

Measuring What Matters

Understanding the Role of Metrics in Measuring Climate Adaptation and Resilience Impact

About the authors

The report is developed collectively by the ARA TLS team at Transitions Research, including Prerna Singh, Abhipsha Ghosh, and Diksha.

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About the Adaptation Research Alliance

The Adaptation Research Alliance (ARA) is a global coalition responding to the urgent challenges faced by vulnerable communities from climate change. Their membership is made up of researchers, funders, policymakers, development bodies and community-based organizations committed to action-oriented research for adaptation that supports climate resilient futures.

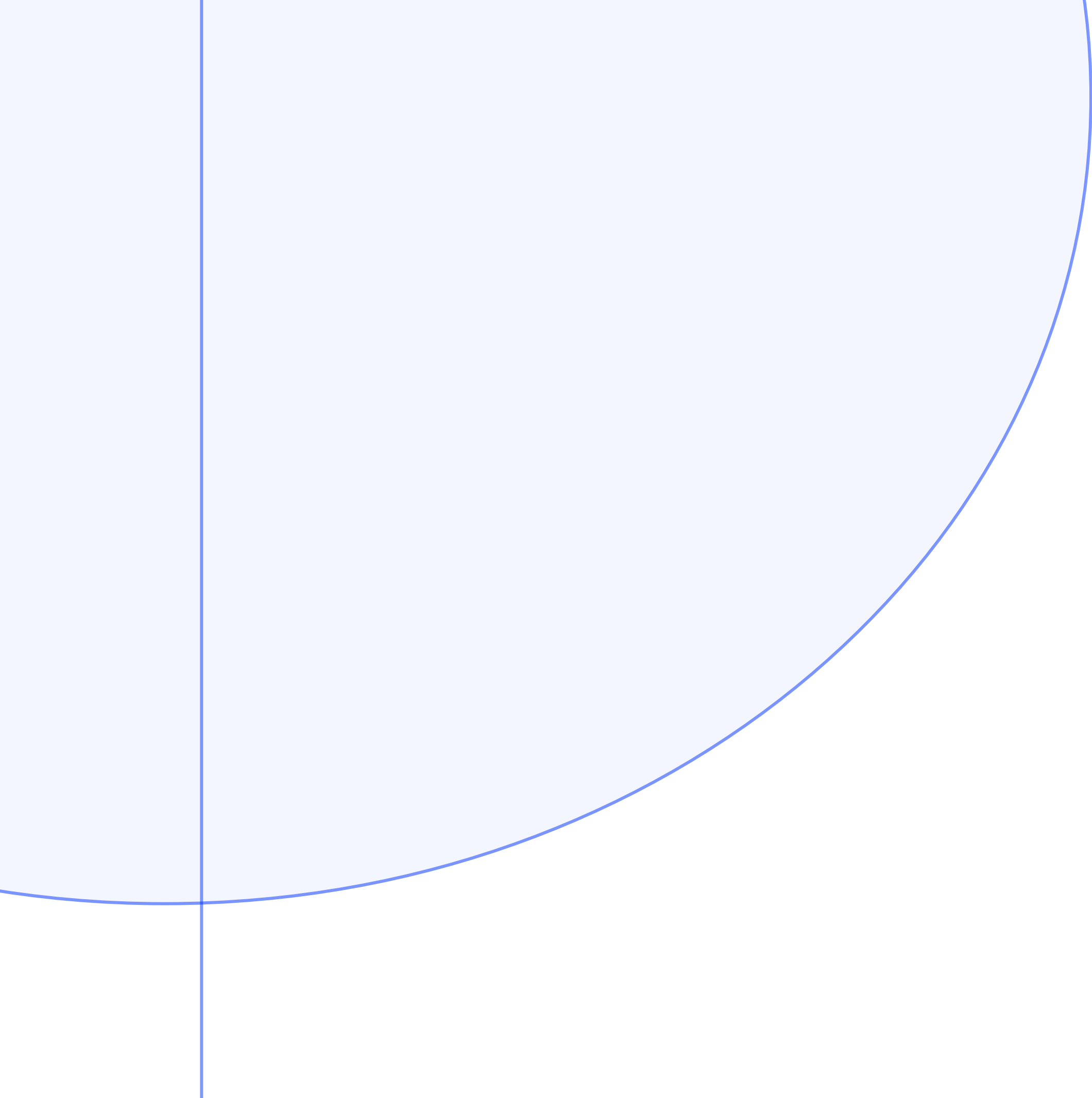
About Transitions Research

Transitions Research is a social science research collective. We examine radical transformations shaping our future, including both urbanisation and the emergence of a climate-resilient society. Our research on urban resilience foregrounds social vulnerability, the differential impact on marginal social groups and communities. Our expertise is focused on driving climate action that's inclusive and participatory by engaging with diverse stakeholders to co-create and test resilience solutions that address challenges of the most vulnerable.

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Overview

In line with the dictum ***“What gets measured gets managed,”*** the use of appropriately designed metrics is recognised as an essential practice to track progress and assess impact of adaptation and resilience measures. It can provide evidence, improve transparency, help scale interventions and drive investment towards larger adaptation goals.

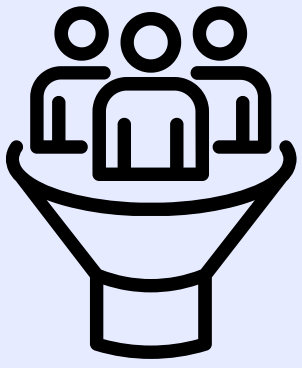
Evaluation of initiatives can enable a better understanding of the factors and approaches that lead to successful outcomes, which can guide future efforts. However, since there are no universally acceptable standards for metrics or frameworks in assessing adaptation impact, practitioners were often face challenges in reflecting the impact of their work appropriately to the broader world.

Identifying the significance of this evolving area of work, ARA members prioritised it as one of the four learning journey of the TLS 23-24 programme.

Broad insights from ARA community



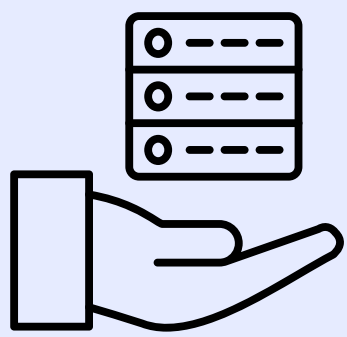
Multiplicity of metrics: Mixed approaches (quantitative and qualitative) were found to be prevalent, along with specific selection of indicators. In some cases, reporting of a single outcome requires multiple metrics, while in other cases a single metric may be linked with multiple outcomes.



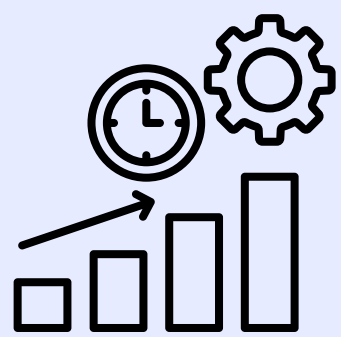
Prioritisation of social inclusion and equity metrics: Member organisations emphasised the need for mainstreaming of metrics on gender equity and social inclusion to address vulnerability and adaptation needs.



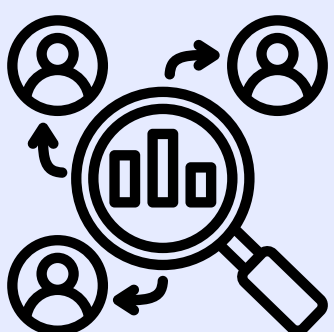
Metrics as part of project design: Members recommended integrating planning and deployment of metrics within project design, not during or post implementation.



Data access and availability: Members prioritised collaboration among local, regional, national and global institutions for addressing data gaps in impact assessment.



Contextualisation of reporting frameworks: Creative reporting frameworks grounded in local context helped highlight resilience metrics aligned with local nuances.



Need for more active engagement: 101 members, representing 43% of the ARA community, have yet to contribute to the body of published work on adaptation and resilience metrics. Among the 133 members who have published information, 75 are based in the Global North and 58 in the Global South, indicating a need for increasing visibility of ongoing efforts in the Global South.

What has worked so far in measuring resilience and adaptation success?

Published Perspectives:

- Integrated assessment approach i.e. using a mix of qualitative and quantitative approaches (81 of 102 members publishing self-assessment metrics use mixed methods)
- Trend of customising and tailoring guidance metrics to specific organisational needs and contexts (64 of 104 members publishing on guidance frameworks do customise metrics).

Voices from the Ground (Interviews & FGDs):

- Capturing local narratives through qualitative methods such as direct interviews, storytelling and case studies helped members supplement data and understand drivers of change.
- Multi-stakeholder partnerships were needed for support with data access and sharing, resources for data reporting and technical capacity for design of frameworks.
- It is important to understand expectations of partner organisations and stakeholders through consistent engagement and specific questions on priorities and perceptions. Positive feedback from stakeholders contributes to the success of interventions.

Key Challenges

Published Perspectives:

- There is a dichotomy between borrowing metrics from general guidance and tailoring metrics to local context. This leads to a lack of consistency in assessing effectiveness of outcomes across different contexts.
- There is a disparity in publication of climate adaptation and resilience metrics, with the Global North contributing more extensively than the Global South.

Voices from the Ground (Interviews & FGDs):

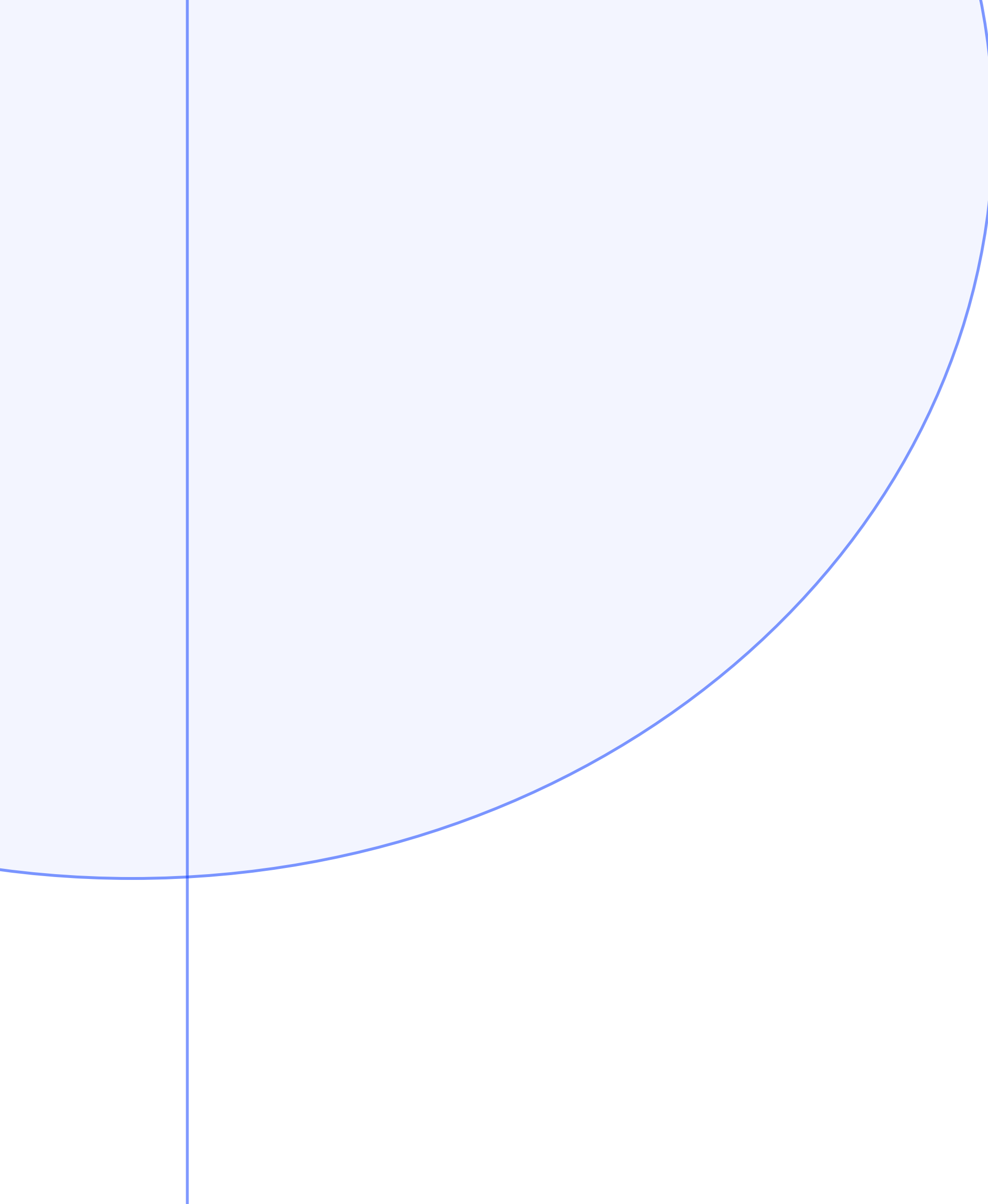
- The downscaling of global frameworks to local levels, and the selection of indicators may result in a lack of consistency across varying contexts.
- Complex and time-intensive reporting mechanisms may pose a challenge to stakeholders and may not be relevant to the local context.

Way Forward

During the course of this learning journey, members emphasised the need to mainstream metrics on equity, gender and social inclusion to drive a bottom-up approach in planning and implementation.

The need to leverage collaborative partnerships with stakeholders was recognised as a crucial pathway for supplementing data.

Global advocacy on data accessibility and appropriate time allocation for adaptation outcomes was necessary to further develop impact measurement systems.



Method & Insights

This chapter presents the details of the data collection, analysis, synthesis, and emerging results for this specific learning journey.

To better understand the ARA community's work we undertook three different approaches: Literature Review, One-on-One Interviews, and Focus Group Discussions (FGDs).

Literature Review

A comprehensive review of literature published by the ARA community (234 members as of March 2024) was undertaken to understand the types of metrics employed to assess adaptation and resilience initiatives, as well as the extent of ARA community's (234 members) involvement in publishing/documenting metrics in their work.

Insights from Literature Review:

1. Engagement of ARA members and their regional distribution

A total of 133 members (57%) were found to have published information indicating metrics on climate change adaptation and/or resilience initiatives, of which 75 members (56%) are based in the Global North. A regional disparity exists, with 82% (75 of 92 members) of the Global North published information on metrics, in comparison to 41% members from the Global South (58 of 142 members).

2. Nature of published work on metrics

The published work included general guidance frameworks as well as metrics specifically selected by members for assessing their own work. The categories of frameworks include Monitoring, Evaluation, and Learning (MEL), Theory of Change (TOC), Logical Framework, etc.

- 104 members (78%) have actively published on guidance frameworks such as toolkits, assessment methodologies etc., the majority (62%, n=65) of whom belong to the Global North.
- Of 104 members, 64 (62%) developed their own adaptation and resilience metrics considering their local scenarios and objectives.
- 102 members (77%) have published metrics on their own assessment and impact measurement strategies, combining qualitative and quantitative indicators.
- The Global South has higher engagement (83%) than Global North (72%) in publishing self-assessment metrics, indicating a commitment towards transparency in reporting.
- The dichotomy between adopting external frameworks and self-developed metrics that align with specific needs and context indicated a lack of consistency.

In-depth Interviews

For a more in-depth understanding of individual actions being taken by ARA members, semi-structured interviews were conducted. A preliminary survey was shared with the ARA member community to gauge interest in members to interview for in-depth conversation on the topic of resilience and adaptation metrics, and how to assess the success of adaptation efforts.

From survey responses, nine member organizations were identified for in-depth interviews on this topic. Semi-structured interview discussions focused around the following questions:

- How do members evaluate the impact of adaptation and resilience work? What does success look like for the organisation?
- What are members' reflections on assessing resilience impact when there is a lack of data?
- Are there specific metrics or indicators that the organisation has found particularly effective in evaluating the impact of adaptation initiatives?
- What alternative impact assessment methods can be leveraged in this space beyond quantitative resilience metrics?

Insights from interviews and individual reflections:

1. Reflections on what individual success looks like for organisations

Through impact evaluation of adaptation and resilience work, success for the organisation is indicated by:

- **Feedback and acceptance by stakeholders:** It was deemed important to understand expectations of partner organisations and stakeholders through specific questions on their priorities and perceptions of impact, since positive feedback from stakeholders help inform the success of interventions.
- **Indicative metrics in capacity building:** It was necessary to track the number of capacity building sessions, their outreach and inclusivity (particularly, representation from targeted groups, gender and regional diversity).
- **Diverse metrics for different levels of impact measurement:** Multiple indicators may be required for a single target, and a single metric can inform multiple outcomes. The selection of metrics should be based on criteria such as scalability, suitability, complexity, etc.
- **Evaluation frameworks aligned with focus areas:** Members used Theory of Change and other frameworks in line with the broader vision, mission and focus areas to analyse how certain interventions can be taken forward separately or conjoined with other interventions.

- **Personal observations:** Field observations and learning from empirical research helps to determine whether actual impacts align with expected outcomes.
- **Periodic monitoring and reporting during intervention:** It was necessary to have regular reporting mechanisms on indicators, and to conduct periodic evaluation to reflect upon progress and outcomes.

2. Reflections on assessing resilience impact in cases of insufficient data

- **Mix of different approaches:** In cases of data deficiency, members would not rely quantitative analysis alone. In such cases, qualitative analysis through focus group discussions, surveys and stakeholder conversations were deemed important in gaining insights on narratives that can inform progress and fulfill outcomes.
- **Extending and creating partnerships:** Potential partners can be identified to help supplement data and support initiatives. The pressure of reporting on existing partners can be eased by changing the approach to include alternative data collection methods.
- **Lack of widely accepted metrics:** While data is potentially available, there is a lack of acceptable measuring mechanisms that can be applied, irrespective of location and context.

3. Specific approaches that organisations have found effective in evaluating the impact of adaptation initiatives

- **Partnerships for technical support:** Partnering with organisations/institutions for technical support in planning roadmaps, developing indicators and methodologies of impact assessment.
- **Mix of primary and secondary sources:** It was important to collect information from reliable sources, and to leverage existing information on climate risk, vulnerability assessments, etc. In cases of data scarcity, downscaled aggregated data can be supplemented with primary data collection.
- **Use of deep qualitative approaches:** To understand better how an intervention led to change in a specific context, it was important to capture information through storytelling, direct interviews and case studies. These ‘change stories’ often help gather detailed feedback from local representatives.
- **Active cross-sectoral coordination:** It was important to identify key players and utilise distinct capabilities (research, implementation, workshop coordination, etc.), when it comes to reporting on common indicators.
- **Use of disaggregated data:** The use of decentralised and disaggregated data can help reveal gaps and inequalities that may not be fully reflected in aggregated data, thus enabling deeper insights. E.g. Understanding the specific nature of inclusion and how it affected change, instead of merely knowing which groups were included.

4. **Alternative impact assessment methods that can be leveraged beyond quantitative resilience metrics**

- **Qualitative methods:** As data scarcity may continue being a challenge, a mix of approaches would be crucial. Interviews, focus group discussions, storytelling help build personal narratives and case studies, contribute to a more holistic understanding of local nuances, as well as the multifaceted ways in which interventions led to outcomes.
- **Community engagement:** It is vital for project outcomes to engage with local communities to gather insights from their lived experiences. This helps capture complexities of the impacts of climate change on local populations, providing valuable context to complement the quantitative data
- **Resilience as a process instead of an outcome:** Resilience should be visualised as an iterative process instead of a hard outcome. This provides scope for communities to benefit from and continue with the long-term process of building resilience.

Case study: Organic Farming in Uttarakhand, India

This chapter presents the details of the data collection, analysis, synthesis, and emerging results for this specific learning journey. To better understand the ARA community's work we undertook three different approaches: Literature Review, One-on-One Interviews, and Focus Group Discussions (FGDs).

Background:

Dr. Samraj Sahay conducted a study of indicator economic water productivity (EWP) in the state of Uttarakhand, India, using a framework proposed by IPAM as part of the UAE-Belem Work Programme.

The three-criteria-framework consisted of identification with climate change adaptation, wide applicability and scalability/aggregability.

Using EWP, irrigation water productivity and crop productivity as indicators, the study evaluated the economic and ecological benefits of organic farming.

The study involved participatory field research conducted over eight years in the state, situated in the Himalayan foothills of India with high risk of water scarcity due to climate change.

Outcome:

The project serves as proof of concept for the possibility of using a single indicator (in this case, EWP) to capture the effectiveness of adaptation strategies in agriculture. In the absence of a universal indicator for all levels of adaptation, EWP proved as a versatile metric covering a broad range of inputs and outcomes, showcasing maximum resource utilisation and community resilience.

Member Engagement

To build on the knowledge captured through desk reviews and individual interviews, and to leverage the collective strength of the community, various Focus Group Discussions (FGDs) were conducted across the Global South regions. Here, we brought ARA members together to start the conversation on how to define success of adaptation and resilience efforts, and what are the key aspects to be shared with the global platforms as the global efforts on defining resilience metrics materializes.

The three key questions that the FGDs focused on were:

- How do you define success for your work?
- How do you see the use of resilience metrics in your work?
- What do global platforms need to know?

Insights from Member Engagement sessions

Member representatives highlighted the need for greater transparency in benefit sharing with communities, documenting knowledge from lived experiences and actively involving communities in decision making. Participants discussed the drivers and indicators of success, the use of different types of frameworks and gaps and challenges therein, while also providing potential solutions.

How ARA members define ‘success’

1. • **Replicability and scalability:** Implemented initiatives are considered successful when they are documented as case studies, scaled up or adopted and replicated by other organisations.
- **Policy, institutional and behavioural change:** Interventions that influence or change policy, that are adopted by partner organisations, or local/state/national governments. and lead to behavioural change were all considered successful.
- **Positive feedback:** Positive feedback from stakeholders including local communities, partner organisations, associated institutions, etc., indicating fulfilment of their requirements, is a clear marker of success.
- **Long-term sustainability:** Any factor that indicated the long-term sustainability of an initiative, such as when the project continues to be functional post closure, stakeholders continuing to be involved, etc., were regarded as indicators of success.

2. How ARA members use resilience metrics in their work

- **Vulnerability and risk assessment:** Critical for pre- and post-intervention assessments, resilience metrics can identify factors influencing success/failure of a particular intervention.
- **Project management:** Metrics ensured the alignment of indicators, milestones and timelines, while also accounting for flexibility and modification based on review of implementation.
- **Specificity to local context:** Members often had to develop metrics that were tailor-made to align with the local context, which varies within and among organisations.
- **Identifying and addressing data gaps:** Members created baselines and improved on-ground data reporting systems to better support official schemes and policies.
- **Evidence documentation:** Evidence was documented through a mix of qualitative and quantitative indicators, allowing members to create narratives backed by data.

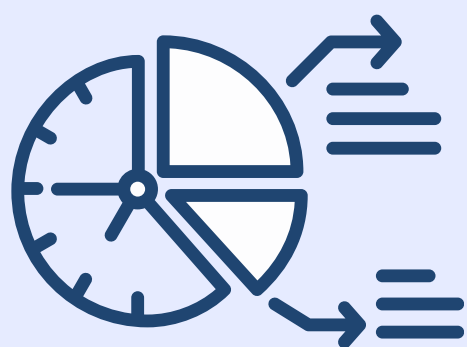
3. Needs recognised by ARA members from practical experience of using metrics

- **Dedicated resources:** There is a need for dedicated resources, personnel and capacity building to develop and use metrics for impact evaluation in certain scenarios.
- **Stakeholder inclusion:** It is important to ensure agency and participation of relevant stakeholders (donors, facilitators and communities) in the design and deployment of metrics.
- **Concurrent monitoring & evaluation:** Metrics need to be planned and deployed in an integrated fashion within project design, and not during or post implementation.
- **Alignment with local context:** The project intervention should include relevant local stakeholders, consider the socio-economic, environmental and political context, and be aligned with local belief systems for long-term success.

Concluding Remarks

The ARA community has shown demonstrated commitment to impact assessment in adaptation and resilience, by employing a diverse mix of approaches suited to varying local contexts. Through a mix of interviews, plenaries, workshops and structured focus group discussions, this learning journey enabled knowledge exchange, sharing of methods and case studies on resilience metrics.

Member organisations identified metrics commonly used to measure the success of initiatives, as well as alternative metrics used by them in cases where the data was deficient. Members acknowledged gaps and challenges in selecting metrics across different contexts, articulating the need for more pragmatic frameworks in impact assessment. The following needs were specifically noted:



Appropriate time allocation

ARA members recognised the need for global platforms to allocate appropriate timelines to ensure project deliverables are effectively implemented.



Simpler reporting mechanisms

It was necessary to use simpler and more efficient reporting mechanisms. The mechanisms also need to be more flexible and contextually appropriate. Eg. Condensed and information-rich reporting templates, the use of story-telling as a tool, etc.



Cross-sectoral collaboration to address data gaps

There was a need for enhancing data access and data sharing by governments, donors, etc.

It was recognised that monitoring and evaluation protocols should be integral to project planning, and the indicators selected should align with specific outcomes and varying local contexts. Further, members recommended that including local stakeholders in adaptation efforts and forming cross-sectoral partnerships would be crucial in developing efficient impact assessment protocols while ensuring greater data accessibility.

Funded by:

