



# Climate Resilient Ageing: Ensuring Care, Dignity & Agency

A HelpAge India Report 2026



## 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 vulnerable because climate risks interact with age-related health conditions, reduced mobility, economic insecurity, social isolation and dependence on care systems. Vulnerability 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 vulnerability 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 elders.
- **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 vulnerability is 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 elders 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 vulnerable elders.
- **Composite vulnerability profile:** The groups facing the greatest compounded vulnerability include **older persons living alone (13%), widows (33%), oldest-old aged 80+ (28%), Scheduled Tribe elders (17%), never-married elders (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 elder 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 vulnerable 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 profile:** Livelihoods are dominated by **pensions (49%)**, 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%.**
- **Living 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 **elder 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 Vulnerability, 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 vulnerability 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**

**vulnerability**, 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 vulnerable 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 elderly 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 vulnerability.
- 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 vulnerable 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 vulnerability, low income and severe disaster exposure, indicating that relief systems are not reaching all vulnerable 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)**, elderly persons living alone, those with impairments or chronic illness, elderly 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 vulnerability arises 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 vulnerable 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.

## Conclusions

The study demonstrates that climate resilience among older persons is shaped not only by exposure to climate hazards but by the interaction of health, income, housing conditions, social connectedness, care support and access to institutional services. While a large majority of older persons have experienced climate-related hazards, many have developed practical coping and adaptation mechanisms supported primarily by family and community networks. However, resilience remains unevenly distributed. Older persons living alone, the oldest-old, widows, persons with impairments, those experiencing poor physical or mental health, financial dependency and insecure housing consistently face poorer outcomes across preparedness, adaptation and recovery. The findings highlight that climate risks are cumulative, with multiple risk factors reinforcing one another and increasing the likelihood of exclusion, reduced wellbeing and slower recovery from climate shocks.

## Recommendations

Strengthening climate resilience among older persons requires an integrated and age-inclusive approach that combines climate adaptation with health, social protection and care systems. Priority should be given to improving access to climate-responsive healthcare, strengthening pensions and livelihood security, promoting resilient and age-friendly housing, and expanding targeted support for older persons living alone and other at-risk groups. Community-based care networks, older persons' groups, accessible early warning systems and age-sensitive disaster management mechanisms should be strengthened to complement family support systems. At the policy level, ageing considerations should be systematically integrated into climate adaptation, disaster risk reduction and social welfare programmes, with particular emphasis on identifying and supporting older persons facing multiple overlapping risk factors to ensure that no one is left behind in building climate resilience.

