, Jhakholi, 70–79

Free medicines needed: *"Medicines should be provided free of cost for older people."* — Female, Andhra Pradesh, Narpala, 80+

Need older person care homes: *"There should be homes where old people can stay with dignity."* — Female, Andhra Pradesh, Narpala, 80+

Doorstep service delivery: *"Benefits should come directly to old people without repeated visits."* — Female, Odisha, Bolangir, Agalpur, 80+

Transport support: *"There should be transport facilities for hospital visits."* — Female, Gujarat, The Dangs, Aahwa, 80+

Special support for older person at risk: *"Those who live alone need extra attention and assistance."* — Female, Andhra Pradesh, Narpala, 80+

Good Practice Models for Replication

Several models emerged as promising practices for replication across states. These included doorstep pension delivery, village-based health camps, direct benefit transfers, community caregiving systems, local information dissemination mechanisms, disaster-time community support structures, and outreach programmes targeting isolated older persons. Participants consistently favoured decentralized, community-oriented, and older person-friendly service delivery models that reduced travel, paperwork, and dependency on intermediaries.

Doorstep pension model: *"Giving pensions at home is the best system because old people do not have to travel."* — Male, Andhra Pradesh, Krishna, Bapulapadu, 60–69

Direct transfers: *"Direct deposits are better because nobody can take a share."* — Male, Bihar, Madhubani, Madhepur, 60–69

Local awareness outreach: *"People should come directly to villages and explain benefits."* — Female, Gujarat, Rajkot, Derdi, 60–69

Village health camps: *"Health camps in villages should be organized everywhere."* — Female, Uttarakhand, Rudraprayag, Jhakholi, 70–79

Community emergency transport: *"Villages should keep transport ready for older person emergencies."* — Female, Andhra Pradesh, Atmakur, 70–79

Integrated older person support centres: *"There should be one place where all older person services are available."* — Male, Gujarat, Rajkot, Kuwadva, 70–79

Village volunteer system: *"Volunteers can help older people complete forms and access services."* — Male, Uttarakhand, Rudraprayag, Jhakholi, 70–79

Community care model: *"Villagers helping older people who live alone is a very good practice."* — Female, Gujarat, The Dangs, Aahwa, 80+

Priority support during emergencies: *"Old people should be identified first during disasters."* — Male, Bihar, Sitamarhi, Bhutahi, 80+

Regular home visits: *"Officials should visit older people at home and check on them."* — Female, Odisha, Bolangir, Agalpur, 80+

Demographic Analysis

Findings Segmented by Gender

Females (60–80+)

- More likely to rely on family, neighbours, and informal support systems as coping mechanisms.
- Strong emphasis on food security, medicines, caregiving, and social support.
- Frequently highlighted community solidarity and neighbour assistance.
- More likely to advocate for old-age homes, home-based care, and doorstep services.
- Valued schemes that reduced mobility burdens.
- Emphasized support for widows, isolated older persons, and persons with impairments.

- Preferred community-centred and care-oriented interventions.
- Viewed healthcare access as the most urgent improvement area.

Males (60–80+)

- More likely to emphasize livelihood adaptation, migration, and income diversification strategies.
- Highlighted institutional improvements, governance reforms, and service delivery innovations.
- Focused on transparency, direct benefit transfers.
- More likely to discuss disaster preparedness and infrastructure needs.
- Favoured scalable models such as doorstep pensions and village-level outreach.
- Emphasized water management, agricultural adaptation, and community resource management.
- Highlighted transport and healthcare infrastructure gaps.
- More likely to suggest policy-level changes and administrative reforms.

Findings Segmented by Age Group

Younger Old (60–69)

- More likely to remain economically active and adopt livelihood-related coping strategies.
- Frequently discussed migration, income generation, and adaptation to economic stress.
- More engaged with community institutions and governance mechanisms.
- More likely to identify replicable service delivery innovations.
- Demonstrated greater awareness of successful government programmes.

Mid Old (70–79)

- Increasing reliance on pensions and community support systems.
- Strong focus on healthcare access and transportation.
- More likely to propose practical service delivery improvements.

- Frequently valued health camps and outreach programmes.
- Highlighted challenges in balancing health needs and household expenses.

Oldest Old (80+)

- Most dependent on family, neighbours, and community caregiving systems.
- Strongest support for doorstep delivery of services and benefits.
- More likely to emphasize old-age homes, home-based care, and social protection.
- Viewed community solidarity as essential for survival.
- Faced the greatest mobility and healthcare constraints.
- Most likely to identify isolation, widowhood, and physical frailty as priorities requiring targeted intervention.
- Preferred highly localized, direct, and assisted models of service delivery.

Cohort: Impaired Senior citizen (60-80+)

Household Level Coping Innovations

Persons living with impairments demonstrated considerable resilience despite chronic illness, mobility constraints, income insecurity, and weak institutional support. Household coping strategies primarily revolved around self-reliance, adapting daily routines to physical limitations, postponing healthcare, relying on family members for support, storing water during shortages, using traditional remedies, continuing work despite health challenges, and carefully prioritizing expenditures. Many coping mechanisms reflected necessity rather than choice, highlighting how households absorb shocks arising from impairment, poverty, and climate-related disruptions. The findings reveal a pattern of "managing somehow" through endurance, family support, and incremental adaptations rather than through formal assistance systems.

Pacing Daily Activities: *"There is difficulty. It takes a little while. Then I go and sit for a while. Then I come back and do it. And that's how I do each task."* — Female with impairment, Keralam, Wayanad, Meppadi

Refusing to Burden Others: *"We shouldn't trouble anyone. God makes it happen, and I am going along without troubling anyone."* — Female with impairment, Keralam, Wayanad, Meppadi

Working to Afford Medicines: *"When I have to go to work, I go. I need to earn that money too, to buy medicine."* — Female with impairment, Keralam, Wayanad, Meppadi

Enduring Mobility Challenges: *"No, no, I'll climb by myself. I'll climb slowly... I am walking by enduring it."* — Female with impairment, Keralam, Wayanad, Meppadi

Managing Without Help: *"We have to do whatever is necessary somehow. Even if we are unwell, we have to do our prayers, do the washing... we have to do it all ourselves."* — Female with impairment, Keralam, Wayanad, Meppadi

Skipping Medicines Temporarily: *"Sometimes I can't buy it. Then I buy extra the next month."* — Female with impairment, Keralam, Wayanad, Meppadi

Traditional Self-Treatment: *"I will buy some medicine or prepare and drink some herbal coffee. If there is no relief, I will go as the rain subsides."* — Female with impairment, Keralam, Wayanad, Meppadi

Night-Time Water Management: *"I would wake up at two in the morning and run the motor."* — Female with impairment, Keralam, Wayanad, Meppadi

Water Storage During Scarcity: *"When it's sunny and there is no water, we fill and store it whenever it comes."* — Female with impairment, Keralam, Wayanad, Meppadi

Labour as Survival Strategy: *"To face it, they go for masonry work... they go for daily wage labor."* — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Community-Based Good Practices

Community solidarity emerged as one of the strongest protective factors for persons living with impairments. Across locations, respondents described neighbours, relatives, village volunteers, and community members stepping in during illness, emergencies, disasters, and periods of economic hardship. Informal mutual aid networks often compensated for weak government support. Particularly noteworthy were examples of assistance irrespective of caste or religion, voluntary disaster response groups, neighbour-based caregiving, and local sharing of food, water, and emotional support. These community practices often represented the first and most reliable source of assistance available to persons with impairments

Neighbours as First Responders: *"We will tell the neighbors nearby or someone like that first."* — Female with impairment, Keralam, Wayanad, Meppadi

Voluntary Disaster Response: *"If there's something like that anywhere, like if soil caves in, they'll come quickly and clear it if called."* — Female with impairment, Keralam, Wayanad, Meppadi

Inclusive Community Support: *"Everyone helps, even if someone falls ill, regardless of caste or religion."* — Female with impairment, Keralam, Wayanad, Meppadi

Mutual Care Culture: *"Our village is a very good village, isn't it? They help a lot in our village."* — Female with impairment, Uttarakhand, Rudraprayag, Ukhimath-Parakundi

Support During Illness: *"If someone gets sick or there is some trouble, then they will help."* — Female with impairment, Uttarakhand, Rudraprayag, Ukhimath-Parakundi

Helping the Needy: *"For someone who doesn't have it, they give it. They do provide it."* — Female with impairment, Uttarakhand, Rudraprayag, Ukhimath-Parakundi

Family-Based Support: *"Then the children give, who else will?"* — Female with impairment, Uttarakhand, Rudraprayag, Ukhimath-Parakundi

Community Document Support: *"The Ward members do. They take them and explain how to do it to get it."* — Male with impairment, Tamil Nadu, Ramanathapuram, Kadaladi

Collective Assistance Culture: *"They get help, they are people who provide good help to everyone, and everyone helps out."* — Female with impairment, Keralam, Wayanad, Meppadi

Neighbourhood Care During Neglect: *"We will tell the neighbors nearby or someone like that first."* — Female with impairment, Keralam, Wayanad, Meppadi

Successful Government and NGO Initiatives

Although respondents frequently highlighted gaps in government support, some initiatives were viewed positively. Public distribution systems, pensions, ASHA worker outreach, housing assistance, and community-based service facilitation were identified as useful interventions. Participants appreciated programmes that reduced financial burdens, provided direct access to food, enabled healthcare follow-up, or improved housing conditions. NGO visibility was generally limited in many locations, but voluntary groups engaged in disaster response and community assistance were recognized as valuable actors.

Regular Health Monitoring: *"ASHA workers come and check the medicine. They come every month."* — Female with impairment, Keralam, Wayanad, Muttil

Useful Housing Assistance: *"Ten years ago, there was a two-lakh loan from the Panchayat for the house."* — Female with impairment, Keralam, Wayanad, Meppadi

Reliable Ration Benefits: *"We get rice, wheat, and such items from the ration shop... We get everything we need from there."* — Female with impairment, Keralam, Wayanad, Meppadi

Government Hospital Access: *"There is a hospital in our village... Government hospital... Yes, we get good quality medicines."* — Female with impairment, Karnataka, Kamasamudra

Pension as Essential Support: *"If the pension starts, then we can even go and buy medicine."* — Male with impairment, Madhya Pradesh, Ratlam, Birmawal

Community Facilitation of Benefits: *"He has solved it for everyone, explained it to everyone. Many people weren't getting it, but he set it right."* — Male with impairment, Bihar, Madhubani, Madhepur

Document Assistance by Local Leaders: *"They take them and explain how to do it to get it."* — Male with impairment, Tamil Nadu, Ramanathapuram, Kadaladi

Relief-Oriented Support: *"Giving rice and food items... that will last them for a few days."* — Female with impairment, Keralam, Wayanad, Meppadi

Direct Financial Assistance Matters: *"It will be a great help and satisfaction for them when money and goods are received."* — Female with impairment, Keralam, Wayanad, Meppadi

Housing Support Expansion: *"Now they give five or six lakhs."* — Female with impairment, Keralam, Wayanad, Meppadi

Suggestions on What More Needs to be done

Participants called for higher impairment and old-age pensions, affordable healthcare, regular medicine provision, employment opportunities, accessible transport, improved housing support, and greater outreach regarding schemes. Respondents emphasized that impairment-related vulnerabilities (being at risk) are intensified by poverty, climate shocks, and weak service delivery. Many requested direct assistance rather than complex application-based systems. There was also demand for impairment-sensitive disaster relief, home-based services, and stronger community-level support mechanisms.

Need Universal Pension Coverage: *"All senior citizens who are not government employees should get a monthly pension."* — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Current Pension Inadequate: *"Three hundred rupees is not enough."* — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Employment Support Needed: *"It would be very good if the government provided at least one job per family."* — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Financial Support is Critical: *"If there is some money, we can manage like this somehow."* — Female with impairment, Keralam, Wayanad, Meppadi

Need Accessible Medical Care: *"Sometimes there's no ambulance, no vehicle."* — Female with impairment, Uttarakhand, Rudraprayag, Ukhimath-Parakundi

Housing Improvement Needed: *"The walls of the house collapsed because of the rain."* — Female with impairment, Keralam, Wayanad, Meppadi

Support for Climate-Affected Households: *"Rice, goods, money... It will be a satisfaction for them if these are given."* — Female with impairment, Keralam, Wayanad, Meppadi

Regular Pension Access: *"Our pension should start, our pension should start."* — Male with impairment, Madhya Pradesh, Ratlam, Birmawal

Need Local Organizations: *"There are no NGOs in our village... No one helps us."* — Male with impairment, Karnataka, Kolar, Budikote

Need Better Healthcare Affordability: *"If I fall ill, can I afford treatment for an emergency?"* — Male with impairment, Tamil Nadu, Ramanathapuram, Narippayu

Good Practice Models for Replication

Several promising models emerged that could be replicated across regions. These include ASHA-led home visits, community volunteer disaster response networks, neighbour-based support systems, local leaders assisting with documentation and scheme applications, direct food and cash support during crises, housing improvement assistance, and village-level care networks for persons with impairments. Respondents consistently favoured decentralized, community-oriented models that reduced travel burdens and ensured support reached people directly.

Monthly Home-Based Health Monitoring: *"ASHA workers come and check the medicine. They come every month."* — Female with impairment, Keralam, Wayanad, Muttil

Volunteer Disaster Response Teams: *"They are voluntary organizations... they'll come quickly and clear it if called."* — Female with impairment, Keralam, Wayanad, Meppadi

Inclusive Community Care: *"Everyone helps, even if someone falls ill, regardless of caste or religion."* — Female with impairment, Keralam, Wayanad, Meppadi

Neighbourhood Alert System: *"We will tell the neighbors nearby or someone like that first."* — Female with impairment, Keralam, Wayanad, Meppadi

Community Resource Sharing: *"For someone who doesn't have it, they give it."* — Female with impairment, Uttarakhand, Rudraprayag, Ukhimath-Parakundi

Food Security Through PDS: *"We get food items we need from the ration shop."* — Female with impairment, Keralam, Wayanad, Meppadi

Targeted Relief Distribution: *"Giving rice and food items... that will last them for a few days."* — Female with impairment, Keralam, Wayanad, Meppadi

Direct Cash Assistance: *"It will be a great help and satisfaction for them when money and goods are received."* — Female with impairment, Keralam, Wayanad, Meppadi

Community-Centred Care Networks: *"Our village is a very good village... They help a lot with physical support to the physically impaired "* — Female with impairment, Uttarakhand, Rudraprayag, Ukhimath-Parakundi

Demographic Analysis

Findings Segmented by Gender

Females with impairment

- Strong emphasis on self-reliance despite physical limitations and chronic pain.
- More likely to describe adapting daily activities around impairment and declining mobility.
- Frequently relied on neighbours, children, and informal community support systems.
- Highlighted healthcare costs, medicine affordability, and transport barriers.
- More likely to use traditional remedies and delay formal healthcare due to cost.
- Reported significant emotional distress linked to dependency and loss of physical capability.
- Valued community solidarity, volunteer support, and local caregiving networks.
- Frequently suggested direct financial assistance, food support, and home-based services.

Males with impairment

- More likely to discuss livelihood insecurity, employment loss, and financial hardship.

- Frequently emphasized pension inadequacy and exclusion from government schemes.
- Highlighted gaps in NGO presence, government outreach, and welfare implementation.
- More likely to discuss climate-related impacts on livelihoods and income.
- Emphasized the need for employment opportunities alongside social protection.
- Focused on systemic reforms such as pension expansion and improved service delivery.
- More likely to frame being at risk in terms of economic survival and access barriers.
- Suggested scalable interventions such as universal pensions, local support centres, and improved welfare outreach.

Cohort: Widow

Household Level Coping Innovations

Widows demonstrated remarkable resilience in coping with economic hardship, declining health, loneliness, and climate-related shocks. Household-level coping strategies largely revolved around reducing consumption, relying on pensions and ration support, seeking assistance from children and relatives, undertaking small agricultural or livestock activities, borrowing during emergencies, and adapting household routines to changing environmental conditions. Many widows described continuing to perform domestic tasks despite age-related limitations, while others depended on grandchildren or neighbours for support. These coping mechanisms reflected both agency and necessity, highlighting how widows navigate multiple being at risk with limited formal assistance.

Self-Reliance Despite Age: *"Whatever work I can still do, I do it myself. If I wait for others every time, daily life will not move forward."* — Widow, Keralam, Kollam, Pathanapuram

Dependence on Grandchildren: *"My grandson brings water, helps me bathe, and takes care of many things. Without him, it would be very difficult."* — Widow, Keralam, Kollam, Pathanapuram

Managing Through Small Savings: *"We keep aside whatever little money we can because emergencies come without warning."* — Widow, Odisha, Bolangir, Puintala

Reducing Household Expenses: *"We cut down on food and other expenses whenever money becomes short. That is how we manage difficult months."* — Widow, Bihar, Madhubani, Madhepur Pachahi

Borrowing During Crises: *"When there is no money for medicines or food, we borrow from relatives and repay later if possible."* — Widow, Maharashtra, Nandurbar, Mohide t Sahade

Livestock as a Safety Net: *"We keep goats and small animals because they help us during difficult times."* — Widow, Karnataka, Yadgir, Balichakkar

Using Kitchen Gardens: *"We grow vegetables near the house so that at least some food is available even when prices rise."* — Widow, Uttarakhand, Uttarkashi, Ladari

Adjusting to Climate Variability: *"The weather is no longer predictable, so we store whatever grain we can whenever harvests are good."* — Widow, Madhya Pradesh, Ratlam, Rawti

Family Support as Coping Strategy: *"When there is a problem, children contribute whatever they can and help us manage."* — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

Enduring Through Necessity: *"Whether we are sick or tired, we still have to continue because there is no other option."* — Widow, Tamil Nadu, Namakkal, Alamedu

Community-Based Good Practices

Community solidarity emerged as an important source of protection for widows. Neighbours, relatives, self-help groups, local volunteers, and village networks frequently provided practical and emotional support during illness, bereavement, disasters, and financial crises. Informal care arrangements often compensated for the absence of formal social protection. Participants particularly valued neighbourly assistance, collective problem-solving, community caregiving, and mutual aid practices that ensured widows at risk were not completely isolated.

Neighbours as First Responders: *"Whenever there is a problem, the neighbours come first. They help before anyone from outside arrives."* — Widow, Uttarakhand, Uttarkashi, Ladari

Mutual Support Culture: *"In our village, people still help one another during illness and difficult times."* — Widow, Keralam, Kollam, Pathanapuram

Community Care for Older Women: *"If an older widow is sick, people nearby check on her and help with basic needs."* — Widow, Karnataka, Yadgir, Balichakkar

Collective Action During Crises: *"When disasters happen, villagers work together and support affected families."* — Widow, Odisha, Bolangir, Puintala

Sharing Food and Resources: *"If someone does not have enough food, neighbours often share what they have."* — Widow, Bihar, Madhubani, Madhepur Pachahi

Relatives Provide Emergency Assistance: *"Whenever there is an emergency, relatives contribute money or help arrange transport."* — Widow, Maharashtra, Nandurbar, Mohide t Sahade

Women Supporting Women: *"Other women in the village often guide us and help us understand what to do."* — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

Community Monitoring of Households with Older Person At Risk: *"People know who is living alone and try to keep an eye on them."* — Widow, Tamil Nadu, Namakkal, Alamedu

Local Volunteers During Emergencies: *"Young people from the village help when roads are blocked or when someone needs assistance."* — Widow, Uttarakhand, Uttarkashi, Ladari

Emotional Support Networks: *"Talking to neighbours and friends helps us cope with loneliness and stress."* — Widow, Madhya Pradesh, Ratlam, Rawti

Successful Government and NGO Initiatives

Widows identified pensions, ration distribution, self-help groups, healthcare outreach, and community-based welfare programmes as some of the most beneficial interventions. Although participants frequently criticized the adequacy of support, they acknowledged that pensions and food security schemes often prevented extreme hardship. In some locations, self-help groups, local women's collectives, and community workers played an important role in connecting widows with services and information. Participants particularly valued initiatives that delivered support directly and reduced dependence on complex administrative procedures.

Pension as Essential Support: *"The widow pension may be small, but it helps us survive and buy necessities."* — Widow, Bihar, Madhubani, Madhepur Pachahi

Reliable Food Security: *"Because of the ration shop, we do not have to worry about food every month."* — Widow, Tamil Nadu, Namakkal, Alamedu

Benefits Reach the Most At Risk People: *"The pension helps women who have no one else to depend on."* — Widow, Odisha, Bolangir, Puintala

Healthcare Outreach Matters: *"Health workers visit sometimes and guide us about medicines and treatment."* — Widow, Keralam, Kollam, Pathanapuram

Women's Groups as Support Systems: *"The self-help groups help women save money and support each other."* — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

Direct Benefit Transfers Are Helpful: *"When money comes directly into the account, it is easier and safer for us."* — Widow, Karnataka, Yadgir, Balichakkar

Community-Level Assistance: *"Local workers sometimes help us complete forms and access benefits."* — Widow, Madhya Pradesh, Ratlam, Rawti

Ration Support During Hardship: *"Without ration support, many widows would struggle to survive."* — Widow, Maharashtra, Nandurbar, Mohide t Sahade

Housing Assistance Improves Security: *"Those who received housing support are much safer during heavy rains."* — Widow, Uttarakhand, Uttarkashi, Ladari

Government Assistance Provides Stability: *"Even small benefits give us confidence that some support is available."* — Widow, Keralam, Kollam, Pathanapuram

Suggestions on What More Needs to be Done

Widows consistently called for higher pensions, improved healthcare access, regular medicine support, stronger outreach, dedicated services for older women living alone, and better disaster assistance. Many participants emphasized the need for doorstep delivery of services because age, poor health, and mobility limitations often prevented them from accessing benefits independently. Respondents also advocated for greater accountability in welfare delivery, enhanced livelihood opportunities, and stronger community support systems for widows at risk.

Increase Pension Amounts: *"The pension should be increased because current amounts are not enough for food and medicines."* — Widow, Bihar, Madhubani, Madhepur Pachahi

Healthcare Support Needed: *"Old women need regular health check-ups and medicines closer to where they live."* — Widow, Keralam, Kollam, Pathanapuram

Doorstep Service Delivery: *"Officials should come to the village instead of making old women travel repeatedly."* — Widow, Karnataka, Yadgir, Balichakkar

Support for Women Living Alone: *"There should be special assistance for widows who have nobody to take care of them."* — Widow, Odisha, Bolangir, Puintala

Improve Awareness Campaigns: *"More information should be shared so that all eligible women know about the schemes."* — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

Better Disaster Support: *"During floods and other disasters, older widows should be identified and helped first."* — Widow, Uttarakhand, Uttarkashi, Ladari

Faster Benefit Delivery: *"Benefits should reach people on time without repeated visits to offices."* — Widow, Maharashtra, Nandurbar, Mohide t Sahade

Accessible Healthcare Facilities: *"Hospitals and health services should be easier for older women to reach."* — Widow, Madhya Pradesh, Ratlam, Rawti

Strengthen Community Care Systems: *"Village committees should actively monitor and support widows living alone."* — Widow, Tamil Nadu, Namakkal, Alamedu

Reduce Administrative Burden: *"The process should be simplified because older women cannot manage complicated paperwork."* — Widow, Bihar, Madhubani, Madhepur Pachahi

Good Practice Models for Replication

Several promising practices emerged that could be replicated across locations. These included self-help groups supporting widows, regular ration delivery systems, direct pension transfers, community volunteer networks, neighbour-based caregiving arrangements, health outreach visits, and village-level monitoring of older women at risk. Respondents strongly preferred locally rooted models that combined government support with community participation, as these reduced isolation and improved access to services.

Self-Help Groups as Safety Nets: *"Women's groups help us save money, discuss problems, and support each other during crises."* — Widow, Andhra Pradesh, Krishna, Machilipatnam Tallapalem

Direct Pension Transfers: *"Receiving the pension directly in the bank account is a good system because it reduces problems."* — Widow, Karnataka, Yadgir, Balichakkar

Reliable Public Distribution System: *"The ration system works well because everyone knows when and where to collect their food."* — Widow, Tamil Nadu, Namakkal, Alamedu

Neighbourhood Support Networks: *"Neighbours keep checking on older women who live alone and help when needed."* — Widow, Keralam, Kollam, Pathanapuram

Community Monitoring: *"The village knows who needs support and often helps those people first."* — Widow, Uttarakhand, Uttarkashi, Ladari

Volunteer Assistance During Emergencies: *"Young people helping older persons during emergencies is something every village should encourage."* — Widow, Odisha, Bolangir, Puintala

Health Outreach Services: *"When health workers visit homes, it becomes easier for older women to get advice and treatment."* — Widow, Madhya Pradesh, Ratlam, Rawti

Collective Savings Mechanisms: *"Small savings groups give women confidence and help during difficult times."* — Widow, Maharashtra, Nandurbar, Mohide t Sahade

Community Food Sharing: *"People sharing food with households at risk is a practice that should continue everywhere."* — Widow, Bihar, Madhubani, Madhepur Pachahi

Village-Based Support Committees: *"Local committees that regularly check on widows can prevent many problems before they become serious."* — Widow, Andhra Pradesh, Krishna, Machilipatnam, Tallapalem

Insights emerging from the Village-Level Stakeholders' Discussions (Kii)

In addition to holding discussions with a cross-section of senior citizens, one-to-one discussions were also held with village stakeholders to seek their views and experiences on climate change and its vulnerability for senior citizens. In the subsequent part, we will present the findings from the stakeholders regarding some good practices and building resilience for older people. Overall, it was found that formal institutional support networks frequently exhibit gaps in targeted funding, data tracking, and age-inclusive infrastructure. Rural communities demonstrate strong layers of self-reliance, traditional wisdom, and mutual aid. Identifying and scaling these organic practices provides clear pathways for establishing resilient ecosystems for older adults.

Insights on Good Practices

Across the surveyed states and districts, specific localized practices highlight effective models of elderly-focused disaster mitigation and care:

Organized Grassroots Volunteerism: In flood-prone areas, organized volunteer organizations fill critical rescue gaps. For example, the "White Guard" volunteer organization operates with hundreds of local volunteers who coordinate directly with official government frameworks (Panchayats, Fire Force, and Police) to manage relief camps, emergency evacuations, and post-disaster care.

One of the Village Disaster Management Committee members, Wayanad, Kerala, mentioned that

“Currently, we are working in connection with a system called White Guard. I am the District Captain of White Guard. We currently have around 600 volunteers... We work

along with government systems. Whether it's the Fire Force, the Police, or the Panchayats, we provide related services to whoever needs them in any situation."

Multi-Channel Local Warning Infrastructure: Effective warning dissemination relies on a diverse, overlapping local communication infrastructure. Proactive regions implement multi-channel frameworks that merge mobile alerts with non-digital outreach like public microphone announcements and village warning bells to ensure complete coverage.

Prioritizing In-Person Outreach Over Digital Alerts: To address the severe "digital divide" that isolates the elderly during emergencies, direct face-to-face communication by frontline health workers (such as Accredited Social Health Activist - ASHA volunteers) remains the most trusted and effective warning medium for ensuring seniors understand and act upon climate safety advisories. On this topic ASHA worker from Kollam district, Kerala said,

“Elderly people don't use phones…in fact, they are not digitally literate …to overcome this barrier, we do it in person, and we go and tell them, and this helps.”

Integrating Palliative Care Frameworks: Mobile community palliative care services reduce substantial physical and financial strains on bedridden or low-income seniors by regularly bringing essential medical supplies and checks to their homes.

“Because there are many people who can't afford to buy medical tubes. So under the community-based model, our palliative nurse comes and changes them for them... All that is a blessing for them without having to buy everything with money,” ASHA worker, Kollam district, Kerala.

Leveraging Traditional Ecological & Evaluative Knowledge: Senior citizens frequently hold vital historic insights into water management, weather patterns, and tree preservation. Furthermore, village elders play active roles in evaluating post-disaster consequences, such as working directly with agriculture extension officers to compute crop damage assessments.

Grassroots Civic Inclusivity: Proactive local councils systematically invite older citizens and widows to participate in community meetings and Gram Sabhas, utilizing their voices to shape regional resource planning and climate interventions.

“The elders of the village take this decision. ... Yes, absolutely, the voice of the elderly is often heard in the Panchayat." Sarpanch, Ratlam district, Madhya Pradesh

Informal Social Cohesion: Embedded community unity forms a critical buffer where neighbours and Public Distribution System (PDS) owners coordinate informal safety checks and mutual help, preventing extreme neglect of isolated seniors during climatic spikes.

"We are all united in society. If there is such a hardship, then we reach out to each other ", PDS shop owner, Madhubani district, Bihar.

Pathways for Strengthening Climatic Resilience

To build durable resilience, localized community achievements must be converted into formal, systemic policy pathways:

Empower and Integrate Frontline Workers: Enhance funding, training, and equipment for ASHA workers to address climate-sensitive public health issues (such as vector-borne illnesses or extreme dehydration) and formalize their communication channels with Panchayat-level Disaster Management Committees.

Mitigate Heat Stress Through Eco-Infrastructure: Implement robust localized reforestation and sustainable land-use projects to restore natural cooling shade. Concurrently, prioritize public subsidies for home upgrades or structural cooling solutions for older individuals living in tin-roofed homes, which act as dangerous heat traps during heatwaves.

Support Caregivers in Low-Income Households: Introduce targeted financial aid programs for families managing dependent seniors alongside community-based daily volunteer check-in programs. This protects seniors from physical risks when primary caregivers must leave the home for daily wage employment.

Establish Non-Digital and Accessible Warning Systems: Relying on digital media like WhatsApp creates systemic exclusions for the elderly. Community response teams should deploy non-digital tools (loudspeakers, town-criers) and distribute simplified, accessible communication tools pre-configured with emergency contacts to isolated seniors and their caregivers.

Build Intergenerational Knowledge-Transfer Forums: Establish platforms where elderly residents formally share traditional ecological conservation methods with disaster planning panels, combining historical wisdom with modern resilience infrastructure.

Design Specialized Senior Infrastructure: Expand on the successes of palliative care networks by investing in climate-specific senior support, such as village cooling centres and age-inclusive emergency centres adapted to the physical constraints of older adults.

Formulate Holistic Post-Disaster Rehabilitation Blueprints: Post-disaster interventions must move beyond short-term shelter. Standard operating procedures must ensure the provision of long-term climate-resilient permanent housing, clothes, customized dietary nutrition, and proactive support to rebuild property and livelihoods.

Embed Mental Health and Social Isolation Screenings: Train village health volunteers to integrate basic psychological first aid and mental health tracking into routine senior care to combat severe anxiety and mental distress caused by climate displacements and solitary living.

Develop Culturally Sensitive Evacuation Protocols: Older individuals often resist evacuation due to long-term emotional land attachments, fear of abandoning livestock, or the difficulties of relocating bedridden family members. Local disaster frameworks must execute personalized, face-to-face communication and offer temporary care structures or alternative livestock shelters to make evacuations safer and less traumatic.

Integrating with the Quantitative Findings

The quantitative and qualitative findings together show that climate resilience among older persons is built through a combination of **household preparedness, community solidarity and social protection support**. Survey findings indicate that storing food (55%), storing water (54%), housing improvements (31%), financial planning (27%) and advance preparedness (25%) are the most common coping practices. Qualitative narratives reinforce these findings, with older persons describing how they store essential supplies, continue working despite age and illness, rely on pensions and family support, maintain livestock as safety nets, and use migration of younger family members as an adaptation strategy. However, many of these measures reflect coping under constraint rather than sustainable resilience, with respondents frequently reporting borrowing money, reducing consumption and delaying healthcare during periods of stress.

Community support emerges as a critical pillar of resilience. Quantitatively, family support (56%), priority access to relief (32%) and community monitoring systems (24%) are among the most commonly reported community practices. Qualitative evidence highlights how neighbours, relatives, volunteers and village networks often provide the first line of assistance during illness, disasters and financial crises. Community caregiving for older persons living alone, informal fundraising, transport assistance and collective support during emergencies were repeatedly cited as valuable practices. These findings suggest that strong social cohesion often compensates for gaps in formal support systems, particularly in rural and disaster-prone areas.

Government interventions constitute the third major pillar of resilience. Financial assistance such as pensions and cash transfers (50%), food relief (36%), healthcare services (29%) and early warning systems (22%) are viewed as the most effective formal interventions. Qualitative findings further illustrate the importance of pensions, ration systems, health insurance, ASHA outreach, direct benefit transfers

and village health camps in reducing financial and health-related vulnerabilities. At the same time, both data sources reveal persistent gaps for older persons facing poor health, impairments, widowhood, social isolation and housing-related risks, who often struggle to access support when they need it most.

The integrated evidence points towards a common resilience pathway centred on **stronger financial protection, accessible healthcare, community-based care systems, safer housing, inclusive early warning mechanisms and targeted support for older persons facing multiple risk factors**. Widows, persons with impairments, those living alone, the oldest-old and households experiencing repeated climate shocks consistently report greater support needs. Together, the findings suggest that the most effective resilience models are those that combine self-preparedness, community care and age-responsive institutional support, while addressing the overlapping social, economic and health-related factors that shape climate resilience in later life.

13.9 District Social Welfare Officers' Perspectives on Inclusive Disaster Management

District Social Welfare Officers (DSWOs) and similar district-level stakeholders are engaged in general welfare, including pension distribution, grievance redressal, and basic support. During the study, we met with the district officials to understand the entire dynamics around climate-specific interventions for older persons. Subsequent pages highlight key findings that emerged from the discussions with the officials.

Preparedness, Planning, and Inclusivity

Pre-Disaster Administrative Preparedness and Relocation Models

Administrative preparedness often involves assessing the condition of government and NGO-run old age homes prior to a climate event. Officers collaborate across departments—including district administrations, police forces, local self-government bodies, and NGOs—to execute pre-emptive evacuation and safely relocate vulnerable residents to designated safe zones. Proactive models, such as those in Bihar (utilizing community/panchayat buildings as multi-purpose relief camps) and Odisha (systematically identifying high-risk seniors online for pre-emptive evacuation), highlight effective structural planning.

"Regarding preparedness, if we receive information about a disaster in advance, the first step taken in coordination with the district administration is to assess the condition of old age homes run by NGOs and the government and move the residents to safe locations." DSWO,Kollam, Kerala.

Inter-departmental Synergy Effective coordination among various government departments is crucial and this has now been embedded in almost all the States/ UTs

of India. The DSWO in Rajkot, Gujarat, actively coordinates with the Collector, disaster management team, and police department, being an invited member of the District Disaster Management Committee. Similarly, in Madhubani, Bihar, the DSWO collaborates with health centers to provide immediate medical assistance, including "life-saving injections for snakebite victims at their homes," highlighting the importance of rapid information exchange. Odisha also utilizes formal convergence meetings for inter-departmental coordination during disaster management

In Kolar, Karnataka, DSWO Srinivasan M notes that direct welfare schemes for senior citizens often fall under the Women and Child Welfare Department, though the DSWO participates in disaster management committees on a humanitarian basis.

Principles of Equity and Non-Discrimination in Response

In times of active climatic or environmental emergencies, standard operating frameworks prioritize saving lives equally across all demographics, ensuring a baseline of non-discrimination during immediate rescue and relief efforts.

"In my opinion, currently, there is no such discrimination related to calamities... Every life is precious. So, rescue operations are carried out, and have been carried out, without any discrimination." DSWO, Kollam, Kerala.

Gaps in Age-Inclusive Disaster Protocols

Although explicit discrimination is absent during rescue operations, a structural vulnerability remains because there are no dedicated, standalone, or age-inclusive disaster response protocols exclusively mapped out for senior citizens. Relief camps and evacuation pipelines are generally standardized rather than purpose-built, leaving the specialised medical, physical, and logistical needs of the elderly overlooked. It was revealed that currently, there is no protocol exclusively for elderly people.

Execution and Implementation Challenges

Centralization of Social Welfare Operations

A primary obstacle to timely disaster service delivery is the organizational design of social welfare and social justice departments, which often operate heavily at the centralized district level. Without a formal lower-level administrative structure (at block, subdivision, or village levels), field connectivity suffers, impeding localized communication, data monitoring, and response during emergencies.

"That is a major issue. The reason is that the Social Justice Department only operates at the district level. It does not exist at the lower levels. Therefore, we do not even reach the beneficiaries promptly."

"To reach the elderly on time, offices only exist up to the district level. There are no field-level officers or offices. Because of this, benefits for them, as well as rescue operations, cannot be implemented promptly."

"Currently, our District Social Justice Office exists only at the district level. It does not go below that. Matters at the lower levels cannot be resolved. Nothing from the lower levels can be communicated."

Digital Divide and Early Warning Vulnerabilities

Relying heavily on digital infrastructure for early weather warnings creates an informational barrier for isolated, remote, and digitally non-literate older individuals who may lack smartphones or live in border/mountain villages known as network "shadow zones". This digital gap isolates them from timely disaster warnings.

Severe Personnel Constraints and Lack of Grassroots Support

Welfare systems operate under acute human resource deficits, where a handful of officers are tasked with managing hundreds of thousands of elderly citizens across entire districts. This operational strain is further aggravated by historical administrative splits that have decoupled social welfare operations from grassroots networks, such as Anganwadi workers.

"To protect these elderly people, who constitute that percentage, there are only 535 officers in all of Kerala. If you calculate it, with this much of an elderly population in Kerala, being this percentage, there are these many lakhs of people. For those lakhs of people, there are 535 officers in the Social Justice Department, including all four sections." — "But currently, none of that is there now. After the department split, we are not getting the service meant for Anganwadi workers." — DSWO, Kollam, Kerala.

Spatial and Inter-departmental Policy Gaps

Strategic Insights: Large geographical expanses spanning dozens of talukas feature wildly divergent terrain, compounding administrative challenges. In the absence of formalized, localized senior-citizen crisis guidelines, uniform aid distribution becomes highly complex. Inter-departmental boundaries mean that social welfare officers often find critical recovery needs (such as housing reconstruction) routed out of their jurisdiction entirely.

"The extent is large. The district is big, it's a district of 16 talukas. And the geographical conditions are different everywhere... Especially for the elderly, or certain specific

policies or guidelines, they are not yet laid down..." DSWO, Yvatmal district, Maharashtra.

"Immediately, the Collector writes to the Housing Department. They take it up. ... In our control... in our jurisdiction, those things do not come" — DSWO, Anantapur, Andhra Pradesh

Climate Risk Perception & Vulnerability of Older People

Observed Climate Disruptions and Microclimatic Changes

Widespread shifts in climatic baseline conditions have been observed across multiple regions, manifesting as severe temperature variations and prolonged extreme heat waves. Microclimatic anomalies are increasingly attributed to urbanization and unsustainable land use, such as clearing natural biodiverse forests to make way for monoculture commercial plantations, which is noted to spike local environmental temperatures by 3 to 4 degrees Celsius.

"There are very big changes in the climate. In our district, in many parts of the district, there are very big changes. A lot of forest areas have been cleared, and the government has established plantations there... In all these plantation areas, the temperature is three to four degrees higher than in natural forests because of these plantations." — DSWODSWO, Kollam, Kerala

""But this year, the heat is terrible, and various guidelines are being issued by the collector's office. It feels more this year... because they are talking about the El Niño effect, its impact is there." — DSWO, Yavatmal, Maharashtra

Uttarakhand's Rudraprayag district, being mountainous, is "entirely prone to various climate disasters like unseasonal rains, cloudbursts, landslides, and earthquakes," (DSWO Office, Rudraprayag)

Intersectionality of Isolation and Climate-Induced Displacement

Older persons experience acute physical and psychosocial vulnerability during disasters due to the compounding impacts of age-related disabilities, economic insecurity, and severe social isolation. This vulnerability is further exacerbated by climate-induced out-migration, where environmental breakdown (such as rising water levels or animal conflicts) prompts younger generations to flee entire settlements, creating a growing cohort of "left-behind" elderly who are isolated without community or kinship safety nets.

"At Munroe Island, due to rising water levels, everyone there has abandoned the place and left. Currently, it is almost deserted. It's only used for tourism... That village called Rosemala, where about 150-200 people used to live, doesn't exist anymore." — DSWO, Kollam, Kerala

Demographic Disparities in Institutional Care

When families neglect elderly relatives, finding rehabilitation options presents gendered challenges. Most old age facilities managed by NGOs or religious charities are structured primarily to take in and protect vulnerable mothers, resulting in a severe shortage of institutional spaces available for elderly men.

"Most of the NGO homes are run by our Christian churches and sisters. So, most of those are institutions that protect mothers. But the number of institutions that protect men is very low. Therefore, we often face a big challenge in the rehabilitation of men." — DSWO, Kollam, Kerala

Discrepancies in Risk Perceptions and Low Crisis Urgency

There is a pronounced regional variance regarding how climate and disaster risks are perceived by local administrations. While certain districts acknowledge intense microclimatic heat trends or global phenomena like El Niño, others display a low sense of urgency, underestimating vulnerabilities because the area has not historically experienced catastrophic disasters like earthquakes or major river floods. This promotes a reactive rather than proactive administrative posture.

"But this year, the heat is terrible, and various guidelines are being issued by the collector's office. It feels more this year... because they are talking about the El Niño effect, its impact is there." — DSWO , Yavatmal, Maharashtra

"In Ratlam district, there's no such thing, like there's no natural disaster, like we haven't seen earthquakes to date, nor any flood situation because there are no such large rivers. The heatwave is also not that much, though this year we definitely felt that the heatwave is a bit more here, but before this, it wasn't like that." — DSWO office, Ratlam, Madhya Pradesh

Local Knowledge and Good Practice

Preventive Awareness Frameworks for Weather Mitigation

Inter-departmental coordination models showcase effective baseline practices, where medical and health organizations (e.g., DM&HO and DCHS) issue seasonal public advisories and press releases to guide the elderly on heatwave management, behavioral changes, and hydration protocols.

"For them, already sir... before such things occur, the DM&HO and DCHS create awareness among them and tell them not to come out from 9 AM in the morning to 4 PM in the evening... Plus, they should keep drinking cold buttermilk and keep drinking water all the time... we used to issue a press note in the papers saying ORS should be taken." — DSWO, Anantapur, Andhra Pradesh

Digital Portals for Transparent Welfare Execution

Leveraging centralized web portals for social welfare programs, such as pension rollouts and automated updates, has successfully minimized traditional service gaps, establishing transparency and public accountability. Other successful models include doorstep biometric services for life certification to reduce travel burdens on frail individuals.

"No, there is no gap now... pension scheme... now it has been arranged so that you can do it from your mobile while sitting at home... Now everything is done through the portal. The implementation is visible to everyone. It is available in the public login." — DSWO, Madhubani, Bihar

Institutional Senior Engagement Networks

Organizing quarterly advisory board meetings with dedicated Senior Citizen Associations, chaired by top district executives (such as District Collectors), ensures structured feedback channels to guide the localized enforcement of elderly welfare policies.

"Yes, we also have a senior citizens' association, and we hold a meeting on senior citizen policies every three months. If there are any problems... the Collector is the chairman, and under his chairmanship, we implement the senior citizen policy." — DSWO, Yavatmal, Maharashtra.

"Community members, including the Village Head and local residents, provide collective support to vulnerable elderly during disasters," with no caste discrimination observed in the mountains — DSWO Office, Rudraprayag, Uttarakhand

Future Outlook and Policy Recommendations

Purpose-Built Specialized Housing Systems ('Couple Homes')

A critical, unmet structural demand exists for specialized housing setups that allow aging couples to stay together during long-term institutionalization or disaster displacement. The absence of "Couple Homes" forces partner separation, underlining an urgent area for capital funding and development.

"So, one of their main demands is to let them stay together as a couple. Unfortunately, there are currently no homes where they can stay together like that. They are called 'Couple Homes'." — DSWO, Kollam, Kerala

Scientific Retrofitting of Aging Infrastructure

While contemporary building guidelines mandate barrier-free and elderly-friendly construction features, less than half of older public structures comply with these

scientific standards, presenting persistent safety concerns during emergency evacuations.

"Less than fifty percent. Because are all the buildings constructed in a scientific manner? [...] Now, after this MWBC Act came, it has been about five to eight years that the government started concentrating on these elderly-friendly things." — DSWO, Kollam, Kerala

Reforming Legal Structures and Establishing Dedicated Courts

The existing legal template—specifically the Maintenance and Welfare of Parents and Senior Citizens (MWPSC) Act—is criticized as weak and slow to execute. Protracted litigation outlasts the lifespans of distressed elders, motivating strong recommendations to form dedicated, fast-track senior citizen tribunals to achieve rapid justice, similar to protection frameworks in other segments.

"The weakness of our Maintenance and Welfare of Parents and Senior Citizens (MWPSC) Act for the elderly is a big factor. It is a weak Act. By the time the case goes on for five years, the person might lose their life. Therefore, there is a conciliation panel for this at the very beginning. That panel should call both parties, talk to them, and take a decision. That decision should be accepted by both parties. That is mostly not implemented. So, for the elderly, a... Fast-track courts or tribunals should operate specifically for senior citizens in all courts, just like existing fast-track courts." — DSWO, Kollam, Kerala

Baseline Local Mapping and Target-Driven Welfare Schemes

Policy models must prioritize comprehensive, localized surveys at the panchayat level to map individual health, dietary, and economic needs, moving beyond data restricted only to pension beneficiaries. New protective schemes covering essential needs—including free transport systems and community kitchens for economically vulnerable elders—must be formalized.

"Providing travel facilities for economically backward elderly people was more essential than making travel free for women; many elderly people would have benefited from it." —

"What I mean is, they are the ones who built this country first. So, in their old age, we must move forward by protecting them. Therefore, schemes for that should be formulated." —

"Similarly, at the panchayat level, an elderly survey must be conducted first. After that, provide treatment for them."

Intergenerational Support and Family Counselling

To mitigate abandonment and address psychological distress caused by loneliness and family neglect, family-focused policy interventions are needed. Counselling targeted at children can foster intergenerational empathy and community protection models.

"...counseling for children is crucial [to improve support for elderly parents, fostering empathy and understanding, as many elderly in old age homes actually have children.]" — DSWO, Ramnathpuram, Tamil Nadu

Introduction and Role in Climatic Disasters

Mandate of General Social Welfare vs. Disaster Roles

The institutional mandate of Social Welfare and Social Justice officers centres on general scheme management for four specific groups: senior citizens, persons with impairment, transgender individuals, and probationers. Managing routine pensions and grievance relief defines their core day-to-day operations.

"I have been working in this Social Justice Department for 21 years. My main role involves implementing schemes for four categories of beneficiaries of the Social Justice Department: senior citizens, people with disabilities, transgender individuals, and probationers. Implementing the schemes for these four groups is the primary duty of the Social Justice Department." DSWO, Kollam, Kerala

Structural Separation from Active Disaster Infrastructure

A significant systemic disconnect is that social welfare officers are frequently decoupled from active disaster management committees or prevention frameworks. This organizational distance means they may overlook on-the-ground environmental trends or treat emergency planning as the exclusive responsibility of separate administrative teams.

"Regarding disaster management, nothing specific has ever come to our attention,. ... We are not in disaster management,. There is a separate wing for that, and a separate officer." DSWO, Anantapur, Andhra Pradesh

"We haven't been told to do anything like that. To act proactively, for us... if in case we feel that some emergencies are coming up, they will be ready; our department will be ahead of everyone else, as far as I know. ... But we haven't received anything regarding prevention. Since there is a Disaster Management department, they will take it up." — DSWO, Anantapur, Andhra Pradesh

Scope Limitations in Routine Welfare Portfolios

Because departments focus strictly on routine programs (such as general pensions like the Asara scheme), broader elements—such as climate-resilient emergency care,

specialized nutrition, or cooling spaces—remain unaddressed and outside their administrative scope.

"For them, currently, there are no welfare schemes at all, in old age. ... There is only the Asara scheme. There is the pension... that's it. ... Those are all different departments, sir. That is not under our control at all." — DSWO, Anantapur, Andhra Pradesh

Standalone Documentation and Senior Identity Cards

To streamline tracking and delivery of routine and emergency support, officers emphasize the value of establishing specialized, standalone documentation—such as dedicated Senior Citizen Identity Cards—comparable to essential nation-wide identity systems.

Action matrix for age-inclusive Disaster Management

Table 14: Action Matrix for Age-inclusive Disaster Management

Identified Gap	Finding	Recommendation
Centralized District Structure & Digital Exclusion	Social Welfare offices operate strictly at district headquarters with zero lower-tier sub-offices or dedicated field staff, creating severe informational bottlenecks for remote elders during app alerts.	Decentralize outreach by appointing dedicated senior welfare nodal officers inside local panchayats and formalize "Elderly Gram Sabhas" for direct consultation.
Fragmented, Pension-Restricted Data	Welfare registries are narrow and restricted exclusively to low-income pension recipients, rendering all non-pensioned elderly invisible to risk mapping.	Prioritize and finance an allinclusive, regular local survey to create a unified database integrated directly into the District Disaster Management systems
Infrastructural Design Dichotomy	While recent rules ensure newer public buildings feature accessibility designs, over 50% of existing structures and relief buildings lack basic senior-friendly engineering features	Launch structured state programs to retrofit existing community buildings and public shelter infrastructure with specialized senior provisions.
Institutional Male Care Deficit	Existing NGO-managed old-age homes are heavily run by church organizations tailored exclusively for mothers, leaving single or abandoned older men with no care options.	Fund and establish specialized municipal care facilities for elderly men and establish co-located "Couple Homes" to protect partnerships. Disaster Wing Disconnect Several DSWO
Disaster Wing Disconnect	Several DSWO departments are completely excluded from direct representation in a formal Disaster Management Committees, viewing emergency response as an external jurisdiction.	Mandate the legislative integration of DSWO representatives into all District Disaster Management Committees to embed age-inclusive design.

13.10 Conclusion

The qualitative findings reinforce and deepen the quantitative evidence by revealing how climate change is experienced not as a series of isolated disasters but as an ongoing reality that shapes the everyday lives, wellbeing and security of older persons. Across diverse geographies and hazard contexts, older persons described climate stresses as interacting with existing challenges related to ageing, poor health, declining livelihoods, financial insecurity, social isolation and care dependency. The narratives consistently demonstrate that climate vulnerability is highly unequal, with older women, widows, persons with impairments, those living alone, the poorest households and those residing in hazard-prone locations facing the greatest difficulties in preparing for, coping with and recovering from climatic shocks. These findings strongly validate the Intersectional Place Perspective (IPP), showing that resilience is shaped not only by exposure to hazards but by the interaction of social, economic, health and environmental factors.

At the same time, the qualitative evidence highlights the remarkable agency and resilience of older persons and their communities. Family support, neighbourly assistance, community solidarity, local knowledge and practical preparedness measures emerged as the primary foundations of resilience, often compensating for gaps in formal systems. However, stakeholders and older persons alike emphasised that community efforts alone are insufficient in the face of increasingly frequent and severe climate stresses. Effective resilience requires stronger integration of social protection, healthcare, early warning systems, age-friendly disaster preparedness, livelihood security and targeted support for high-risk older persons. The findings suggest that the most successful resilience pathways are those that combine household preparedness, family and community care networks, and responsive institutional support within an inclusive framework that recognises older persons not merely as beneficiaries of assistance but as active contributors to climate adaptation and community resilience.

14. CONCLUSIONS, STRATEGIC INSIGHTS AND RECOMMENDATIONS

14.1 Overall Conclusions

The study demonstrates that climate resilience among older persons is fundamentally an issue of ageing, health, care, social protection and environmental justice rather than disaster exposure alone. Across the ten states studied, climate-related risks are increasingly embedded in everyday life through recurring heat stress, drought, flooding, heavy rainfall, coastal erosion and other environmental hazards. These hazards affect older persons not only through direct exposure but also through their impacts on health, mobility, livelihoods, housing, access to services and social support systems.

The qualitative findings further demonstrate that climate change is experienced by older persons not only through major disasters but also through the gradual disruption of everyday life. Older persons consistently described rising temperatures, changing rainfall patterns, water scarcity, declining agricultural productivity and environmental degradation as ongoing stressors that affect health, livelihoods, mobility, nutrition and social wellbeing. The narratives reveal that climate resilience is as much about maintaining dignity, independence, social connectedness and continuity of care as it is about surviving climatic events. While older persons possess considerable knowledge, experience and adaptive capacity, these strengths are increasingly strained by weakening family support systems, youth migration, rising care burdens and growing economic insecurity

The findings strongly validate the Intersectional–Place Perspective (IPP). Risk factors are not determined by age alone but emerges through the interaction of multiple disadvantages including poor health, impairment, widowhood, living alone, financial insecurity, inadequate housing and residence in environmentally exposed locations. Conversely, resilience is strengthened through family support, social connectedness, financial security, access to healthcare, institutional support and community solidarity. Climate resilience therefore reflects the cumulative balance between protective and risk factors operating across individual, household, community and institutional levels.

14.2 Emerging Patterns across States and Hazard Types

Several consistent patterns emerge despite differences in geography and hazard exposure.

First, health impacts represent the most universal consequence of climate-related stress. Whether in drought-prone, flood-prone, erosion-prone or heat-affected areas, deteriorating physical health, chronic disease burdens, reduced mobility and mental stress emerge as the most significant pathways through which climate risks affect older persons.

Second, repeated exposure does not necessarily lead to greater being at risk. In many highly exposed communities, older persons demonstrate stronger preparedness, adaptive capacity and coping mechanisms. However, repeated exposure simultaneously erodes savings, assets, livelihoods and recovery resources, creating a paradox where preparedness improves but recovery becomes increasingly difficult.

Third, hazard type shapes the nature of risk factors. Floods, cyclones, heavy rainfall and coastal erosion tend to generate acute impacts on housing, displacement and asset loss, while droughts, heat stress and water scarcity create slower but cumulative pressures on health, livelihoods, nutrition and household wellbeing.

Finally, the same social groups consistently emerge as at risk across all hazard contexts, indicating that social and structural disadvantages are often more important predictors of outcomes than hazard type itself.

14.3 Key Drivers of Risk

The study identifies six major drivers of risk.

Health Risk

Poor physical health, chronic illnesses, mobility limitations, sensory impairments, cognitive difficulties and poor mental health consistently reduce preparedness, adaptive capacity and recovery potential.

Social Isolation

Older persons living alone face higher risks due to weaker access to information, care, emergency assistance and emotional support during and after climate-related events.

Economic Insecurity

Financial dependence, low income, lack of savings and insecure livelihoods reduce the ability to prepare for disasters, absorb losses and recover from shocks.

Housing Risk

Poor ventilation, inadequate roofing, structural weakness, dampness, unsafe water access and environmentally exposed housing significantly increase climate-related risks.

Institutional Exclusion

Information barriers, documentation requirements, administrative complexity and limited outreach contribute to exclusion from social protection and disaster support systems.

Place-Based Exposure

Residence in flood-prone, drought-prone, erosion-prone or otherwise environmentally fragile locations creates cumulative and recurrent risks that compound existing risk factors.

Together, these factors create overlapping risk profiles, with the greatest risks concentrated among older persons experiencing multiple disadvantages simultaneously.

Weakening Care and Support Systems

Qualitative evidence highlights the gradual erosion of traditional family and community support systems as an emerging risk factor. Migration of younger family members, changing family structures, increasing economic pressures and declining intergenerational interaction are reducing the availability of informal care and support for many older persons. These trends are particularly significant for widows, persons with impairments and those living alone, who often rely heavily on family and community assistance during climate-related crises.

14.4 Drivers of Resilience

The findings reveal that resilience is generated through interconnected protective systems.

Family and Care Networks

Family support remains the strongest determinant of resilience, providing practical assistance, financial support, emotional care and disaster response assistance.

Community Cohesion

Neighbourhood support systems, community organisations, volunteers and local social networks provide critical support during preparedness, response and recovery phases.

Financial Security

Income, pensions, savings, productive assets and livelihood diversification significantly strengthen resilience and recovery capacity.

Healthcare Access

Accessible healthcare systems, continuity of treatment and access to medicines are central to resilience among older populations.

Government Support

Social protection programmes, disaster relief, pensions, healthcare schemes and public support mechanisms provide essential safety nets.

Information and Early Warning

Timely and understandable warnings improve preparedness, enable protective action and reduce disaster impacts.

The most resilient households are those where several of these protective factors operate simultaneously.

Local Knowledge and Lived Experience

Older persons possess valuable environmental knowledge, historical memory of disasters and practical coping strategies developed over decades of experience. The qualitative findings show that traditional practices related to water management, food storage, housing adaptation, agricultural decision-making and community cooperation continue to support resilience. These knowledge systems represent important but under-recognised assets that can strengthen local climate adaptation efforts.

14.5 Structural and Environmental Inequalities

A central finding of the study is that climate risk factors among older persons are deeply rooted in broader structural inequalities.

Health inequalities, income inequalities, gender disparities, impairment-related exclusion, social isolation and uneven access to public services all shape resilience outcomes. Environmental inequalities further reinforce these disadvantages, as poorer households are often concentrated in areas characterised by weak infrastructure, insecure housing and greater exposure to environmental hazards.

The qualitative findings reveal that many older persons experience a form of "everyday risk" created by the interaction of poor health, inadequate services, social isolation, environmental degradation and financial insecurity. These disadvantages often remain invisible within conventional disaster management systems because they accumulate gradually over time rather than during major emergencies. The evidence therefore highlights the importance of addressing slow-onset and chronic environmental stress alongside sudden-onset disasters within resilience planning.

The findings therefore suggest that climate resilience cannot be built solely through disaster management interventions. It requires addressing underlying inequalities in healthcare access, income security, housing quality, social protection coverage and care support systems.

14.6 Place-Specific and Intersectional Policy Pathways

The evidence supports a shift away from universal approaches towards differentiated and targeted interventions.

An older widow living alone in a drought-prone village faces different risks and support needs than an older farmer living with family in a flood-prone district. Similarly, older persons with impairments require different preparedness and response measures than physically active older adults.

Future policy frameworks should therefore combine:

- Hazard-specific interventions
- Place-specific adaptation strategies
- Life-course and ageing perspectives
- Gender-responsive approaches
- Impairment-inclusive programming
- Targeted support for high-risk older persons

The IPP framework demonstrates that effective climate resilience policies must simultaneously address both environmental exposure and social risk factor.

14.7 Strategic Insights for Policy and Programming

The study generates seven overarching strategic insights:

1. Climate resilience for older persons is primarily a health and care issue.
2. Building resilience requires equal attention to preparedness, response and recovery.

3. Family and community care systems remain indispensable and should be strengthened rather than replaced.
4. Universal programmes alone cannot adequately reach highly at risk older persons.
5. Financial security is a foundational determinant of resilience.
6. Housing quality functions as a critical frontline defence against climate risks.
7. Climate adaptation, disaster risk reduction, healthy ageing and social protection policies must be integrated into a single elderly resilience framework.
8. Older persons should be recognised not only as beneficiaries of assistance but also as active contributors to resilience through their roles in caregiving, household support, livelihood management, community networks and the preservation of local knowledge, and resilience programming should build upon these capacities alongside addressing their needs and risk factors.

14.8 Recommendation Framework

The findings of this study demonstrate that climate resilience among older persons is shaped by far more than exposure to climate hazards alone. Health, social support, financial security, housing conditions, access to services and local environmental contexts all influence the ability of older persons to prepare for, cope with and recover from climate-related shocks. The following recommendations provide a comprehensive and age-inclusive framework for strengthening resilience across these interconnected dimensions, with particular attention to older persons facing multiple and overlapping risk factors.

Disaster Preparedness

- Develop village-level elderly at risk registers.
- Institutionalise age-sensitive disaster preparedness planning.
- Conduct regular preparedness drills involving older persons.
- Establish assisted evacuation protocols for older persons with impairments, chronic illnesses and mobility limitations.
- Strengthen Village Disaster Management Committees with explicit responsibility for elderly inclusion.

Climate-Resilient Older persons' Care Systems

- Develop integrated climate-resilient older persons' care models.
- Expand home-based care services.
- Establish community caregiver support systems.
- Integrate climate preparedness into older persons' care programming.
- Promote village-level elderly support and monitoring networks.

- Strengthen support systems for family caregivers who provide the majority of care during climatic emergencies.
- Develop respite care, caregiver training and psychosocial support programmes for caregivers of dependent older persons.
- Promote community-based care models for older persons living alone.

Strengthening Social Protection

- Increase pension adequacy and inflation protection.
- Introduce emergency pension top-ups following disasters.
- Expand anticipatory cash transfer mechanisms.
- Strengthen livelihood protection and income diversification programmes.
- Simplify access to welfare schemes and benefits.

Inclusive Health Systems

- Strengthen climate-resilient primary healthcare systems.
- Expand mobile geriatric health services.
- Ensure continuity of medicines during disasters.
- Integrate heat-health and climate-health action plans.
- Strengthen mental health and psychosocial support services.

Mental Health and Wellbeing

- Integrate loneliness, social isolation and psychosocial wellbeing into climate resilience programming.
- Establish community companionship and social engagement initiatives for widows, persons with impairments and older persons living alone.
- Strengthen mental health outreach during and after climatic events.

Housing and Infrastructure Adaptation

- Promote climate-resilient and age-friendly housing retrofits.
- Improve ventilation, cooling and thermal comfort.
- Strengthen flood-resistant and weather-resistant construction.
- Improve water supply and sanitation infrastructure.
- Prioritise support for elderly households in environmentally at risk locations.

Community-Based Care Models

- Establish Older Persons' Climate Resilience Groups.
- Promote community monitoring systems.

- Develop volunteer-based support networks.
- Strengthen intergenerational support mechanisms.
- Scale successful community care models identified in the study.
- Establish village-level neighbour support and "buddy" systems for older persons living alone.
- Create community volunteer networks responsible for regular welfare checks before, during and after climatic events.
- Promote intergenerational engagement programmes that strengthen connections between youth and older persons.

Inclusive Communication and Early Warning

- Develop elderly-sensitive warning systems.
- Use multiple communication channels including interpersonal communication.
- Ensure warnings are accessible to persons with hearing, vision or cognitive impairments.
- Promote household preparedness education.
- Improve last-mile communication systems.
- Reduce dependence on digital-only communication channels.
- Strengthen interpersonal communication through ASHAs, Panchayats, volunteers and community leaders.
- Develop warning messages specifically tailored to the needs of older persons and persons with impairments.

Gender and Impairment Mainstreaming

- Mainstream gender and impairment considerations across all resilience programmes.
- Prioritise widows, elderly women living alone and persons with impairments.
- Ensure impairment-inclusive relief, shelter and evacuation arrangements.
- Expand assistive devices and accessibility support.

Institutional Coordination

- Establish convergence mechanisms between disaster management, health, social welfare, rural development and ageing programmes.
- Integrate ageing indicators into climate adaptation plans.
- Strengthen district-level coordination platforms.
- Develop dedicated elderly resilience action plans.
- Incorporate older persons' lived experiences and traditional knowledge into local adaptation and disaster planning.

- Include older persons directly within Village Disaster Management Committees and local resilience planning structures.

Environmental Health and Indoor Climate Adaptation

- Address indoor heat stress, ventilation and dampness.
- Improve access to safe drinking water.
- Reduce smoke exposure and indoor air pollution.
- Promote household-level environmental adaptation measures.
- Integrate environmental health into ageing and resilience policies.

Data, Monitoring and Research Systems

- Incorporate ageing-disaggregated indicators into disaster and climate databases.
- Develop Elderly Climate Resilience Monitoring Systems.
- Institutionalise risk factors mapping of high-risk older persons.
- Strengthen longitudinal research on climate and ageing.
- Monitor resilience outcomes across gender, impairment, living arrangement and hazard categories.

14.9 Recommendation Priority Framework

The **Recommendation Priority Framework** organises the study's recommendations into a phased roadmap for strengthening climate resilience among older persons. Recognising that resilience is shaped by multiple interconnected factors, the framework distinguishes between interventions that require immediate action, those that strengthen adaptive capacity over the medium term, and longer-term reforms that create sustainable and age-inclusive resilience systems.

- The **Immediate Priorities (0–2 years)** focus on addressing the most critical risk factors identified in the study, particularly poor health, financial insecurity, inadequate care support and low preparedness for climate-related disasters.
- The **Medium-Term Priorities (2–5 years)** aim to strengthen resilience through improved housing, community-based care systems, inclusive communication and early warning mechanisms, gender and impairment inclusion, and environmental health improvements.
- The **Long-Term Priorities (5+ years)** focus on institutionalising resilience through stronger inter-sectoral coordination, integrated planning, monitoring systems and evidence generation on climate and ageing.

Across all priority areas, particular attention should be directed towards older persons facing multiple and overlapping risk factors, including those living alone, widows, persons with impairments, the oldest-old, financially insecure households

and those residing in climate-exposed locations. Together, the framework provides a practical pathway for moving from short-term protection towards long-term, sustainable climate resilience for older persons.

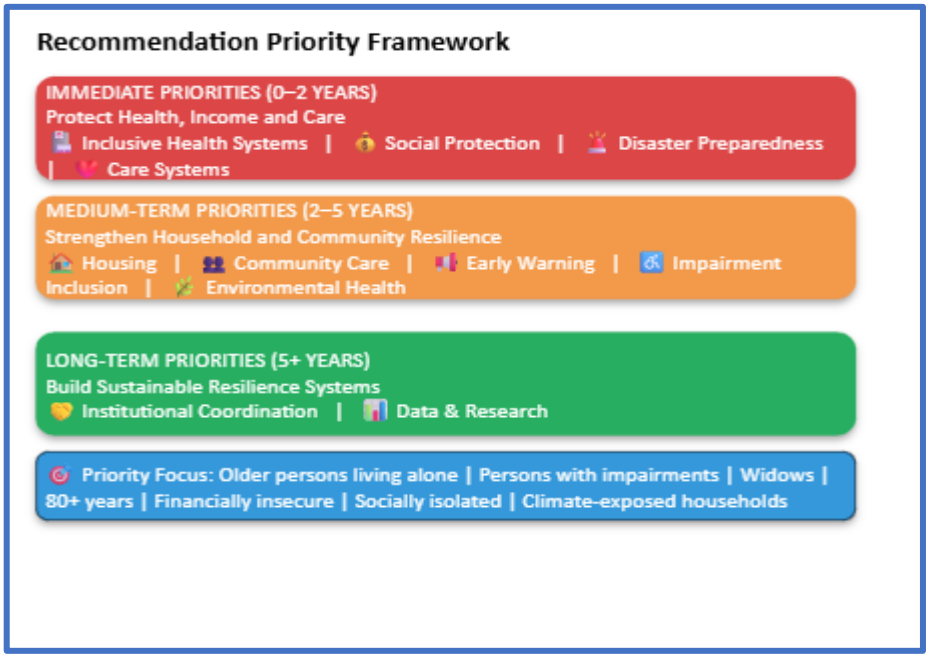

Figure 66: Recommendations Priority Framework

The study demonstrates that older persons are not passive victims of climate change but active agents of adaptation and resilience. However, resilience remains unevenly distributed and is strongly influenced by health status, social support, economic security, housing quality and place-based exposure. Building climate resilience for older persons therefore requires a transition from hazard-centred approaches to people-centred approaches that place ageing, care, equity and inclusion at the heart of climate adaptation and disaster risk reduction policy.