PEOPLE'S ACTION FOR NATIONAL INTEGRATION (PANI)

"The earth, the land and the water are not an inheritance from our forefathers, but on loan from our children. So, we have to hand it over to them at least as it was handed over to us."

- *Mohandas Karamchand Gandhi*

Strategy Document
on
Climate Change Integration in Thematic Areas

May 2024

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Chapter 1: Introduction

PANI is a social development organization working in developing regions of states in the north of India since 1986. It primarily focusses on the states of Uttar Pradesh (UP), Bihar and Himachal Pradesh. It has its roots in the Gandhian philosophy of rural reconstruction and nation building by keeping people's actions at the center. Its objective is to bring positive and **sustainable change** in the lives of communities living in abject poverty and undue inequality.

PANI envisions itself as a medium for building an inclusive society that prospers in **harmony with its surroundings**. Its mission is to empower people so that they have greater control over their life situations and take responsibility to make a world that is mutually rewarding. Inclusiveness, government collaboration, gender focus, **sustainability**, participatory collective action and **integration of issues** constitute its key approaches.

PANI divides its work into the following seven thematic areas:

1. Gender and Governance (Women and Adolescent Girls' Empowerment)
2. Sustainable Livelihood Development
3. Community Health, Nutrition and WASH
4. Integrated Child Development
5. Natural Resource Management (NRM) and Climate Change
6. Integrated Community Development
7. Humanitarian Response Initiative on Disaster and Pandemics

Implementation is the core strength of PANI. It works to address the root causes of poverty and inequality through community-based interventions. It engages with women, children, youth, adolescent girls, small and marginal farmers, and migrant workers at the grassroots. It strives for changes in their life situations so that they can live a life with dignity.

PANI is part of multiple development alliances at state, national and international levels and enjoys credibility of some of the big philanthropic funders from around the world. It has implemented more than 100 projects in the last three decades and has directly outreached and benefitted 25 lakh households and 1.25 crore individuals. Through its interventions, PANI has successfully developed various cost effective, replicable and scalable development models under all its thematic domains.

PANI believes in nurturing CSOs working at the grassroots, and their networks and capacities. So, it facilitated creation of the Supporting Association for Thematic and Holistic Initiative in 1992. As on date, 469 CSOs are its members. It launched a Rural Change Makers Program to build a cadre of development professionals comprising adolescent girls of UP.

PANI implements the programs with a high level of commitment. It respects people's dignity and tries its best to deliver high quality results in a manner accountable to stakeholders. It has been recognized for its sincere efforts. Guide Star India honored it for transparency, Credibility Alliance commended it for good governance and the Charities Aid Foundation for process validation.

The description elaborated above shows that PANI takes a holistic approach to development and believes in presenting a development paradigm that has deep foundation in sustainability. However, climate change is emerging as real threat across the globe. Many countries are already experiencing adverse impacts on almost all aspects of lives. Those at the "bottom of the pyramid" are bearing the maximum brunt because they have the least capacity to adapt. Thus, it becomes crucial for PANI to integrate the climate consideration in its overall strategy as climate change is impacting and will impact almost all of its work streams and projects in the times to come.

Considering the above aspect, this strategy document has been created for PANI. It will help the organization in the following ways:

A. **Align its mission and activities with broader sustainability goals**, enhancing their relevance and effectiveness in addressing interconnected social and environmental challenges.
B. **Identify and mitigate risks to its operations and stakeholders**, such as increased vulnerability of target populations or damage of infrastructure from extreme weather events.
C. **Identify opportunities for innovation, collaboration, and positive impact** in addressing climate-related issues within its areas of expertise and influence, potentially unlocking new funding sources, partnerships, and programmatic initiatives.
D. **Enhance its resilience to external shocks and uncertainties**, safeguarding its long-term viability and ability to deliver on its mission despite changing environmental conditions.
E. **Foster dialogue, collaboration, and collective action** among staff, volunteers, donors, partners, and communities, strengthening relationships and building a sense of shared purpose and responsibility for addressing climate change.
F. **Build organizational capacity** by raising awareness, enhancing knowledge, and building skills among staff and volunteers on climate-related issues, fostering a culture of learning, innovation, and continuous improvement.
G. **Enhance brand reputation and credibility** among donors, funders, partners and the public, positioning it as a forward-thinking and responsible steward of resources and mission-driven impact.
H. Lead to **resource efficiencies, cost savings, and environmental benefits**, such as reducing energy consumption, minimizing waste generation, and promoting sustainable procurement practices.
I. Leverage its expertise, networks, and efforts to **create evidence to provide to the policy makers**, mobilize investment and collective action on climate-related issues at local, state, national and global levels, amplifying its impact and catalyzing systemic change.

Chapter 2: Impact of Climate Change on PANI's Work, Beneficiaries and Stakeholders

2.1 Climate change challenges facing the region and communities being served by PANI

Climate change is real and it is upon us. India is one of the hardest hit countries. Some of the key impacts of climate change that regions and people being served by PANI are dealing with are as follows:

A. **Agriculture adversely impacted:** Climate change is playing havoc with the already unpredictable monsoon, which farmers in vulnerable rainfed areas so heavily rely upon to grow crops.
B. **Droughts, floods and pest attacks intensify:** Over the past few decades, the intensity of rainfall has increased as extreme weather events become more frequent and widespread. There are also periods of droughts interspersed with floods. These intense, extreme weather events cause huge losses and damages to UP's agriculture-based economy and to lakhs of farmers. Extreme weather events also lead to increased crop vulnerability to infection and pest infestation. In 2020, and for the first time in 27 years, UP was one of many states affected by a vicious swarm of locusts that originated due to unusually heavy rains over North Africa and the Arabian Peninsula.
C. **Ecosystem, goods, and services affected:** Shifting weather patterns as a result of climate change, especially variable rainfall, and temperature, are impacting ecosystem services (water, air quality, pollination, etc.), thus, magnifying the existing risks of rural communities and their vulnerability to disasters.

A recently released study by the Indian Institute of Technology, Kharagpur and the University of Augsburg has revealed that the Indo-Gangetic Plain (IGP) that happens to be PANI's primary area of operation and home to half of the Indian population will soon become a hotspot of extreme climate events. There will be dual devastation caused by extreme heat and heavy rains. Even in the most favorable scenario, people in the IGP will be severely affected by climate change. It will not only increase the population living in poverty, but will also exacerbate the conditions of those currently impoverished. It is feared that climate change will emerge as a "threat multiplier" by escalating social, political and economic tensions.

Specifically, what makes Uttar Pradesh particularly vulnerable to adverse impacts of climate change are factors including but not limited to- unique geography, location, socio-economic structure, demography, and the state's economy. UP is home to some of the world's most polluted cities. The economy of UP is predominantly agrarian, and the state is India's largest producer of grain. The Ministry of Agriculture and Farmers' Welfare, Government of India acknowledged in 2019 that climate change is expected to reduce the state's output of wheat, maize, potatoes and milk. Rapid warming in the Himalayas, in turn melting glaciers faster, also has a significant impact on the state, which lies in the Ganga basin. An August 2021 study

found that the melting snow and glaciers will swell the Ganga River, and changed seasonality will affect farming, other livelihoods, and the hydropower sector, while causing floods downstream. In the Ganga basin, more than 70% of its replenishable groundwater had been extracted by 2021. Much of rural UP continues to live in a state of deprivation and therefore, vulnerable to climate change which threatens their life and livelihoods.

2.2 Potential climate change impacts on PANI's target beneficiaries and areas of operation, based on global experience

A. **Climate crisis is not "gender neutral".** It amplifies existing gender inequalities. Agriculture employs a large number of women who face increased workloads during periods of drought and erratic rainfall. This leaves less time for women to access education, develop skills or earn income. It puts added pressure on girls, who often leave school to help their mothers manage the increased burden. As climate change intensifies, women and girls face higher risks of poor mental and physical health, partner violence and food insecurity. Rising temperatures cause higher incidence of stillbirth, and the spread of vector-borne diseases which lead to adverse maternal and neonatal outcomes. Displacement due to climate change further accentuates the vulnerability of women.

B. **Climate change adversely impacts sustainable livelihood development.** It disrupts agricultural activities, reduces crop yields, and threatens food security, particularly for smallholder farmers who rely on rain-fed agriculture. It affects the availability and distribution of water resources and exacerbates water scarcity. Health outcomes of climate change like heat stress, vector- and water-borne diseases, and malnutrition jeopardize productivity, and livelihood opportunities. Climate-induced environmental changes contribute to migration and displacement. The displaced people often find themselves in precarious situations without any social security. The influx of migrants, strains destination's infrastructure, services, and resources, leading to social, economic, and environmental challenges there.

C. **Climate change presents a fundamental threat to human health.** It is leading to death and illness caused by disruption of food systems, and increases in zoonoses and food-, vector- and water-borne diseases. It induces both immediate mental health issues, like anxiety and post-traumatic stress, and long-term disorders due to factors like displacement and disrupted social cohesion. It threatens to further widen existing health inequalities between and within populations. Heavy rainfall and flooding damages water sources and sanitation facilities, and contaminates the water supply. Water scarcity and the resulting increase in the costs of water leads to inequitable access. This deprives households of opportunities to collect the amount of safe water needed for proper hygiene, limiting children's ability to grow up healthy and strong.

D. **Climate change is changing children.** It is exacerbating the spread of killer diseases. Children are suffering from air pollution more than adults. Infants and young children are less able to regulate their body temperature and more prone to dehydration. Child malnutrition is worsening by crop failures and rising food prices. Children are having their education disrupted every year. Extreme heat is increasing mental health problems.

E. **Natural resources are at stake because of climate change.** Climate change is altering marine, terrestrial and freshwater ecosystems, causing species losses and declines in key ecosystem services. These climate-driven impacts on ecosystems have caused measurable economic and livelihood losses.

F. **Climate change is crippling communities and societies as a whole.** Conventional strategies and incremental adaptation are proving to be insufficient.

The above analysis shows that there is an interconnectedness among problems being faced by the communities and climate change is manifesting itself to be a common cause. So, climate ought to be a cross-cutting theme in all development action at the grassroots.

2.3 Rationale for integrating climate change activities into PANI's work streams

PANI works across the domains of sustainability, infrastructure, inclusion, livelihoods and governance, and plays a pivotal role in ushering development on the ground. Climate change has a strong bearing on all these thematic areas. So, PANI needs to put an integrated climate change strategy in place to minimize the impact climate change on its programs so that there is no disruption to activities with the community and project results are not adversely affected.

A. **Addressing Urgent Needs:** Climate change intersects with a wide range of social, economic, and environmental issues that PANI aims to tackle, such as poverty, health, food security, and gender equality. By applying a climate lens, it can better identify root causes and develop more comprehensive and impactful solutions.

B. **Managing Risks:** Climate change poses significant risks to the populations served by PANI. These risks include extreme weather events, natural disasters, loss of livelihoods, and displacement. By integrating a climate lens into its work, it can better anticipate and mitigate these risks, thereby protecting the well-being of the people it serves.

C. **Maximizing Impact:** Climate change affects vulnerable populations disproportionately. By integrating a climate lens, PANI can tailor its interventions to address their specific needs, thereby maximizing the impact of its interventions.

D. **Mitigating Risks:** Climate-related risks, such as extreme weather events, resource scarcity, and ecosystem degradation, can undermine the effectiveness of PANI's programs and projects. By proactively assessing and mitigating these risks, it can better safeguard the interests of the stakeholders, and ensure the long-term success of its initiatives.

E. **Fulfilling Mission and Values:** PANI envisions itself as a medium for building an inclusive society that prospers in harmony with its surroundings. Its values are centered around environmental conservation, social justice and community empowerment. Hence, integrating a climate lens into its work aligns with these principles and demonstrates a commitment to holistic, sustainable solutions.

F. **Strengthening Partnerships:** Tackling climate change requires collaboration with various stakeholders. Incorporating a climate lens may help PANI in strengthening existing partnerships and fostering new collaborations with government, civil society, businesses,

academia, etc. This will help it in leveraging collective expertise and resources to drive meaningful change.

G. **Enhancing Resilience:** Building resilience to climate change is essential for the long-term sustainability of development efforts as climate-resilient communities are better equipped to withstand environmental shocks and adapt to changing conditions. By incorporating a climate lens, PANI can help communities strengthen their resilience through measures such as sustainable agriculture, disaster preparedness, and infrastructure improvements.

H. **Funding Opportunities:** Donors increasingly prioritize climate action in their grant-making. PANI applying a climate lens to its work may align with donor priorities and increase access to funding opportunities. This strategic approach will enable PANI to diversify its funding sources and expand its impact.

I. **Strengthening evidence building:** By integrating a climate lens into its evidence building efforts, PANI can raise awareness about the interconnected nature of issues and mobilize support for policies and actions that address both climate change and its underlying drivers.

Chapter 3: Thematic Areas and Potential Opportunities

3.1 Gender and Governance (Women and Adolescent Girls' Empowerment)

PANI works towards women's and adolescent girls' social and economic empowerment by enhancing livelihood opportunities through skill development, training and capacity development. It also focusses on generating awareness around gender equality, initiatives against gender-based violence and instilling leadership qualities. Women and adolescent girls are encouraged to participate in local governance and development activities, and equipped for the same through capacity building and training. In this context, PANI may focus on following climate-centric activities under this thematic area:

A. **Capacity Building:** Providing training programs in sustainable agriculture practices, renewable energy technologies, disaster risk reduction (DRR), and climate-resilient livelihoods.
B. **Entrepreneurship and Income Generation:** Facilitating access to microfinance, business development services, market linkages, and technical assistance to establish enterprises such as sustainable agriculture cooperatives, clean energy ventures, eco-friendly handicrafts, organic farming and climate-smart enterprises.
C. **NRM:** Promoting community-based NRM, watershed restoration, afforestation, and sustainable land use practices.
D. **Climate-Resilient Agriculture:** Promoting agroecology, organic farming, agroforestry, diversified cropping systems, and climate-resilient crop varieties.
E. **Access to Clean Energy:** Increasing women's and adolescent girls' access to solar lanterns, improved cookstoves, biogas digesters, and solar irrigation systems.
F. **Water and Sanitation:** Launching community-managed water systems, rainwater harvesting, water conservation and hygiene promotion programs.
G. **DRR and Resilience Building:** Strengthening women's and adolescent girls' leadership and participation in disaster management by training them as first responders, establishing community-based early warning systems, developing evacuation plans and providing psychosocial support to help them cope with the psychological and emotional stressors associated with climate change impacts.
H. **Evidence Building and Policy Engagement:** Raising awareness about the gender dimensions of climate change and supporting formulation of policies that address the intersecting challenges of gender inequality and climate change.
I. **Education and Awareness:** Conducting awareness programs for adolescent girls on climate change, its impacts, and adaptation strategies.
J. **Leadership and Skill-Building:** Offering leadership and skill-building workshops and training sessions for adolescent girls, equipping them with the confidence, communication skills, and leadership abilities to become agents of change.
K. **Science, Technology, Engineering and Mathematics (STEM) Education:** Promoting STEM education among adolescent girls, encouraging their participation in fields related

to climate science, renewable energy, environmental conservation and sustainable development.

L. **Youth-Led Climate Action:** Supporting youth-led climate action initiatives, providing platforms and resources for adolescent girls to develop and implement projects that address climate change in their communities.

3.2 Sustainable Livelihood Development

PANI's work in this thematic area focusses on providing new opportunities and avenues for livelihoods to the rural population. Therefore, to ensure sustainable income for its target population, PANI may undertake the following activities that will also be climate-friendly.

A. **Renewable Energy Access:** Facilitating access to clean and renewable energy technologies, such as solar, and biogas by distributing solar lanterns, installing solar panels for household and community use, and promoting clean cooking technologies.

B. **Climate-Smart Agriculture:** Promoting climate-smart agricultural practices such as agroforestry, conservation agriculture, organic farming, and integrated crop-livestock systems that improve soil health, water management, and biodiversity conservation.

C. **Sustainable Forestry and Land Management:** Supporting sustainable forestry and land management practices such as reforestation and afforestation, community-based forest management, and agroforestry.

D. **Green Jobs and Entrepreneurship:** Promoting green jobs and entrepreneurship opportunities in sectors such as renewable energy, energy efficiency, waste management and eco-tourism by training and supporting individuals in starting and scaling such businesses.

E. **Eco-friendly Livelihoods:** Supporting the development of livelihoods such as sustainable tourism, eco-friendly handicrafts, organic food production, and green building construction.

F. **Climate-Resilient Livelihoods:** Building resilience to climate change impacts via initiatives such as drought-resistant crops, climate-smart fisheries and DRR training.

G. **Waste Management and Recycling:** Implementing waste management and recycling initiatives such as waste collection and sorting, composting, recycling, and upcycling projects.

H. **Community-Based Adaptation:** Engaging communities in identifying and implementing climate adaptation strategies such as community-led climate risk assessments, participatory planning processes and small-scale infrastructure projects.

I. **System of Crop Intensification:** Creating farmer field schools to orient farmers on nature-friendly farming techniques, use of organic inputs for fertilizer and plant protection, high-quality seeds and micro-nutrients.

J. **Enhancing Water Use Efficiency:** Promoting crop planning and micro-irrigation technology to achieve "more crop per drop".

K. **Agro-Meteorology:** Providing timely weather forecasts to farmers with crop management advisories to help them better plan their agricultural activities.

L. **Knowledge Sharing and Capacity Building:** Providing training, technical assistance and knowledge-sharing platforms to empower individuals and communities to adopt climate-friendly livelihood practices through initiatives such as workshops, extension services and online resources.

M. **Evidence Building for Partnerships:** Evidence building for policy and regulatory frameworks that support climate-friendly livelihoods development, including incentives for renewable energy adoption, sustainable agriculture practices, and green entrepreneurship. PANI may also forge partnerships with governments, businesses, academia, and civil society to scale up climate-friendly livelihood initiatives and leverage resources for greater impact.

3.3 Community Health, Nutrition and WASH

PANI works with individuals and communities to bring behavioral change towards the need for primary healthcare of women, children, and adolescent girls. It also tries to improve the primary health of these focus groups through awareness generation, counselling and collective community actions. In light of this, PANI may focus on the following activities to ensure sustainability:

A. **Climate-Resilient Healthcare Infrastructure:** Strengthening healthcare infrastructure to withstand climate-related hazards by upgrading health facilities, ensuring access to clean water and sanitation, and improving disaster preparedness and response capacities.

B. **Early Warning Systems:** Establishing early warning systems to alert communities about climate-related health risks by providing timely information and guidance on preventive measures, evacuation procedures, and access to healthcare services.

C. **Heatwave Preparedness and Response:** Providing cooling centers, distributing heat-protective materials, conducting public awareness campaigns and training healthcare workers to recognize and treat heat-related illnesses.

D. **Vector-Borne Disease Control:** Implementing vector control measures such as insecticide-treated bed nets, indoor residual spraying and larval habitat management.

E. **WASH:** Improving access to safe WASH facilities and promoting handwashing practices, building latrines, implementing wastewater treatment systems and ensuring access to clean drinking water sources.

F. **Food Security and Nutrition:** Launching initiatives such as community gardens, farmer markets, nutrition education, food source diversification programs, food distribution networks, and resilience-building measures to ensure access to nutritious food during climate-related emergencies.

G. **Drinking Water Facilities:** Installing home drinking water facilities, community water purification filters and water ATMs.

H. **Green Infrastructure and Urban Planning:** Creating green spaces, promoting active transportation options and reducing urban heat island effects to improve air quality and mitigate the health impacts of extreme heat events.

I. **Climate-Smart Livestock Production:** Adopting climate-smart practices such as rotational grazing, improved feed management and agroforestry integration.

J. **Mental Health and Psychosocial Support:** Providing mental health services, psychosocial support and resilience-building activities to help individuals and communities cope with climate-related stressors and trauma.

K. **Community-Based Adaptation:** Engaging communities in identifying and implementing adaptation measures like participatory risk assessments, establishing evacuation routes, and stockpiling emergency supplies, and training individuals in first aid and disaster response to enhance local resilience and adaptive capacity.

L. **Health Education and Awareness:** Raising awareness about the health impacts of climate change, and promoting preventive and adaptive strategies at the grassroots by organizing campaigns, community workshops, and disseminating information.

M. **Partnerships and Collaboration:** Foster partnerships and collaboration among different stakeholders to coordinate efforts, share resources, and leverage expertise in addressing climate-related health challenges.

3.4 Integrated Child Development

PANI aims to ensure that children grow up and live in a safe and enabling environment where they are respected, protected, and empowered against various forms of abuse and exploitation. It places children's holistic growth at the center and makes efforts to enable children to break the cycle of denial and discrimination. Through various initiatives, it makes efforts to improve their health, increase their nutrition, reduce mortality and morbidity among them, provide them better learning opportunities and remove the barriers to education they face. While working on these, PANI may also undertake the following climate-centric activities:

A. **Climate-Resilient Nutrition Programming:** Integrating climate-resilient nutrition programming by promoting diversified diets, locally-adapted foods and nutrition education to ensure children receive adequate nutrients despite climate-related challenges to food production and availability.

B. **Safe Water and Sanitation:** Prioritizing access to safe water and sanitation facilities, particularly in areas vulnerable to climate-related water scarcity and contamination by promoting handwashing practices, water treatment methods, and sanitation infrastructure to reduce the risk of waterborne diseases.

C. **Healthcare Services:** Strengthening healthcare services to address climate-related health risks, such as vector-borne diseases, heat-related illnesses, and respiratory infections by providing immunizations, preventive health screenings, and treatment for climate-related health conditions.

D. **Early Childhood Development:** Enhancing early childhood development programs to support children's cognitive, social, and emotional development in the context of climate change by promoting responsive caregiving practices, stimulating learning environments and providing psychosocial support to help children cope with climate-related stressors and trauma.

E. **Disaster Preparedness and Response:** Establishing early warning systems, evacuation protocols, and emergency shelters, as well as providing psychosocial support and essential services during and after emergencies.

F. **Community Participation:** Engaging communities in climate-resilient programming.
G. **Capacity Building and Training:** Building the capacity of frontline workers, supervisors and volunteers to provide training to communities on climate change adaptation, DRR, and child-centered approaches to programming, as well as facilitating knowledge exchange and learning networks among practitioners.
H. **Research and Monitoring:** Supporting research and monitoring efforts to better understand the impacts of climate change on child health, nutrition, and development, as well as the effectiveness of climate-resilient interventions by conducting vulnerability assessments, tracking key indicators and documenting best practices to inform evidence-based decision-making and programmatic improvements.
I. **Evidence Building:** Building evidence for policies and investments that support climate-resilient early childhood education (ECE) programming and promoting environmental sustainability in early childhood settings.
J. **Partnerships:** Building partnerships with stakeholders across sectors to raise awareness about the importance of ECE in addressing climate change and give recommendations for greater integration of climate-related content into ECE curricula and professional development programs.

3.5 Natural Resource Management (NRM) and Climate Change

PANI works collaboratively with village panchayats, farmers, and other stakeholders to help in adoption of climate adaptable agricultural practices, access to climate change schemes, products and services, and conserving natural resources to promote environment-friendly practices. Therefore, PANI can undertake the following activities:

A. **Ecosystem-Based Adaptation:** Implementing ecosystem-based adaptation strategies that harness the natural functions of ecosystems to enhance climate change resilience by restoring and protecting natural habitats such as forests, wetlands, etc.
B. **Climate-Smart Agriculture:** Promoting practices such as agroforestry, conservation agriculture, crop diversification and water management techniques that help farmers adapt to changing climatic conditions, conserve natural resources, and reduce greenhouse gas emissions from agricultural activities.
C. **Water Resource Management:** Ensuring sustainable access to clean water for drinking, agriculture, and sanitation, particularly in water-stressed regions by implementing water conservation measures, enhancing water storage and distribution infrastructure, and promoting integrated water resources management approaches that balance competing demands and prioritize environmental sustainability.
D. **Integrated Watershed Development:** Capturing and conserving water via rainwater harvesting structures, treating degraded soils, undertaking soil and water conservation measures such as water absorption trenches, continuous contour trenches, farm bunds, gully plugs and check dams, among others. PANI may also undertake afforestation and establish local representative bodies to better manage water assets.
E. **Forest and Biodiversity Conservation:** Protecting and sustainably managing forests, biodiversity hotspots and natural habitats to conserve biodiversity, enhance ecosystem

resilience, and mitigate climate change through carbon sequestration and storage through community-based conservation initiatives and sustainable forest management practices.

F. **Rangeland and Pasture Management:** Adopting sustainable rangeland and pasture management practices to preserve ecosystem services, support livestock livelihoods, and mitigate land degradation and desertification by rotational grazing, rangeland rehabilitation, and community-based NRM initiatives that promote sustainable land use and livelihoods for pastoralist communities.

G. **Renewable Energy Development:** Promoting the transition to renewable energy sources by supporting renewable energy projects, investing in clean energy infrastructure, and promoting energy efficiency measures that reduce carbon footprint.

H. **Community Participation and Governance:** Fostering community participation and stakeholder engagement in NRM processes to ensure inclusive decision-making, equitable benefit-sharing, and local ownership of climate change adaptation and mitigation initiatives by empowering local communities and marginalized groups.

I. **Horticulture and Household Forestry:** Supporting farmers to develop fruit orchards, and fields of vegetables and flowers. Raising useful trees for fodder, fuel wood, timber and income on homesteads and farmlands.

J. **Livelihood Diversification:** Promoting livelihood diversification strategies to reduce dependency on climate-sensitive sectors by supporting alternative income-generating activities such as eco-tourism, handicrafts, and non-timber forest products.

3.6 Integrated Community Development

Through integrated community development initiatives, PANI aims to improve the overall well-being and quality of life for communities by addressing various interconnected aspects such as social, economic, environmental, and cultural factors. So, it may undertake the following activities:

A. **Community Engagement:** Engaging with local communities to understand their specific needs, vulnerabilities, and priorities while developing adaptation strategies.

B. **Climate Information and Early Warning Systems:** Improving access to climate information and early warning systems at the local level. Providing timely and accurate weather forecasts and practicing drills to help communities prepare for extreme events.

C. **Knowledge Sharing:** Promoting among communities the exchange of best practices, success stories and lessons learned from other regions and communities.

D. **Capacity Building:** Building the capacity of local communities on climate change impacts, adaptation options, and sustainable practices. Strengthening local institutions and organizations to support adaptation efforts.

E. **Inclusivity and Equity:** Ensuring that locally led adaptation is inclusive and equitable, considering the needs and perspectives of vulnerable groups.

F. **Integration with Local Development Plans:** Integrating climate adaptation into local development plans and policies.

G. **Collaboration and Partnerships:** Fostering collaboration and partnerships among stakeholders, and strengthening the multi-stakeholder approach to address complex climate challenges.

H. **Evidence Building for Policy Formulation:** Undertaking evidence building and outreach efforts for supporting formulation of national and subnational policies that enable and strengthen locally led adaptation efforts. Raising awareness about the significance of community-driven solutions in climate resilience.

I. **Financing and Resources:** Securing funding and resources for locally led adaptation initiatives. Exploring innovative financing mechanisms and partnerships with public and private sectors to support community-driven projects.

J. **Monitoring and Evaluation:** Establishing mechanisms to monitor the effectiveness and impact of adaptation actions. Regularly assessing the success of projects and adjusting, as needed.

K. **Green Infrastructure:** Planting trees and vegetation, creating green spaces, and promoting natural drainage systems to reduce the risk of flooding and improve air quality.

L. **Sustainable Climate-Smart Agriculture:** Promoting sustainable farming practices, such as crop and nutritional diversification, conservation tillage and water management to reduce the impacts of drought, flooding, and other climate-related challenges on food production.

M. **Climate-Smart Energy Solutions:** Promoting the use of renewable energy sources, such as solar and wind power, and fostering energy-efficient practices.

N. **Community-Based DRR Planning:** Engaging with community and local organizations to develop plans for responding to and recovering from disasters such as floods, storms, and wildfires.

Chapter 4: Implementation Strategy

4.1 Communication and Evidence Building for Policy Reforms

A. **Communication Strategy:** PANI will make a comprehensive communication strategy to raise awareness about climate change issues among stakeholders, an integral part of its project implementation process. Convergence of projects with climate change issues will be identified proactively before implementation. The approach will include targeted messaging and outreach campaigns to engage donors, beneficiaries, and the wider community. Utilizing various communication channels such as social media, newsletters, and community events, PANI will ensure that climate change is recognized as a critical issue requiring urgent action. PANI will also identify potential moments during the year that can be leveraged to create sensitivity in the community about climate change issues through broader outreach.

B. **Planning Evidence Building for Policy Reforms:** PANI will develop evidence building plan focussed on promoting policy changes and securing funding opportunities to address climate change. The inputs to this plan will be derived from projects and groundwork conducted by the organization in its implementation areas. The plan will involve engaging with policymakers, government agencies, and relevant stakeholders to influence decision-making processes. PANI will also leverage its partnerships and networks to amplify its policy influencing efforts and drive systemic change.

4.2 Partnership Building

PANI recognizes the importance of collaboration in addressing climate change effectively. It will actively seek partnerships with other organizations, government agencies, academia, and community groups working on climate change. Lately, other institutions have been involved with work related to climate change issues which include decentralized decision-making for climate governance, development of climate-smart villages, district decarbonization plans, climate adaptation and resilience plan districts, air quality management, etc. Through joint initiatives, knowledge sharing, and leveraging complementary expertise and resources, PANI will strengthen its impact and enhance the resilience of vulnerable communities. PANI will take a year-round assessment of similar partnership opportunities across the programs.

4.3 Human Resources and Capacity Building

PANI will prioritize capacity-building initiatives to empower staff, volunteers, and partners to address climate change effectively. This will include organizing training programs, and workshops, and providing resources to enhance knowledge and skills related to climate change adaptation, mitigation and resilience. By investing in human resources, PANI will ensure that its workforce is equipped to tackle the challenges posed by climate change. It will identify the right opportunities and competencies to send its staff for training programs outside of the organization, to develop new skills and capabilities in the field. It will also make climate change

an integral topic of deliberation for the annual strategy convening of the organization. While hiring a new team member, PANI will assess the knowledge and check the attitude of candidate/s under consideration towards climate change. It will also deploy climate-friendly practices and policies within the organization.

4.4 Finance

PANI recognizes that adequate funding is essential for scaling up climate change initiatives and maximizing impact. Therefore, it will do a comprehensive finance-related planning focused on mobilizing additional resources to support its climate action efforts.

A. **Diversifying Funding Sources:** PANI will seek to diversify its funding sources by exploring alternative funding mechanisms such as corporate partnerships, crowdfunding campaigns etc. to take up more climate-centric work under various thematic areas. By diversifying its funding base, PANI will enhance financial resilience and sustainability, enabling itself to adapt to changing funding landscapes and economic conditions.

B. **Exploring Grant Opportunities:** PANI will actively pursue grant opportunities from a variety of sources, including government agencies, multilateral organizations, foundations and philanthropic donors. It will conduct thorough research to identify relevant grant opportunities aligned with its climate change objectives and develop competitive proposals to secure funding. By tapping into grant funding, PANI will access additional resources to implement climate-centric interventions and expand its reach among vulnerable communities.

C. **Engaging with Donors and Investors:** PANI will proactively engage with potential donors, funders and impact investors interested in supporting climate-focused initiatives under its various thematic areas. It will cultivate strategic partnerships and leverage its networks to showcase the impact of its work and attract financial support. By building strong relationships with donors and investors, PANI will create opportunities for sustainable funding and long-term collaboration, enabling it to achieve its climate change goals under different thematic areas effectively.

4.5 Monitoring, Learning and Evaluation (MLE)

PANI is committed to establishing robust MLE mechanisms to track progress towards its climate-centric goals and objectives under various thematic areas. Its MLE strategy will serve as a vital tool for assessing the effectiveness of its interventions, identifying areas for improvement and informing evidence-based decision-making.

A. **Developing Indicators and Data Collection Tools:** PANI will develop a set of clear and measurable indicators to track progress towards its climate change goals and objectives. These indicators will be aligned with its program outcomes and will capture key metrics related to climate resilience, adaptation and mitigation efforts. Additionally, it will design and implement data collection tools and systems to systematically collect, manage and analyze relevant data. This will include surveys, interviews, focus group discussions, and

other participatory methods to gather qualitative and quantitative information from stakeholders. Emission reduction and finance mobilization data will also be progressively collected for projects.

B. **Conducting Regular Assessments:** PANI will conduct yearly assessments and evaluations to measure the effectiveness and impact of its climate-focused interventions. These assessments will be conducted at various stages of program implementation, including baseline assessments, mid-term evaluations and end-line assessments. Through rigorous data analysis and interpretation, it will assess the extent to which the interventions are achieving their intended outcomes and identify any challenges or barriers that may need to be addressed. Additionally, it will solicit feedback from stakeholders to ensure that the interventions are responsive to their needs and priorities.

C. **Learning from Experiences and Adopting Strategies:** PANI is committed to a culture of continuous learning and improvement. It will systematically analyze monitoring and evaluation findings to identify lessons learnt and best practices. This will involve documenting success stories, case studies and innovative approaches that can be replicated and scaled up. Additionally, it will use evaluation findings to recalibrate its strategies and approaches to climate change integration, and maximize the impact on vulnerable communities.

Chapter 5: Implementation Timeframe

PANI recognizes the importance of implementing climate change activities within a structured timeframe to achieve its objectives across the thematic areas effectively. Thus, it has developed a comprehensive strategy outlining specific timelines, responsibilities, and resource requirements for the next 3, 6 and 10 years.

Strategy	Timeline	Objective	Priorities
Short term	3 years	Laying the **foundation for climate action initiatives** with targeted interventions	1. Conducting a **comprehensive needs assessment and stakeholder analysis** to identify priority areas for climate action. 2. Developing and launching **awareness campaigns** to raise awareness about climate change and **capacity building programs** to build the capacities of staff, volunteers, and partners. 3. Establishing **partnerships and collaborations** with other organizations, government agencies, and community groups to leverage resources and expertise for climate change initiatives. 4. Implementing **pilot projects and demonstration activities** to test innovative approaches and best practices for climate resilience and adaptation. 5. **Integrate** climate change resilience and other elements in existing and future programs as a risk mitigant, without affecting the core components and results. 6. Setting up **monitoring and evaluation systems** to track progress towards organization's climate change goals and objectives.
Medium term	6 years	**Scaling-up climate-centric interventions** and **expanding PANI's reach** to a wider range	1. **Scaling-up successful pilot projects and demonstration activities** to reach out to a larger number of beneficiaries and communities. 2. **Strengthening community-based adaptation and resilience-building initiatives**, including climate-smart agriculture, NRM and DRR. 3. Presenting **evidence for policy changes and supportive measures** at state and national levels to mainstream climate change considerations

		of communities	into development planning and decision-making processes.
			4. Enhancing **partnerships and collaborations** with government agencies, academia and private sector stakeholders to mobilize additional funding and resources for climate change initiatives.
			5. Conducting regular **monitoring and evaluation** to assess the effectiveness and impact of the interventions and make necessary adjustments to the organizational strategies.
Long term	10 years	Achieve **sustainable impact and resilience** in the communities PANI serves	1. **Consolidating and institutionalizing the climate-focused initiatives** within PANI's programmatic framework to ensure long-term sustainability and continuity.
			2. **Expanding PANI's geographical reach and scaling up successful interventions** to reach a larger number of vulnerable communities.
			3. Strengthening **partnerships and collaborations with international organizations, donors and global networks** to access additional funding and technical support for climate change initiatives.
			4. Presenting **evidence for policy changes and investments in climate-resilient infrastructure**, livelihoods, and ecosystems at state, national and global levels.
			5. Continuing to **monitor and evaluate** the impact of its interventions and sharing lessons learned and best practices with stakeholders to **contribute to global knowledge sharing and capacity building**.