United Nations
Futures Lab
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Science Council

Futures Thinking and Strategic Foresight in Action

Insights from the Global South

A joint report by the UN Futures Lab/Global Hub
and the International Science Council

May 2025

FOREWORD

Futures thinking is a long-standing practice for exploring possible futures, identifying emerging trends, and testing new paradigms. By anticipating risks and opportunities across multiple timescales and fostering intergenerational perspectives, it shapes better decisions today. Its versatility empowers fields from education and health to climate and governance to challenge assumptions, engage stakeholders, and envision alternative pathways.

As outlined in the Pact for the Future, foresight that draws on insights from scientific, policy, and stakeholder perspectives enriches our decisions and drives the deep transformations that are needed towards a sustainable, equitable, resilient and peaceful world. Produced in partnership by the UN Futures Lab and the International Science Council, this report contains a rich repertoire of foresight practices and shares concrete examples to guide effective anticipatory action.
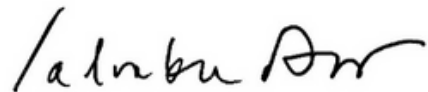
Our spotlight on the Global South is intentional. Although this region possesses rich, locally developed foresight traditions and proven methodologies, its perspectives have too often been sidelined in global dialogues.

We encourage policymakers, stakeholders from all fields and scientists to reflect upon these short stories and engage with us on how we can enhance the diversity of foresight approaches and the impact of foresight on decision- and change-making.

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EXECUTIVE SUMMARY

Our societies are facing increasingly complex sets of risks, and the rapid pace of change is challenging existing governance systems. There is a growing acknowledgement of the need to transform current approaches to policymaking and decision-making to become more future-oriented in support of anticipatory action and building long-term resilience.

The UN Summit of the Future, held in September 2024, marked a pivotal moment in global governance. The Pact for the Future, including its annexes on a Global Digital Compact and a Declaration on Future Generations, was adopted by the UN General Assembly by consensus and committed to a broad range of priorities to ensure that the multilateral system is better able to address the realities of today and prepare for the challenges of tomorrow.

To contribute to fostering a culture of anticipation and preparedness, and to building a multilateral system that remains relevant for current and future generations, the UN Futures Lab/Global Hub and the International Science Council (ISC) have collaborated to better understand the concrete and transformational role of futures thinking and strategic foresight in informing decision-making and action. Futures thinking and strategic foresight are key to helping us address complex issues and deal with significant uncertainty – and to embedding long-term perspectives that consider policy implications on future generations.

From insights to action

Drawing on case studies from the Global South[1], this joint paper demonstrates the versatility of foresight practices with a focus on tangible actions for decision-makers and policymakers. It also illustrates how these approaches can support anticipatory governance and resilience building, offering lessons learned and practical recommendations.

This report provokes more questions than answers. It is only one part of the equation, intended to motivate diverse discussions, dialogue, cross-cultural perspectives, and action in order to **inspire debate, facilitate exchange, and ultimately contribute to helping drive a more forward-looking and anticipatory multilateral system that is fit for future generations.**

Applying foresight in decision-making and policymaking is influenced by a range of key factors. While these are not specific to the Global South, the case studies highlight the importance of embedding these factors in design, implementation, and follow-up.

There is no one-size-fits-all approach to futures thinking and strategic foresight practices; nevertheless, six key recommendations resonate across the case studies featured in the report.

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[1] While not part of the Global South, the case study from New Zealand offers a valuable example from the Southern Hemisphere that highlights indigenous knowledge and approaches to futures thinking.

Six key recommendations for inclusive foresight

Exercise bold leadership to shift mindsets and challenge the status quo

Leaders must actively cultivate a culture that embraces foresight, challenges dominant paradigms, and drives openness to innovative and novel solutions. Building such a culture is essential to dismantling outdated norms, overcoming systemic barriers, and enabling future-oriented action.

Invest decisively in collaborations between scientists, policymakers, and communities to drive faster, real-world impact

Significant and sustained investment is required to bridge science, policy, and societal efforts. Overcoming resistance to change and unlocking collective action demand financial and institutional commitment, particularly where entrenched interests or norms impede forward-looking change.

Leverage contextual insights and behavioural science to enhance foresight

Foresight initiatives must recognize the extent of cognitive and behavioural biases, and historical and local contexts. Addressing these influences – including over-optimism and resistance to counter-narratives – is critical to fostering constructive engagement and resilience in the face of uncertainty.

Embed inclusive participation and long-term thinking at all levels

Foresight processes must be explicitly inclusive, accessible, and participatory, ensuring that diverse perspectives are integrated from the outset. Gender, age, geographic location, demographics, and diverse backgrounds and perspectives should be recognized in foresight exercises – as should the types and sources of data used.

Build systematic foresight capacity and ensure impact measurement

Creating opportunities and mechanisms for capacity-building in foresight and embedding long-term thinking into education, leadership development, and decision-making pipelines is essential to building a future-ready workforce and institutional culture. Foresight exercises must be scaled appropriately, with robust, context-sensitive measures of impact to ensure they translate into tangible, sustainable outcomes.

Strengthen networks, data access, and evidence-based adaptation

Building strong, dynamic, and diverse communities of practice and ensuring open and equitable access to data are fundamental for adaptive policymaking. Collaborative knowledge ecosystems, including indigenous and community-based groups, must be cultivated to drive innovation, share lessons from real-world foresight applications, and embed futures thinking across systems.

BACKGROUND

UN Futures Lab

The UN Secretary-General's *Our Common Agenda* report in 2021 underscored the need for the UN and multilateral system to be better prepared for major global risks while ensuring that policy decisions consider their impact on future generations. The UN Futures Lab (per *Our Common Agenda* proposal) was established by the Executive Office of the UN Secretary-General in 2023. The UN Futures Lab is a global network that empowers the UN system and beyond to use futures thinking and strategic foresight in planning, policymaking, and decision-making. The UN Futures Lab is driven by a Global Hub, whose activities aim to contribute to: (i) future-proofed decisions and actions with a long-term perspective shift, (ii) more accessible foresight tools, frameworks, and approaches, (iii) a multilateral system that can withstand risks, shocks, and change, (iv) a coherent method and approach to supporting Member States through change and turbulence, and (v) an inclusive foresight ecosystem that balances participation of the Global North and South with more diverse perspectives.

International Science Council

The International Science Council (ISC) brings together over 250 scientific organizations worldwide from across the natural and social sciences and is working to advance science as a global public good. Integrated scientific perspectives are increasingly key to understanding the root causes of global challenges through systems-based approaches to identify sustainable solutions. Such pluralistic approaches to science are especially important when undertaking foresight to identify key factors, their interdependencies, and critical uncertainties associated with them to help inform decision-making towards achieving positive development outcomes. The ISC has been engaging in foresight work recently to support multidisciplinary assessment of current and future risks and opportunities and enhance preparedness. This includes the 2024 United Nations Environment Programme (UNEP)-ISC environmental foresight report which identified signals of change that can affect long-term planetary health.

Definition of futures thinking and strategic foresight[2]

Many indigenous practices have long embodied long-term thinking, drawing on worldviews that reflect principles of natural cycles, reciprocity within ecosystems, and intergenerational responsibility. While referred to using different names, they share a similar intent to that of strategic foresight: to anticipate future possibilities and ensure the resilience and well-being of future generations, underpinned by a holistic understanding of sustainability.

Such approaches help us to systematically think and act in a long-term and anticipatory way under conditions of uncertainty. They offer a variety of tools that can be used to produce different outputs to inform policy, strategy, and decision-making.

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[2] Futures thinking and strategic foresight are both oriented towards understanding the future, but they can present some differences. Futures thinking involves exploring various possible futures to challenge and broaden our present perspectives. This method encourages open-ended consideration of what might happen. On the other hand, strategic foresight focuses on harnessing insights about the future to inform practical, strategic planning and decision-making processes.

Futures thinking and strategic foresight help organizations, leaders, and policymakers navigate uncertainty, address complex challenges, and promote long-term, sustainable outcomes. Strategic foresight offers one set of approaches that help drive such processes, some of which are outlined in the UN Strategic Foresight Guide[3]. It provides us with a departure point from which to understand a diversity of approaches – as captured across many of the case studies presented below.

FOCUS ON THE GLOBAL SOUTH: APPLICATION OF FORESIGHT PRACTICES

Case study approach

The UN Futures Lab/Global Hub and the ISC issued a call for case studies in March 2024 to learn from foresight approaches developed and used in the Global South in decision-making, planning, and action. Historically, examples from the Global North have predominantly appeared in futures thinking and strategic foresight discussions. However, the widespread application of futures and foresight in the Global South provides a rich opportunity to uncover valuable insights and learnings, bridging diverse perspectives, novel approaches, and methods across regions.

The selection of 14 case studies presented in this report reflect balance across geographies, themes, sectors, stakeholders, and foresight tools (the tools are marked in **pink** for easy reference). The case studies illustrate a range of impacts, primarily through a typology of approaches by desired outcomes as outlined below.

Local and Indigenous Knowledge, Sources, and Practices

Building Local Capacities and Durable Solutions from Community-Led Initiatives

Multistakeholder Partnerships and Collaborations

Organizational Development

Sector-Wide Policy Development and Innovation

Futures Empowered by Technological Advancements and Innovation

Improved Social Outcomes/Social Well-Being for Marginalized Communities

Rebuilding Narratives

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[3] UN Futures Lab (2023). *UN Strategic Foresight Guide*: un-futureslab.org/project/un-strategic-foresight-guide/

Local and Indigenous Knowledge, Sources, and Practices

Case Study 1

Women's Participation in Climate Action at Hyperlocal Levels: Insights from Jodhpur for Strengthened Disaster Risk Governance

Scenario Development

India

What was the context?

In Jodhpur, Rajasthan, the adverse impacts of climate change are intensely felt at the hyperlocal level, specifically in urban neighbourhoods where women are disproportionately affected. Despite global encouragement towards women's participation in climate action, ensuring meaningful participation at local levels can remain challenging due to national contexts. This 2023-2024 study examines how women's knowledge of climate change, access to traditional knowledge, indigenous practices, and place-based wisdom, combined with their intention to act, positioned them as suitable leaders and champions for climate action.

What was the process used to think and act in a long-term, anticipatory manner?

Foresight principles and statistical tools were employed to identify key factors for women's involvement in hyperlocal climate action decision-making.

Framework development: To understand the role of women in climate action, a three-dimensional framework was developed. This framework considered various factors, including knowledge, impact perception, and readiness to engage in activities.

Interactive workshop: A one-day workshop brought women from Jodhpur together to discuss the impacts of climate change and envision **future scenarios**[4] and actions. The session concluded with a reflection on the capacity of the current socio-political ecosystem to support their active participation. The discussions were structured around a rating (Likert) scale with linguistic variables to accurately measure responses.

Data analysis: Following the workshop, responses were analyzed using statistical methods, including correlation and principal component analysis. This analysis helped identify specific adjustments needed in the ecosystem to support women's participation in climate action more effectively, utilizing their traditional knowledge, and contributing meaningfully to resilience-building.

What were the impacts?

Increased intergenerational engagement: Women in Jodhpur who participated in the exercise have become more interested in utilizing their knowledge to combat heat stress and have actively contributed to preparing the climate-culture story of Jodhpur, with elderly women leading and younger ones advising and educating the next generation.

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[4] Scenario development is an approach to broaden our understanding of how the future may evolve. UN Futures Lab (2023). *UN Strategic Foresight Guide* ("Scenario Development"): un-futureslab.org/project/un-strategic-foresight-guide/

Educational initiatives: Schools in Jodhpur are delivering immersive workshops that engage young minds in exploring the connections between culture and climate action through innovative approaches.

The workshop utilized traditional knowledge, place-based wisdom, and modern science to advance capacity building among participants.

So what?

This exercise highlighted the need for a balance between traditional knowledge and science and technology, while demonstrating the efficacy of combining the two for climate action. This led to the development of Jodhpur's first-ever Heat Action Plan, which officially recognized and effectively utilized the potential of culture in mitigating extreme heat risks.

This exercise helped participants adapt to a contemporary context. Culture is not static

and there is a need to adopt older ways of life to newer challenges. One such example was incorporating traditional architecture in modern building design to mitigate the ill-effects of urban heat.

This exercise also took an intergenerational approach to engagement between elderly women and young people (aged between 12 and 21 years) to explore traditional knowledge, place-based wisdom, and modern science.

Local and Indigenous Knowledge, Sources, and Practices

Case Study 2

Urgent Integration of Ancestral Knowledge as Resilient Strategies for Disaster Mitigation and Response

Scenario Development

Bolivia

What was the context?

The foresight process, implemented between 2008 and 2010, addressed the struggles of impoverished indigenous families who rely on traditional agriculture and are impacted by climate change. Sustainable solutions focus on risk management through prevention, mitigation, and integration of ancestral and scientific technologies. While the Kyoto Protocol provides macro-level protection, resilience at the micro-level has been bolstered through good agricultural practices incorporating ancestral knowledge.

These practices have been studied, shared, and enhanced with scientific innovations, fostering food security and income stability despite extreme weather events.

What was the process used to think and act in a long-term, anticipatory manner?

Data analysis: With the support of elders who read and interpreted bioindicators to understand soil and climate behaviour trends, 30 agricultural best practices were analyzed and identified across different thematic areas: agriculture, livestock, farming, natural

resource management, and water and land conservation.

Scenario development: Preventive scenarios were developed to holistically manage risks, fostering resilience and productive sustainability in the most vulnerable and impoverished sectors of the high Andean society.

Proactive resilience planning: Community germplasm and seed banks were considered actions as well as specific policy interventions at national and local levels.

What were the impacts?

Develop best practice: Over 30 other agricultural best practices have been successfully rescued and replicated, with

some being published in scientific literature and disseminated to numerous small food producers and farmers who suffer from high levels of food insecurity and poverty.

Synergy between local knowledge and ancestral techniques: This has led to better understanding of annual climate patterns and appreciation of genetic resource biodiversity.

This includes incorporating community germplasm and seed banks for emergencies, territorial rotations, crop associations, and minimal tillage amongst other practices.

Policy development: The creation of risk management units and the development of community-based early warning systems for disasters at all municipal levels were implemented.

So what?

This exercise highlighted the importance of cultural preservation of intergenerational knowledge. It is a vital part of a community's identity, contributing to safeguarding cultural wealth and preventing the loss of this knowledge over time. It also demonstrated the influence on modern society to help uncover more resilient and balanced solutions for contemporary problems.

This exercise fostered solidarity amongst the population and increased productivity by systematically capturing traditional knowledge and enhancing knowledge management techniques. Knowledge that was once lost was restored through modern practices to find innovative solutions to climate challenges.

Building Local Capacities and Durable Solutions from Community-Led Initiatives

Case Study 3

An Intergenerational Project Vital to the Ongoing Success of Ngāti Whatua Orakei (NWO)

Horizon Scanning | Trend Analysis | Scenario Development

New Zealand

What was the context?

In 2022, Ngāti Whātua Ōrākei (NWŌ), a Māori hapū (subtribe) of the broader Ngāti Whātua iwi (tribe) in New Zealand, embarked on a foresight initiative to understand the current state of its members' well-being. The goal was to anticipate demographic changes over the next 50 years and areas for improvement in education, housing, and physical and mental health.

What was the process used to think and act in a long-term, anticipatory manner?

This initiative, led by the Koi Tū Centre for Informed Futures and NWŌ, applied three foresight methodologies to ensure a thorough and nuanced analysis that integrated the unique characteristics of the NWŌ hapū:

Horizon scanning[5]: The exercise started by mapping emerging demographic trends through desktop analyses and discussions with hapū members.

Trend analysis: Past and current patterns among the hapū and broader Māori and New Zealand populations were examined to understand potential future developments. The analysis showed that the demographic trends followed the patterns of the broader population but with a delayed effect.

Scenario development: The scenarios represented multiple potential futures narratives and different circumstances, such as varying fertility or mortality rates, to explore a range of possible futures amidst uncertainty.

What were the impacts?

Informed programmes and services: The foresight exercise highlighted demographic trends of the NWŌ hapū – slower population growth, declining mortality and fertility rates, a transitioning young population, an ageing community, and tendency for women to have children later. These insights guided the development of targeted services such as aged-care facilities, specialized housing, and comprehensive healthcare.

Hapū-owned population survey: The process resulted in an agreement to develop a hapū-owned study of the NWŌ population. This survey will be conducted at regular multi-year intervals to complement the New Zealand national census, with a focus on NWŌ's strategic priorities in order to fill localized data gaps.

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[5] Horizon scanning is a tool to identify emerging changes that could have an impact on a country or a specific actor. UN Futures Lab (2023). *UN Strategic Foresight Guide* ("Horizon Scanning"): un-futureslab.org/project/un-strategic-foresight-guide/

So what?

This is a first-of-a-kind exercise in New Zealand, with the NWŌ hapū actively engaging and embracing the findings from the work. They have since taken ownership of the foresight exercise's outcomes and are progressing on implementing the recommendations to better inform intergenerational outcomes.

The hapū-owned population survey is a signal by the NWŌ to further integrate anticipatory planning and to inform future programmes for the hapū. Furthermore, NWŌ acknowledges that moving forward they need improved data to make evidence-informed decisions for better outcomes. The survey is a mechanism to strengthen their knowledge, adapt to uncertainty, and continue to tackle the complex issues facing them.

Multistakeholder Partnerships and Collaborations

Case Study 4

Systems Innovation and Foresight for Food Security and Livelihoods

Drivers of Change Analysis | Desired Future | Back Casting

Kenya | Malawi | Zimbabwe

What was the context?

The global food system produces enough calories to feed 10 billion people annually, yet food insecurity remains a significant challenge. Climate change disruptions, economic instability, global pandemics, conflicts, and geopolitical shifts have worsened food insecurity, with 258 million people facing acute hunger in 2022. In 2024, the International Federation of Red Cross and Red Crescent Societies (IFRC) Solferino Academy implemented a foresight initiative requested by the Kenyan, Malawian, and Zambian Red Cross National Societies. It sought to develop a portfolio of future-ready and system-level innovations to strengthen food security and livelihoods programmes.

The project focused on embedding systems thinking and strategic foresight skills within the participating National Societies, setting a precedent for exploratory initiatives that integrate diverse methodologies.

What was the process used to think and act in a long-term, anticipatory manner?

Systems mapping: Co-creation of a **systems map** to understand **drivers of change**[6] related to food security and livelihoods issues, through which the three National Societies mapped programmes to identify new intervention spaces.

Development of desired futures[7]**: Desk research, expert interviews, scenario**

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[6] A driver of change is a source of change. It might an event, an organization, or a social or environmental phenomenon. UN Futures Lab (2023). *UN Strategic Foresight Guide* ("Horizon Scanning"): un-futureslab.org/project/un-strategic-foresight-guide/

[7] Desired future is a tool to identify future characteristics. It helps us think about a range of outcomes rather than one scenario. UN Futures Lab (2023). *UN Strategic Foresight Guide* ("Desired Future"): un-futureslab.org/project/un-strategic-foresight-guide/

development, and creative sessions were conducted to generate preferred futures and identify risks, building skills which were then embedded in the National Societies. Finally, **back casting**[8] was used to translate the preferred futures into current actions.

Design thinking: Community story-based workshops and **diverse stakeholder sessions** were used to formulate innovative food security and livelihoods concepts.

Multistakeholder engagement: The approach involved diverse stakeholder input that varied during the different phases of the project. This included innovators, entrepreneurs, academics, NGOs, government representatives, international cooperation representatives, community connections, and external partnerships. Different combinations of stakeholders were brought together to test assumptions and challenge potential solutions.

The initiative is currently being tested and refined within the three host National Societies.

What were the impacts?

Capability enhancement: The foresight work generated a variety of products, including a systems map, scenarios, desktop walkthroughs, and a portfolio of innovation concepts. The most promising concepts have triggered further activity to turn these ideas into a series of practical experiments to build evidence for investment and laying a foundation for future humanitarian efforts.

Programme expansion: A proposal is underway to expand the initiative to four additional countries, including in the Asia Pacific region. This expansion will allow for testing, iteration, and scaling of innovations, potentially transforming the global delivery of critical food security and livelihoods programmes, and helping secure essential food and livelihoods. The project left a legacy with Red Cross-National Societies by embedding foresight in their planning approaches moving forward.

Flexible and adaptive programming: This project tested ways of working within the three National Societies, who met at the start of every phase but otherwise operated independently. This autonomy worked well, with each able to proceed at a different pace depending on context and disruptions caused by sudden crises. However, a "champion" was required in each National Society who could maintain the momentum and motivation during each phase.

So what?

By experimenting with approaches such as foresight and design thinking, the processes became richer and more targeted. This initial work has catalyzed further innovation, including in-depth explorations to refine and expand further.

Engagement in the project has also inspired participants to embrace and apply foresight, systems thinking, and design thinking across other projects and activities, leaving a lasting legacy in the participating National Societies.

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[8] Back casting is a tool to develop pathways to the future, starting not from the present but from what we need to achieve. UN Futures Lab (2023). *UN Strategic Foresight Guide* ("Back Casting"): un-futureslab.org/project/un-strategic-foresight-guide/

Case Study 5

Innovative Partnerships for Anticipatory Action: Better Programming in Farming Areas

Trend Analysis

Sudan

What was the context?

In Darfur, Sudan, inter-communal conflicts arise from multiple underlying causes, including livestock damage to crops, disputes over land ownership and natural resources, access to water, and inadequate pastures exacerbated by climate change. These conflicts typically escalate during the rainy and harvesting seasons, involving farmers, internally displaced persons, and nomadic peoples.

The COVID-19 pandemic and variations in law enforcement further aggravated this situation. In response, the United Nations–African Union Mission in Darfur (UNAMID) implemented a foresight process between 2020 and 2021 aimed at understanding the persistent threat of violence arising from resource competition to mitigate the impact on civilians, particularly farming communities, given UNAMID's Protection of Civilians mandate.

What was the process used to think and act in a long-term, anticipatory manner?

Trend analysis[9]**:** UNAMID and its partners conducted a **trends analysis** to review agricultural hotspots in Darfur and identify areas where farmers and displaced populations were frequently subjected to intimidation and violent threats.

Identification of conflict-prone areas: Through **mapping** and **listing,** they identified conflict-prone farming areas where older and newer inter-communal conflicts occurred, particularly during the rainy season. Threats to civilians in Darfur included physical assaults, tribal conflicts, abductions, and various forms of violence. The review highlighted significant vulnerabilities, including limited law enforcement presence and inadequate justice institutions.

Risk classification: A **risk ranking criteria** was established based on the frequency of threats, classifying areas from low risk to very serious. This risk assessment was reviewed on an ongoing basis and enabled UNAMID, as well as other stakeholders, to prioritize protection activities for the most vulnerable areas.

What were the impacts?

Implementing mitigation measures: Reviewing conflict trends in farming areas allowed UNAMID to pinpoint the most vulnerable regions and the specific threats and risks affecting the safety and security of the civilian population, including physical assaults, tribal conflicts, abductions, and various forms of violence. As a result, UNAMID developed and implemented 15 interlinked mitigation measures, such as adjusting patrol plans, enhancing coordination with local communities, and increasing the presence of

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[9] A trend is an established general direction in which something is changing. UN Futures Lab (2023). _UN Strategic Foresight Guide_ ("Horizon Scanning"): un-futureslab.org/project/un-strategic-foresight-guide/

law enforcement and UNAMID patrols.

Supporting communities: These measures aimed at protecting farming communities, especially during the farming/rainy season, and included initiatives to strengthen community networks, promote peaceful negotiations, and support law enforcement and protection networks.

Anticipatory action: This process has initiated specific measures to anticipate likely violent clashes and readjust the local responses. This includes working with community-based leaders to collect early warning information and build capacity and resilience in key areas to better anticipate and prevent incidents.

While the causes of the conflict were already well understood, this project enabled UNAMID to determine the farming areas most at risk of conflict and prioritize the resources needed for mitigation or response measures. This exercise established a systematic mechanism for stakeholders to anticipate the most vulnerable areas that require intervention and put in place an ongoing review process to regularly update the priority farming areas. The project brings together local and international partners to leverage evidence, advocacy, and capacity building to improve the safety and security of farming communities.

Organizational Development

Case Study 6

The Alternative Futures of the International Centre for Biosaline

Six Pillars | Desired Future

United Arab Emirates (UAE)

What was the context?

In 2012, the International Centre for Biosaline Agriculture (ICBA) held a strategic planning and foresight workshop with 50 international stakeholders in Dubai, UAE. This workshop represents a pioneering effort within the Middle East and North Africa (MENA) region to employ the **six pillars**[10] anticipatory approach.

What was the process used to think and act in a long-term, anticipatory manner?

Methodological framing: Utilization of the six pillars approach to structure the foresight process.

Desired futures: Key stakeholders, including UAE government representatives, donors, the private sector, and leading scientists, developed **six visions of the future**. These ranged from continuing to focus on biosalinity research to expanding into new areas and transforming the organizational structure of ICBA.

[10] The six pillars (S. Inayatullah, 2008) refers to: i) mapping past, present and future, ii) anticipating, iii) timing the future, iv) deepening the future, v) creating alternatives, and vi) transforming the future.

Strategic and business plan formulation: The visions were transformed into a long-term strategic and business plan for the ICBA.

Risk assessment: A risk assessment of each vision was conducted.

What were the impacts?

Integration into ICBA's Strategic Plan: Based on the insights gained from the foresight exercise, ICBA took several actions to shape its future and implement the identified visions. These actions were reflected in the development and implementation of ICBA's Strategic Plan.

Innovation and research expansion: The insights fostered innovation in research related to saline and marginal environments and informed the development of novel visions and strategies for water and food futures, together with a risk assessment of each vision.

The foresight activity was central to identifying ICBA's strategic pathways and major initiatives, guiding a new research agenda and vision through 2023. These directly fed into developing the ICBA corporate strategy, which has been the guiding force behind the Centre's work ever since. The strategy has proven an essential tool for devising actions in response to the needs of various stakeholders in different regions.

The initial foresight work undertaken has also catalyzed embedding foresight practices into decision-making. In 2019, the ICBA undertook a mid-term strategic review to reevaluate the Centre's future based on emerging threats and opportunities, which highlighted the importance of linking long-term visions but having mechanisms to revisit these and recalibrate in response to uncertainty. The legitimacy of the foresight exercises was part of the organizational change underpinning these actions.

Sector-Wide Policy Development and Innovation

Case Study 7

Scenario-Based Strategic Planning of Industrial Development

Trend Prioritization | Scenario Development

Kyrgyzstan

What was the context?

The Government of Kyrgyzstan aimed to develop a national industrial strategy to facilitate economic growth, reduce dependence on foreign financing, and increase the welfare of its population. Given the uncertainties and long-term implications of the challenges faced at that time – including low domestic demand for manufactured products, access to capital, workforce skill gaps, and an evolving regulatory framework – this initiative, implemented by the United Nations Industrial Development

Organization (UNIDO) and the International Institute for Applied Systems Analysis (IIASA) between 2018 and 2019, integrated strategic foresight into planning processes. The aim was to align short-term measures with long-term implications and mitigate potential pitfalls.

What was the process used to think and act in a long-term, anticipatory manner?

Scope definition: Utilizing foresight tools to frame the exercise, this included identifying and **prioritizing 75 uncertainties and trends** across different PESTLE[11] domains, which were then clustered using causal loop diagrams to reveal five key uncertainties.[12]

Scenario development: From these uncertainties, a scenario matrix was developed, which outlined six plausible scenario narratives up to 2040, offering distinct visions of Kyrgyzstan's future. Each narrative reflected the complex interplay of uncertainties that could shape the country's industrial path:

- **Modern Yurt** envisioned an export-oriented economy driven by liberalization and global integration.

- **Khagan's Fortress** highlighted centralized, state-controlled growth.

- **Assembly Shop** depicted the country as a foreign-invested manufacturing hub with limited domestic benefits.

- **Sandcastle** warned of fragile institutions and over-reliance on external resources.

- **Falling Tower** emphasized the risks of incomplete reforms, resource dependence, and large-scale emigration of the skilled workforce.

- **Abandoned Palace** underscored the dangers of excessive centralization and isolation.

Strategy formulation: Core and contingent strategies were defined, supported by a digital platform that included quantitative and qualitative indicators to track scenario trajectories.

What were the impacts?

Informing policy: The scenario narratives and strategic insights identified opportunities and risks in Kyrgyzstan's industrial sector and directly shaped the official Sustainable Industrial Development of the Kyrgyz Republic 2019-2023 and its accompanying Action Plan, adopted by the Kyrgyz Government.

Providing policy recommendations: The foresight process provided foundational policy recommendations for trade, investment, human capital development, innovation, and sustainable resource management.

Creating institutional capability: The project highlighted the value of strategic foresight, enhancing futures-thinking capabilities within the Government and other stakeholders, including civil society, the business sector, academia, research institutions, and international organizations.

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[11] A PESTLE analysis studies the key external factors (Political, Economic, Societal, Technological, Legal, and Environmental) that influence an organization.
[12] The five key uncertainties included trade policy and governmental regulation of the economy, state of the production factors, quality of domestically produced goods and services, dependence on external financial support, and domestic demand.

So what?

The study presented a successful approach to building anticipatory capacity and fostering a futures-thinking culture within government and society. It also highlighted the importance of ensuring that cultural sensitivity is incorporated throughout the foresight approach as illustrated with the scenario design. For example, scenario names resonate with local contexts. The process also underlined the importance of framing negative scenarios as potential risks rather than inevitable trajectories in order to encourage constructive engagement. The scenarios catalyzed awareness and, by confronting the possibility of adverse developments, policymakers were prompted to reflect on the limitations of their existing assumptions and instead encouraged to integrate targeted risk-mitigation measures into the industrial development strategy.

Sector-Wide Policy Development and Innovation

Case Study 8

The Future of Food and Agriculture – Drivers and Triggers for Transformation: A Preliminary Result

Horizon Scanning | Scenario Development

Vietnam

What was the context?

Agriculture, forestry, and fishery are vital sectors in Vietnam, contributing 11.88% to GDP and employing 27.54% of the labour force. Despite significant progress in poverty reduction, national food security, and social stability, these sectors continue to face challenges such as resource degradation, overuse of chemicals, climate change, and market concentration.

In 2022, the Government adopted a food systems approach to address these challenges and collaborated with the Food and Agriculture Organization (FAO) on a pilot Country Foresight Exercise. The Country Foresight Exercise results will inform the national development strategy and policy frameworks.

What was the process used to think and act in a long-term, anticipatory manner?

The Country Foresight Exercise, guided by FAO's global foresight methodology, encompassed several key stages:

Framing: Definition of agrifood systems.

Horizon scanning: Analyzing FAO's statistical data, web-based dashboard, and domestic data sources to identify trends in socioeconomic, environmental, and agrifood systems nationally over the last decade and weak signals[13] looking ahead.

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[13] Weak signals are a first indicator of change; an event, a local change, an organization with the potential to scale. UN Futures Lab (2023). *UN Strategic Foresight Guide* ("Horizon Scanning"): un-futureslab.org/project/un-strategic-foresight-guide/

Scenario development: Creating narratives for future scenarios using qualitative and quantitative modelling with additional iterative steps.

Strategies and policy formulation: The development of strategies and policy options for desired outcomes, including the identification of triggers and/or accelerators for desired transformations.

What were the impacts?

Identified key priority drivers: The Country Foresight Exercise's initial phase in Vietnam has identified key priority drivers, including an ageing population, urbanization, high internal mobility, and climate change. Challenges include low labour productivity, resource concentration impacting sustainable

development, rising risks of infectious diseases, pollution, and inadequate research and development (R&D) investment. Climate change poses severe threats, which are exacerbated by extreme weather events and rural demographic shifts. The COVID-19 pandemic highlighted existing vulnerabilities and inequalities, hindering inclusive growth.

Inputs to national strategy and policy frameworks: The initiative engaged closely with the Vietnamese Government to raise awareness and inform further steps, which included the approval of the "Sustainable "Agriculture and Rural Development Strategy with a Vision to 2050"[14] in 2022 and a "National Action Plan (NAP) on food systems transformation in Vietnam towards transparency, responsibility and sustainability by 2030".[15]

So what?

This work was crucial in building national institutional capacity for strategic foresight exercises in Vietnam and in developing the know-how to utilize foresight results in policy development and action planning.

Notably, the contextualization of FAO's foresight methodologies at the national level and the sharing of this knowledge with other countries in the Global South (through the UN Futures Lab, FAO members, ASEAN, and other international and regional forums) are of particular relevance.

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[14] Government of Vietnam (2021). *Decision No. 150/QD-TTg: Approving the sustainable agriculture and rural development strategy for the period 2021–2030 with a vision toward 2050*.

[15] Government of Vietnam (2023). *Decision No. 300/QD-TTg: National Action Plan on food systems transformation in Vietnam towards transparency, responsibility, and sustainability by 2030*.

Futures Empowered by Technological Advancements and Innovation

Case Study 9

African Digital Futures

Causal Layered Analysis | VERGE Framework | Impact Wheels |
Back Casting | Scenario Development

Kenya | Nigeria | Rwanda | Tunisia | Zimbabwe

What was the context?

The African Digital Futures project, initiated by Next Generation Foresight Practitioners programme, sought to explore the future of data governance in Africa by 2050. It envisioned a healthy digital society in African communities, examining the technological freedoms and safeguards necessary to foster a thriving digital ecosystem in the face of new tech such as Artificial Intelligence (AI).

The foresight process took place during the COVID-19 lockdown in 2021-2022 and utilized technology to connect a range of participants from Kenya, Nigeria, Rwanda, Tunisia, and Zimbabwe. Participants ranged from human rights defenders and community workers to organic farmers, cryptocurrency experts, doctors, educators, data scientists, technology policy researchers, entrepreneurs, and international professionals.

What was the process used to think and act in a long-term, anticipatory manner?

The foresight exercise incorporated several approaches to analyze and explore future digital trends, providing a comprehensive view of the potential future landscape for African data governance:

Dissecting and exploring: Causal Layered Analysis (CLA)[16] was used to unpack deeper layers of change while the **VERGE framework**[17] was applied to ensure a holistic future analysis. The mixed-methods approach, with participants engaging in individual horizon scanning, paired futures dialogues, and collective sense-making exercises, was an important approach that helped to understand how people living on the African continent might experience digital futures.

Analyzing impact: The **impact wheels** tool was used for futures thinking to assess the effects of critical changes – including population growth, climate change, and data privacy – on society, technology, ecology, values, economics, and politics.

Back casting was used to imagine the preferred future and detail the transformative

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[16] Causal Layered Analysis (CLA) is a tool to explore the layers of change needed to transform and achieve the future we want. UN Futures Lab (2023). *UN Strategic Foresight Guide* ("Causal Layered Analysis"): un-futureslab.org/project/un-strategic-foresight-guide/

[17] The VERGE framework (R. Lum, M. Bowman, 2010) is designed to dissect and explore complex systems through six interconnected domains: define (key concepts, ideas and paradigms), relate (social structures and relationship between stakeholders), connect (practices and technologies to connect people, places and things), create (practices through which we produce goods and services), consume (ways in which acquire and use the goods and services we create), destroy (ways in which we destroy value and the reasons for doing so).

policies that enabled its emergence.

What were the impacts?

Scenario development: Through the exploration of scenarios, the exercise investigated the intersections between digital development and ecological preservation. For instance, in the "Unplug Africa" scenario, Naserian, an African Union Ethical Technology Advisor, emphasizes balancing technological advancement with maintaining human connections.

Policy engagement: The process generated key insights, including around "sincere technologies" (technologies purporting to meet the real needs of people rather than exclude or divide society), humane technology research centres, and addressing technostress and digital psychological dissonance. The insights and outcomes have had a meaningful policy impact as they were presented to the African Union, which has led to policy shifts and increased interest in Africa's Digital Futures, including AI initiatives.

So what?

This work highlighted the potential of foresight to drive transformation, emphasizing the need to build skills and capabilities for the next generation which will carry this work forward across the African continent in the coming decades.

This case study underscored the importance of considering time as a key design element, recognizing that relationships and trust do not develop immediately. The exercise also stressed the value of reframing issues to encourage diverse perspectives and avoid echo chambers dominated by a few voices.

Futures Empowered by Technological Advancements and Innovation

Case Study 10

E-Health Future

Six Pillars | Scenario Development

Bangladesh

What was the context?

The Bangladesh Ministry of Health's Directorate General of Health Services and the Bangladesh Enterprise Institute, in collaboration with the Rockefeller Foundation, commissioned this exercise in 2011 to explore and develop alternative futures for e-health in Bangladesh and articulate compelling visions for Bangladesh e-health systems. This initiative outlined

alternative e-health futures for public health policymaking in Bangladesh and addressed challenges such as low doctor-patient ratios, limited access to public services, inadequate health coverage, poor patient data storage, and a lack of public health monitoring systems. Positive drivers for e-health include advances in telemedicine, affordable and increased access to ICTs, health system transparency, low-cost digital health services, quality improvements, the

transition from paper-based to web-based systems, and potential productivity gains.

What was the process used to think and act in a long-term, anticipatory manner?

Framing: The **six pillars** approach was chosen to explore alternative and preferred futures for establishing a health information system and e-health provision in Bangladesh.

Scenario development: Stakeholders, including techno-entrepreneurs, IT specialists, e-healthcare groups, and senior government officials, contributed to developing diverse futures that reflected a blend of technological optimism and practical realities. The e-health scenarios were enriched with non-textual and artistic elements, creating four alternative futures:

- **Leapfrog 2025,** which depicted a decentralized, enabling e-health system, allowing Bangladesh to "fly over" industrial technologies and infrastructure and create new digital environments.

- **E-health Car 2025** shared many similarities to the Leapfrog future but was focused on the relationships

- between the main institutional actors and the implementation of the national health strategy.

- **Health Cloud 2025**, where health information was widely available to all.

- **E-health Political Party** was more focused on the political and social dynamics for ensuring the success of the e-health system and less concerned about the nature of e-health.

What were the impacts?

Strategic initiatives: The foresight insights led to several actions to shape the future of e-health in Bangladesh. The Leapfrog 2025 and Health Cloud 2025 scenarios offered different visions for e-health implementation, enabling stakeholders to explore various possibilities.

Collaborative frameworks: This process emphasized the importance of local communities and healthcare workers.

Public-private partnerships: The foresight process highlighted the importance of public-private partnerships in successful uptake and adoption of the scenarios and outcomes, including driving financial incentives to motivate individuals to maintain healthy habits.

So what?

A crucial aspect of this exercise was the importance of moving beyond a static view of the current situation towards a focus on increased engagement between various stakeholders of the e-health process. Issues such as public health cannot be formulated arbitrarily by a handful of experts; instead, they require a broad consultative process and diverse stakeholders to formulate effective solutions.

It also highlighted the need for a balance between centralized and decentralized approaches to encourage greater participation and collective ownership. Actions were taken to ensure that the e-health systems were developed from the bottom up, with the government providing the overarching governance framing – an approach that empowered local communities and healthcare workers to actively participate in delivering healthcare services.

Improved Social Outcomes/Social Well-Being for Marginalized Communities

Case Study 11

Decolonizing Futures: Citizen Visions in Government Planning

Desired Future | Back Casting

Colombia

What was the context?

This project introduced participatory foresight methodologies to bring underrepresented voices into Colombia's National Development Plan planning process, including youth groups, Amazonian indigenous populations, and Afro-Colombian communities. Between 2022 and 2023, UN Global Pulse Finland and the United Nations Population Fund (UNFPA) in Colombia trained young leaders from underrepresented communities to co-create workshops and facilitate discussions about their desired future, empowering young people and underrepresented communities to participate in shaping their future and integrating a wider range of perspectives into the National Development Plan.

What was the process used to think and act in a long-term, anticipatory manner?

This project reimagined citizen engagement through a decolonial lens, with young leaders from the Amazon and Chocó regions co-creating a participatory foresight process to integrate their visions into government planning.

Community engagement: The process involved online sessions and collaborative workshops using service design and foresight training to centre underrepresented voices. This approach emphasized decolonizing youth engagement, building trust through culturally specific activities, and fostering collective perspectives.

Co-creation of desired futures: Participants reflected on individual aspirations, identified interconnectedness, and co-created a desired future.

Back casting: Using back casting, the insights were translated into actionable policy recommendations. This initiative aimed to embed citizen visions and ancestral knowledge into government plans, promoting inclusive and empathetic governance.

What were the impacts?

Policy integration: The project's success led to a policy change in Colombia's National Development Plan with regards to participatory foresight and inclusive future methods, which have now become standard practices for government planning and citizen dialogues.

Empowerment of young leaders: The project equipped young leaders with co-creation skills, fostering safe spaces for dialogue with underrepresented communities, building trust, and amplifying the voices of those who are often unheard while envisioning futures beyond the dominant narrative. Decolonizing approaches to foresight exercises that are rooted in local contexts, and utilizing culturally relevant tools such as harmonization (sharing cultural activities) resulted in building trust and fostering empathy.

Development of a planning toolkit: The project methodology has evolved into a toolkit for youth and community activists, empowering them to bridge the gap between citizens and government in planning processes.

This approach has been integrated into Colombia's national planning framework, recognizing that decolonial and participatory future dialogues in regional policy are necessary to ensure that the voices of underrepresented communities are captured in policy formulation. Achieving this has required shifting planning from a centralized model to a participatory, community-led approach that has led to more inclusive and effective strategies.

Improved Social Outcomes/Social Well-Being for Marginalized Communities

Case Study 12

Accelerating the Double Dividend through Horizon Scanning: The Role of Social Protection Policies

Horizon Scanning | Scenario Analysis

Nigeria

What was the context?

Following the African Union (AU)'s Social Policy of 2008, the Nigerian Government initiated a plan to develop a national social protection policy in collaboration with development partners, including UNICEF, between 2014 and 2018. This effort was primarily focused in Southwest Nigeria. It provided an opportunity to assess the future of the wide range of social net investment programmes implemented by the Government at the subnational level in six states. Two State Governments invited expert intervention to either scale up or phase out existing social net investments and craft policy guidance using a foresight methodology.

What was the process used to think and act in a long-term, anticipatory manner?

Scoping: In collaboration with the Economic Policy Research Institute in Cape Town and the Nigerian Institute of Social and Economic Research, UNICEF organized an inception workshop to establish the most suitable methodologies for future planning.

Horizon scanning: A technical working group was formed, including Government, community leaders, legislators, civil society, and academia, to map out Social Net Investment Programmes from the past decade, assessing their scale, scope, innovation, and maturity in terms of targeting, delivery, and continuity of support / political buy-in.

Capability building: Nigeria's Osun Social Protection Technical Working Group and key informant interviews were part of a training session.

Verification and documentation: A high-level study tour analyzed future social protection **scenarios**, aiming for a double dividend for the state.

Dissemination and outreach: The draft policy was shared with key influencers, including traditional, religious, and community leaders, elder statesmen, teachers, professional association leaders, labour union leaders, civil society leaders, peer group leaders, development experts, and academia to gather public input and opinions.

What were the impacts?

Framework for future social protection in Nigeria: A working group developed a framework for future social protection, resulting in Nigeria's first approved subnational social protection laws and policies and institutionalizing a life-cycle approach to social protection.

Consensus building: 22 social net investment programmes were considered, and the draft policy was shared with selected key influencers to make the process of policymaking more participatory and to elicit public opinion and consensus.

So what?

This foresight exercise led to the Osun State Social Protection Policy being both nationally and internationally recognized as an exemplar for social policy implementation. The Osun Social Protection Law (2018) made the state the only state in Nigeria to have a Social Protection Policy and a law governing social protection.

The success of the Osun State Social Protection Policy was due, in part, to the human-centric focus of the project. None of the key stakeholders lost sight of the exercise, which was to address social outcomes for the community. Stakeholders have also taken proactive measures to codify social protection policies into law, ensuring their longevity by making social protection programmes compulsory.

Rebuilding Narratives

Case Study 13

The Impact of "the Weight of the Past" in Strategic Decision-Making

Scenario Development

Kenya

What was the context

Over the past decades, civil society organizations (CSOs) in Kenya have played a

crucial role in promoting political consciousness, contributing to democratic and electoral processes, and advocating for accountability. Throughout their history, they

have navigated shifts in the political landscape and called for democratic norms and policies. Conscious of their critical role, in 2013, they launched a foresight process to explore the future operating environment of CSOs in Kenya and the evolution of civil society engagement models in 2022.

What was the process used to think and act in a long-term, anticipatory manner?

Scenario development: Kenyan CSOs developed four scenarios to build shared values among civil society leaders, deepen understanding of potential external and internal threats, and support civil society in preparing for the future with a 10-year time horizon.

- The **Jienjoy (Enjoy Yourself)** scenario highlighted the importance of CSOs continuing to successfully play a dominant role in Kenya's democracy by 2022.

- The **Jisort (Sort Yourself Out)** scenario underscored the critical role of financial stability and past achievements in sustaining democratic progress, even when external support wanes.

- The **Jihurumie (Feel Sorry for Yourself)** scenario was a cautionary tale about the detrimental effects of international sanctions and internal repression on civil society's effectiveness.

- **The Jitolee (Volunteer Yourself)** scenario demonstrated the power of solidarity and external support in enabling CSOs to thrive under oppressive regimes.

What were the impacts?

Strategic insights: The scenarios gave the Kenyan CSOs the insights necessary to anticipate changes over a 10-year period, strategically position themselves in various potential futures, and enhance their preparedness and strategic decision-making capabilities.

Evidence-informed decision-making: The analysis undertaken in developing the scenarios showed that shrinking civic space was a significant issue that the Kenyan CSO needed to address. However, overdependence on donor funding and internal operational ineffectiveness were serious threats to the survival of the governance CSOs in the country. The exercise highlighted the need for CSOs to innovate internally and seek sustainable funding models.

Acting on foresight: The narratives challenging their desired vision for more resourcing and greater relevance were not used by the Kenyan CSOs, primarily due to the "weight of the past"[18]. The CSOs focused on scenarios aligned with optimism and resilience (Jienjoy and Jitolee scenarios), while omitting the scenarios that more accurately reflected emerging challenges and which they needed to pay attention to and prepare for (Jisort and Jihurumie scenarios).

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[18] "Weight of the past" (S. Inayatullah) refers to the constraints and limitations imposed by past decisions, beliefs, and structures that hinder progress towards a desired future.

So what?

The inaction to act on the scenarios by the Kenyan CSOs was primarily due to the "weight of the past" where past successes and legacies led to resistance of counter-narratives to what we know, or which do not confirm our desired visions for the future. Since 2022, the omitted scenarios have been the reality for Kenyan CSOs.

While foresight exercises are not a tool for predicting the future, the less optimistic scenarios provide a mechanism to navigate future uncertainty informed by available evidence. More importantly, this case study highlights the importance of embedding foresight exercises in a change process to help drive impact on outcomes.

Rebuilding Narratives

Case Study 14

The Future of Port Elizabeth's Northern Areas

Scenario Development

South Africa

What was the context?

Port Elizabeth is South Africa's sixth-largest city. Due to historical marginalization during Apartheid, the city has faced severe socio-economic challenges. For example, the so-called Northern Areas became an economically disadvantaged region with high unemployment, poverty, and crime levels. In response, the Northern Areas People's Development Initiative (NAPDI) was launched in 2009, aiming to revitalize the community and enhance the quality of life for its residents.

What was the process used to think and act in a long-term, anticipatory manner?

Scenario development: In 2010, NAPDI collaborated with Reos Partners to initiate a foresight exercise to reshape the future of the

Northern Areas, inspired by the "Dinokeng Scenarios"[19]. The scenario development included interviews, focus groups, and surveys to engage diverse community groups. High-visibility community activities and thorough research encouraged participation and ensured the scenarios were relatable to translate theory into action.

These activities resulted in the "North Star Scenarios". These four scenarios were informed by two primary driving forces: (i) the integrity of local leadership, and (ii) the extent of local economic development. Each scenario depicted one relatable fictional character that explored the different potential future outcomes: Justin (Fallen Star), Lucky (Lucky Star), Auntie Gertie (Shooting Star), and Loliwe (Bright Star).

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[19] The Dinokeng scenarios (Reos Partners, 2008) projected three futures for South Africa in a post-Apartheid country (Walk Apart, Walk Behind, and Walk Together).

- **Justin (Fallen Star)** presented low levels of economic development and poor levels of values-based leadership, resulting in a negative social, economic, and political situation and a low sense of community morals and ethics.

- **Lucky (Lucky Star)** illustrated higher levels of economic development and poor values-based leadership – an exploitative, corrupt environment where jobs are created but not sustained.

- **Auntie Gertie (Shooting Star)** explored high levels of values-based leadership but weak economic development where nothing really changes and most efforts end up fizzling out.

- **Loliwe (Bright Star)** depicted strong and capable leadership in the community, a focus on youth and development, good stakeholder relations, and common purpose.

By using these four fictional characters, NAPDI aimed to generate momentum for creative responses to the situations outlined in the scenarios. The scenarios brought national and international attention to the area and showed a community where engaged leadership was actively seeking solutions. Drawing on the momentum produced through the scenario process, NAPDI was able to translate the community's enthusiasm for change into concrete activities.

What were the impacts?

Ongoing engagement: Roadshows and other engagement following the foresight exercise helped capture and grow support to transform the scenario process into high visibility community impact activities across the Northern Areas.

Environmental and safety improvements: NAPDI established a public space clean-up and recycling process, improving the quality of life for the residents. Their "Safety and Peace Through Urban Upgrade programme", which has been running since 2014, reduced violence and crime and fostered a sense of safety and peace.

Cultural and educational advancement: The "Arts Capacity Programme" nurtured artistic talent and cultural expression, while the "Second-Chance Matric" education initiative empowered mature students by improving their employment prospects.

Community ownership and inclusivity: Enhanced collaboration and increased funding allowed for sustained positive change, ultimately fostering a more inclusive, sustainable, empowered, and innovative community in the Northern Areas of Port Elizabeth.

NAPDI's foresight process strengthened Port Elizabeth, inspiring innovation, sustainability, and inclusion in the Northern Areas. This created a platform for envisioning a positive future and taking practical actions by engaging different stakeholders, creating capacity through collaboration and data gathering, and promoting community enthusiasm. Initiatives like clean-ups, recycling, arts, and education boosted safety, peace, and opportunities, while also highlighting that foresight is an ongoing journey responsive to change.

More specifically, the scenario process helped NAPDI create a shared vision to translate community aspirations into concrete initiatives, such as the "Second-Chance Matric" educational programme. Aimed at mature students to help them gain high-school completion certificates and improve their employment prospects, as of 2024 it had become the longest-running NAPDI programme to date. NAPDI has earned the community's trust and inspired further activities that highlight the longer-term significance of the North Star Scenarios project – which has also had a broader effect on improving relationships between the local authorities and the community.

RECOMMENDATIONS FOR INCLUSIVE FORESIGHT

As we navigate through a period of unprecedented change and complexity, futures thinking and strategic foresight play a critical role when considering long-term implications for society, the environment, and the economy. The focus here on the Global South highlights the wealth of insights from diverse methods and perspectives that is shaping decision-making.

The 14 use cases underscore how futures thinking can transform decision-making, enriching strategies and national development initiatives with robust, participatory, and innovative approaches that result in impact. Different stakeholder groups leverage futures thinking and strategic foresight in distinct ways to support informed decision-making. But how these enablers are applied is determined by context, objectives, and desired outcomes.

This report thus provokes more questions than answers. It is only one part of the equation, intended to motivate diverse discussions, dialogue, cross-cultural perspectives, and action. The aim is that this report **inspires debate, facilitates exchange, and ultimately contributes to helping drive a more forward-looking and anticipatory multilateral system that is fit for future generations.**

There is no one-size-fits-all approach to futures thinking and strategic foresight practices; nevertheless, six key recommendations resonate across the case studies featured in the report.

Exercise bold leadership to shift mindsets and challenge the status quo

Leaders must actively cultivate a culture that embraces foresight, challenges dominant paradigms, and drives openness to innovative and novel solutions. Building such a culture is essential to dismantling outdated norms, overcoming systemic barriers, and enabling future-oriented action.

Invest decisively in collaborations between scientists, policymakers, and communities to drive faster, real-world impact

Significant and sustained investment is required to bridge science, policy, and societal efforts. Overcoming resistance to change and unlocking collective action demand financial and institutional commitment, particularly where entrenched interests or norms impede forward-looking change.

Leverage contextual insights and behavioural science to enhance foresight

Foresight initiatives must recognize the extent of cognitive and behavioural biases, and historical and local contexts. Addressing these influences – including over-optimism and resistance to counter-narratives – is critical to fostering constructive engagement and resilience in the face of uncertainty.

Embed inclusive participation and long-term thinking at all levels

Foresight processes must be explicitly inclusive, accessible and participatory, ensuring that diverse perspectives are integrated from the outset. Gender, age, geographic location, demographics, and diverse backgrounds and perspectives should be recognized in foresight exercises as should the types and sources of data used.

Build systematic foresight capacity and ensure impact measurement

Creating opportunities and mechanisms for capacity-building in foresight and embedding long-term thinking into education, leadership development, and decision-making pipelines is essential to building a future-ready workforce and institutional culture. Foresight exercises must be scaled appropriately, with robust, context-sensitive measures of impact to ensure they translate into tangible, sustainable outcomes.

Strengthen networks, data access, and evidence-based adaptation

Building strong, dynamic and diverse communities of practice and ensuring open and equitable access to data are fundamental for adaptive policymaking. Collaborative knowledge ecosystems, including indigenous and community-based groups, must be cultivated to drive innovation, share lessons from real-world foresight applications, and embed futures thinking across systems.

This report aims to demystify futures thinking and strategic foresight and reduce the perceived risks of its application by showcasing both successful and imperfect outcomes. At its core are 14 case studies from the Global South that offer practical, actionable recommendations for **implementing foresight in inclusive, participatory, and impactful** ways. These recommendations can be used individually or adopted as a comprehensive approach depending on context.

Ultimately, it is important to recognize that **foresight exercises alone do not drive change – it is the actions taken in response to foresight insights that truly make a difference.**

Join our networks

In support of these efforts, the UN Futures Lab/Global Hub and the ISC convene and facilitate networks and communities of practice, providing guidance and support for practitioners, decision-makers, and stakeholders. They also play a critical role in advocating for foresight approaches and championing innovative thinking within the multilateral system.

To learn more about how the UN Futures Lab/Global Hub and the ISC are working to integrate futures thinking and strategic foresight into decision-making processes, see links below to further resources and networks.

UN Futures Lab

Website: https://un-futureslab.org

Email: futureslab@un.org

International Science Council

Website: https://council.science

Email: secretariat@council.science

ACKNOWLEDGEMENTS

Case study contributors

We wish to thank the UN Futures Lab and ISC network members who took an interest in this initiative and responded to the initial call for case studies. In particular, we would like to thank the individuals whose case studies are presented here.

Case study	Contributor[20]
Case study 1: Women's Participation in Climate Action at Hyperlocal Levels: Insights from Jodhpur for Strengthened Disaster Risk Governance (India)	Dr. Repaul Kanji, GRRID Corps
Case Study 2: Urgent Integration of Ancestral Knowledge as Resilient Strategies for Disaster Mitigation and Response (Bolivia)	Dr. Einstein Henry Tejada Velez, Academia Nacional de Ciencias de Bolivia
Case Study 3: An Intergenerational Project Vital to the Ongoing Success of Ngāti Whatua Orakei (NWO) (New Zealand)	Ms. Dawnelle Clyne, Policy Advisor, Auckland Council, and Researcher at Koi Tū: The Centre for Informed Futures, New Zealand
Case Study 4: Systems Innovation and Foresight for Food Security and Livelihoods (Kenya, Malawi, and Zambia)	Mr. Ben Holt, Global Lead for Strategic Foresight, International Federation of Red Cross and Red Crescent Societies (IFRC), Solferino Academy
Case Study 5: Innovative Partnerships for Anticipatory Action: Better Programming in Farming Areas (Sudan)	Mr. Zurab Elzarov, Chief, Learning, Leadership and Management Development, Head of Staff Mobility Implementation Team, United Nations Department of Management Strategy, Policy and Compliance (DMSPC)
Case Study 6: The Alternative Futures of the International Centre for Biosaline (United Arab Emirates, UAE)	Dr. Sohail Inayatullah, UNESCO Chair in Futures Studies
Case Study 7: Scenario-Based Strategic Planning of Industrial Development (Kyrgyzstan)	Dr. Elena Rovenskaya, Program Director, Advancing Systems Analysis Program, International Institute for Applied Systems Analysis (IIASA)

[20] Refers to the representative who submitted the case study in response to the open call published in March 2024.

Case study	Contributor[21]
Case Study 8: The Future of Food and Agriculture – Drivers and Triggers for Transformation: A Preliminary Result (Vietnam)	Ms. Linh Pham, Researcher, Institute of Policy and Strategy for Agriculture and Rural Development
Case Study 9: African Digital Futures (Kenya, Nigeria, Rwanda, Tunisia, and Zimbabwe)	Ms. Nancy Chepkoech Muigei, Nawiri Foresight
Case Study 10: E-Health Futures (Bangladesh)	Dr. Sohail Inayatullah, UNESCO Chair in Futures Studies
Case Study 11: Decolonizing Futures: Citizen Visions in Government Planning (Colombia)	Ms. Claudia Sáenz Zulueta, UN Global Pulse Finland
Case Study 12: Accelerating the Double Dividend through Horizon Scanning: The Role of Social Protection Policies (Nigeria)	Ms. Foluke Ojelabi, UNICEF
Case Study 13: The Impact of "the Weight of the Past" in Strategic Decision-Making (Kenya)	Dr. Katindi Sivi, Founder and Executive Director, LongView Consult
Case Study 14: The Future of Port Elizabeth's Northern Areas (South Africa)	Ms. Karen Folkes, Head of Strategic Futures, UK Government Office for Science

[21] Refers to the representative who submitted the case study in response to the open call published in March 2024.

ANNEX

Annex 1: Methodology

The UN Futures Lab/Global Hub and the International Science Council (ISC) established a joint team in February 2024 to develop a policy paper. The objective was to understand the concrete and transformational role of futures thinking and strategic foresight in informing decision-making and action.

The UN Futures Lab/Global Hub and the ISC issued a call for case studies in March 2024 that was disseminated across their networks. The call sought contributions in the form of case studies demonstrating the successful application of futures thinking and strategic foresight methodologies to address real-world challenges and achieve impactful results, focusing on countries in the Global South.

In particular, the call sought case studies that demonstrate the concrete actions taken based on (i) the foresight insights and the resulting impact (e.g. policy changes, improved decision-making, or innovation), (ii) provide evidence of the tangible results achieved and, where possible, quantify the impact (e.g. cost savings, improved efficiency, increased stakeholder engagement, or replicability).

Roughly 40 case studies were received in response (see Annex 2 for the complete list). A final selection of fourteen case studies illustrates a range of impacts, primarily through a typology of approaches by desired outcomes. The final case studies reflect balance across geographies, themes, sectors, and stakeholders.

In parallel, an expert group with diverse expertise and experience was established to provide input and thought leadership on futures thinking and strategic foresight practices and peer review of the final publication. The expert group's composition is listed in Acknowledgments.

In July 2024, the UN Futures Lab/Global Hub and the ISC jointly hosted two online workshops with the expert group members to explore the use of foresight tools, their suitability, and their impact on affecting change in the current context of complexity and uncertainty. The outcomes from these discussions informed the categorization of the case studies and overarching recommendations presented in this publication.

Annex 2: Case Studies

The table below lists all the case studies received in response to the call for proposals in March 2024. Case studies included in this publication are indicated by grey boxes.

Title	Location (Global/Regional/National/Local)
African Digital Futures	Africa (Kenya, Nigeria, Rwanda, Tunisia, and Zimbabwe)
Digital Transformation Today and in the Next 20 years	Africa
Sahel 2043: Towards a Resilient, Inclusive and Prosperous Sahel Region	Africa (Burkina Faso, Cameroon, Chad, The Gambia, Guinea, Mali, Mauritania, Niger, Nigeria and Senegal)
Territorial Foresight of the Rural Area of the Municipality of Guaymallén, Mendoza, Argentina	Argentina
The Future of Public Employment, Digital Technologies and State Structures	Argentina
E-Health Futures in Bangladesh	Bangladesh
Urgent Integration of Ancestral Knowledge as Resilient Strategies for Disaster Mitigation and Response	Bolivia (extended to Argentina, Ecuador and Peru)
OECD Strategic Foresight for Resilient Public Policies Toolkit	Canada, Indonesia, Lithuania, New Zealand, and The Philippines
Decolonizing Futures: Citizen Visions in Government Planning	Colombia
Prospective for Sustainable Tourism Development in the Border Zone between Colombia and Ecuador	Colombia, Ecuador
Climate Policy Quest: Engaging Global Citizens Through Quiz and Dilemma Games for Insights and Action	G20 Countries
How to Prepare World's Population to Face Natural Disasters	Global

Title	Location (Global/Regional/National/Local)
Regional Insights for Global Sustainability: UNEP's Foresight Initiative for Planetary Health and Well-being	Global, by covering five regions: Africa, Asia-Pacific, Europe, Latin America and the Caribbean, North America, and West Asia
How Resilient are ICCCs of Indian Smart Cities to Growing Cyber-Physical Risks?	India
Women's Participation in Climate Action at Hyperlocal Levels: Insights from Jodhpur for Strengthened Disaster Risk Governance	India
Bridgers Between Indigenous Knowledge and Science Systems	Italy
The Impact of the "Weight of the Past" in Strategic Decision-Making	Kenya
Food Security and Livelihoods: Systems innovation and Foresight for Food Security and Livelihoods	Kenya, Malawi and Zambia
Impact of Climate Change on Poverty and Food Insecurity for Women and Girls in Kiribati	Kiribati
Scenario-based Strategic Planning of Industrial Development	Kyrgyzstan
Unveiling Sexist Narratives: Utilizing AI to Combat Online Sexism in Latin America	Latin America
Anacronopete: Engaging Communities in Futures Thinking Through Innovative Board Game	Latin America
Decolonial Feminist Futures: Towards Health-Equitable and Gender-Equal Systems for Health by 2050	Malaysia
Augmented reality, the Murabbi and the Democratization of Higher Education: Alternative Futures of Higher Education in Malaysia	Malaysia

Title	Location (Global/Regional/National/Local)
Mexico City Science Policy Interface Program: Strengthening Evidence-Informed Policies	Mexico
Strategic Foresight for Public Security	Mexico
30 years of the Dutch Public Heath Foresight: Lesson-Learned	Netherlands
An Intergenerational Project Vital to the Ongoing Growth and Success of Ngāti Whātua Ōrākei	New Zealand
Accelerating the Double Dividend through Horizon Scanning: The Role of Social Protection Policies	Nigeria
Future of Priority Exports Sectors in Pakistan	Pakistan
Strategic Foresight for Strategic Planning, Policymaking and Budgeting	Seychelles
Seeds of Good Anthropocene: Visions of Positive, Hopeful Futures	South Africa
The Future of Port Elizabeth's Northern Areas	South Africa
Innovative Partnerships for Anticipatory Action: Better Programming in Farming Areas	Sudan
Going Global Partnership Programme: Foresight for the Bio Circular Green Economy	Thailand
Sustainable Freshwater for the Global South	Tropical/Subtropical area where freshwater is limited or contaminated
Smart Futures Tunisia: Exploring the Digital Skills of Tomorrow	Tunisia

Title	Location (Global/Regional/National/Local)
From Scenarios to Strategy: How Foresight has Shaped the Development of Uganda's National Data Strategy	Uganda
Ukraine Conflict: Operational Strategic Foresight	Ukraine, plus Europe and Central Asia Red Cross Red Crescent-National Societies.
The Alternative Futures of the International Centre for Biosaline Agriculture	United Arab Emirates (UAE)
The Future of Food and Agriculture in Vietnam – Drivers and Triggers for Transformation: A Preliminary Result	Vietnam
Foresight and STI Strategy Development in an Emerging Economy: The Case of Vietnam	Vietnam

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