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Advancing sustainable, inclusive, science- and evidence-based solutions for the 2030 Agenda for Sustainable Development and its Sustainable Development Goals for leaving no one behind

Report of the Secretary General

Summary

The world is experiencing an unprecedented series of rapid and unpredictable shifts driven by geopolitical tensions, trade wars, deepening socio-economic inequalities, accelerating climate change, loss of biodiversity and other challenges undermining sustainable development prospects. These trends are also weakening the will to seek multilateral solutions based on the rule of law.

At the same time, scientific discoveries and technological innovation are expanding exponentially, generating opportunities for breakthroughs that can overcome barriers to progress and advance science- and evidence-based solutions for inclusive sustainable development. Effective science-policy interface is a key for driving transformational change by enabling policy makers to advance evidence-based decisions with strategic foresight.

The present report analyzes barriers to advancing progress towards the Sustainable Development Goals under review at the high-level political forum on sustainable development in 2025, highlights practical measures for coordinated policy implementation and targeted actions that can advance science- and evidence-based solutions, and provides recommendations on how countries can advance these solutions more effectively, including through multistakeholder cooperation.

I. Introduction

1. Many countries are still struggling to recover from the economic and social impacts of the COVID-19 pandemic. Around 4.5 billion people worldwide still lack universal health coverage (UHC).[1] The persistence of gender-based violence, biased social norms, harmful practices, discriminatory laws and lack of parity in public life have prevented progress in realizing the rights of women and girls.

2. Climate change and biodiversity loss have reached irreversible tipping points. Long-term impacts are projected to result in compounding and cascading risks across sectors in every region.[2] Earth's global average surface temperature in 2024 rose to 1.55 °C—the hottest year on record, and the first year on record with a global mean temperature of more than 1.5°C above pre-industrial levels.[3] As a result of increased greenhouse gas concentrations in the atmosphere, the global sea surface temperature and ocean heat content reached unprecedented highs last year.[4]

3. Economic uncertainties, poverty, inequality, scientific-technological and digital divides are eroding public trust in government institutions, increasing political polarization, partisanship and nationalism.[5] Rapid technological advancements such as artificial intelligence are transforming labor markets, commerce, trade and finance, and creating uncertainty around ethical use and regulation of information and data. Large corporations and private entities increasingly control data and technology, threatening to undermine inclusivity and public interest.[6]

4. Accelerating progress through sustainable and inclusive structural transformation demands effective translation of scientific evidence and insights into actionable policies. To be meaningful, science should be transparent, inclusive, transdisciplinary, allow for comparisons, and be produced in diverse contexts by heterogeneous and multidisciplinary groups engaging all possible actors, including youth.[7] This involves creating frameworks that integrate scientific findings into policymaking processes, ensuring that evidence-based strategies are implemented and monitored for their effectiveness and adaptability.

5. The present report[8] highlights how science- and evidence-based solutions for achieving the 2030 Agenda can accelerate progress towards the Goals under review at

[1] World Health Organization; World Bank. 2023. *Tracking Universal Health Coverage: 2023 Global Monitoring Report.*
[2] IPCC, 2023: Sections. In: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 35-115, doi: 10.59327/IPCC/AR6-9789291691647
[3] World Meteorological Association, January 2025.
[4] Cheng, L., Abraham, J., Trenberth, K.E. *et al.* Record High Temperatures in the Ocean in 2024. *Adv. Atmos. Sci.* (2025). https://doi.org/10.1007/s00376-025-4541-3.
[5] United Nations, Department of Economic and Social Affairs, "Trust in a Changing World: Social Cohesion and the Social Contract in Uncertain Times", World Social Report 2025, Thematic Paper 2, v.2, December 2024.
[6] United Nations Conference on Trade and Development, *Digital Economy Report 2024: Shaping an environmentally sustainable and inclusive digital future.*
[7] *Global Sustainable Development Report 2023: Times of Crisis, Times of Change – Science for Accelerating Transformation to Sustainable Development* (United Nations publication, 2023).
[8] Submitted in accordance with the mandates provided by the General Assembly in resolutions 61/16 (https://documents.un.org/symbol-explorer?s=A/RES/61/16&i=A/RES/61/16_6928607), 67/290 (https://documents.un.org/symbol-explorer?s=A/RES/67/290&i=A/RES/67/290_5949701), 70/299 (https://documents.un.org/symbol-explorer?s=A/RES/70/299&i=A/RES/70/299_8764753), 72/305 (https://documents.un.org/symbol-explorer?s=A/RES/72/305&i=A/RES/72/305_5122935), 74/298 (https://documents.un.org/symbol-explorer?s=A/RES/74/298&i=A/RES/74/298_7109506), 75/290 A (https://documents.un.org/symbol-explorer?s=A/RES/75/290%20A&i=A/RES/75/290_A_6129705) and 75/290 B (https://documents.un.org/symbol-explorer?s=A/RES/75/290%20B&i=A/RES/75/290_B_5840552).

the 2025 high-level political forum on sustainable development,[9] and provides recommendations for practical actions. It is complemented by the report of the Secretary-General on progress towards the Sustainable Development Goals (A/80/XX-E/2025/XX) and the report of the Secretary-General on the long-term impacts of current trends on the realization of the Sustainable Development Goals (E/2025/XX).

II. The science-policy interface: from concept to practice

6. The science-policy interface (SPI) plays a crucial role in advancing sustainable development by facilitating the translation of scientific knowledge into actionable policies. Effective SPIs ensure that policy decisions are informed by the best available evidence, integrating insights from multiple disciplines and knowledge systems. The 2030 Agenda underscores the importance of a robust SPI, emphasizing the need for inclusive, participatory, and evidence-based decision-making.

Emerging ecosystems of science-policy-society interfaces and new knowledge infrastructures

7. A shift from traditional, linear models of knowledge production to more dynamic, inclusive and transdisciplinary approaches is necessary to address complex sustainability challenges. SPIs are evolving, fostering multi-directional knowledge exchanges, synthesizing scientific knowledge and integrating perspectives from policymakers, civil society and indigenous communities. Global platforms such as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services explore interlinked relationships among nature and society and provide solutions for protecting and restoring biodiversity and ecosystem health that also improve human well-being.

8. International cooperation in science and technology policy facilitates progress in addressing global challenges and supporting sustainable development. The Montreal Protocol, the Intergovernmental Panel on Climate Change (IPCC) and the One Health High-Level Expert Panel exemplify how structured collaboration leads to effective policy interventions. Anticipatory science-policy frameworks increasingly use foresight methods such as scenario modeling and big data analytics to address future uncertainties. For example, the IPCC's 2023 Synthesis Report emphasizes the role of scenario modelling in enhancing climate resilience by providing consistent narratives that explore potential futures. These scenarios help policymakers understand possible impacts and plan for various outcomes, assessing climate change effects on human systems, ecosystems and infrastructure. They also inform mitigation and adaptation strategies, such as reducing greenhouse gas emissions and developing resilient infrastructure.

9. The emergence of knowledge infrastructures including digital repositories and artificial intelligence-powered analytics enhances the accessibility and application of scientific evidence, and scientific diplomacy fosters international collaboration on transboundary issues. However, disparities persist in national governance capacities access to high-quality data and technological resources, particularly in low-income countries. There is a growing recognition that knowledge systems must evolve to be more inclusive and responsive to emerging risks such as climate-induced health threats and artificial intelligence governance.

[9] See: https://hlpf.un.org/2025.

10. Strengthening national and regional science-policy ecosystems through capacity-building and institutional frameworks that connect networks of researchers, policy practitioners and local communities remains a priority for ensuring that science-policy-society interfaces are rooted in science that is multidisciplinary, equitably and inclusively produced, openly shared, widely trusted and relevant to society.[10]

11. Furthermore, a robust science-policy-society interface alone is not sufficient to influence decision makers and ensure that science- and evidence-based solutions are effectively implemented. Consideration must be given to addressing limitations imposed by the political economy, such as policy preferences, institutional barriers to integrating scientific knowledge in policymaking and limited funding for scientific research. Implementation can be undermined by influential actors, vested interests and concerns about potential trade-offs for jobs and livelihoods.[11]

Global cooperation for capacity building

12. Although scientific and technological innovation (STI) is a cornerstone of sustainable development, research and development expenditure remains concentrated in high-income countries, with sub-Saharan Africa accounting for less than one per cent of global spending. This imbalance constrains the ability of many countries to develop locally relevant innovations and contribute to global scientific discourse.

13. Efforts to enhance STI capacity must focus on expanding access to higher education and technical training, particularly for underrepresented groups; fostering international partnerships for knowledge transfer and joint research initiatives; and mobilizing financial resources through public and private sector engagement, creating conducive political conditions where such decision-making becomes the norm. Initiatives including the Global Research Council and regional STI hubs demonstrate the potential of cooperative frameworks to bridge capacity gaps.

14. Reliable data is fundamental for evidence-based policymaking, yet many developing countries face significant gaps in data collection and management. The availability of disaggregated, real-time data remains limited, undermining efforts to track progress towards the Goals. Enhancing statistical capacity requires investment in digital infrastructure, open data initiatives, and training programs for data analysts and policymakers.

15. Advanced technologies such as artificial intelligence, space-based monitoring and digital connectivity have transformative potential for sustainable development. However, affordability and uneven distribution of these technologies exacerbate inequalities. Only 30 per cent of the population in least developed countries has access to the internet, compared to over 90 per cent in high-income countries.

16. Policy measures including technology transfer agreements, digital public goods, and regulatory frameworks for ethical artificial intelligence deployment, along with support for digital infrastructure and data literacy are essential to ensure equitable and affordable access, bridge digital divides and ensure inclusive application of emerging STI systems. Strengthening domestic research ecosystems through targeted investments in universities, incentives for local innovation, and collaborative research networks can help retain talent and build resilient STI systems.

17. The voluntary national reviews presented over the past ten years at the high-level political forum on sustainable development by 190 countries sharing their progress towards the 2030 Agenda illustrate how the SPI has been integrated into

[10] *Global Sustainable Development Report 2023: Times of Crisis, Times of Change – Science for Accelerating Transformation to Sustainable Development* (United Nations publication, 2023).
[11] Ibid.

national platforms and reflected in development plans.[12] In 2024, Member States agreed to strengthen the quality of their voluntary national reviews, including through a more systematic use of accurate and comparable data and anticipatory models for evidence-based reviews that are supported by participatory processes involving all relevant stakeholders (See E/HLS/2024/1). Countries have also partnered with the scientific community, stakeholder groups and the United Nations development system to deliver high-impact initiatives.[13]

III. Policies and measures to overcome barriers to advancing science- and evidence-based solutions for achieving the Goals

18. The following section highlights examples of how Governments—in collaboration with local, regional and global partners—can advance science- and evidence-based solutions at the national level to overcome barriers to progress towards the Goals under review in 2025.

Goal 3: health and well-being

19. Goal 3 aims to ensure healthy lives and promote well-being for all at all ages. Advancing progress requires prioritizing the achievement of UHC, strengthening health systems, investing in disease prevention and treatment, and addressing disparities in access to care and services, especially for vulnerable populations. Inadequate healthcare infrastructure and workforce shortages are being overcome through policy reforms that strengthen healthcare systems, leverage technological advancements and implement data-driven strategies to ensure that marginalized groups are included, and support global partnerships to address the spread of communicable and non-communicable diseases.

Strengthening healthcare systems

20. A resilient healthcare system is fundamental to delivering quality health services. Uneven access to essential health services across and within countries can be improved by encouraging mixed financing models with contributions from both income-based and payroll schemes, while also ensuring public domestically financed support for those who are unable to contribute, especially in low- and middle-income countries. Conditional cash transfers have helped improve overall health outcomes in some countries by incentivizing low-income households to seek preventive health care services. Access to quality maternal health services, including comprehensive care for mothers and children at both health system and societal levels, comprise critical components of a multi-sectoral approach.

21. Policy dialogue is a driver for reorienting national health systems and brokering consensus among all relevant stakeholders for evidence-informed decision-making on health priorities that can be reflected in national health plans. Effective policy frameworks and governance structures are crucial for strengthening national efforts to reduce the burden of diseases, requiring comprehensive strategies that focus on prevention, early detection, and treatment.

22. Evidence-based solutions for the successful implementation of national health initiatives involve enhancing immunization programs, improving service delivery and

[12] United Nations, “Good practices and lessons learned in VNR reporting”. Voluntary national reviews database. Available at https://hlpf.un.org/lessons-learned-and-best-practices.
[13] United Nations, “Bringing SDG solutions to scale”. https://sdgs.un.org/SDGSummitActions/HII

diagnosis, implementing public health campaigns to raise awareness about disease prevention by promoting healthy lifestyles and providing incentives for the diffusion of simple and cost-effective solutions. Over 125 countries are engaged in such policy work with guidance from the World Health Organization's UHC Partnership, which advocates for a whole-of-society approach in addressing national health priorities.[14]

23. Interlinkages among Goals 3, 5 and 8 reinforce a rights-based approach to creating a more equitable and sustainable health workforce by promoting full and productive employment and decent work for all women and men and equal pay for work of equal value in health sectors.

Aligning holistic health approaches to leave no one behind

24. Creating synergies that promote health and well-being for all requires alignment of health policies to ensure that health considerations are embedded across all sectors. The One Health approach relies on interdisciplinary research and data-driven strategies to understand the complex interactions between human, animal and environmental health, and provides evidence for decision-making through epidemiological studies, genetic sequencing, disease surveillance, and ecological modeling.[15] This approach has been instrumental in addressing zoonotic diseases (e.g., COVID-19, Ebola), antimicrobial resistance, and food safety issues, and provides a strong foundation in scientific evidence and global health policy. It links Goal 3 with Goal 6 by preventing waterborne diseases, Goal 13 by addressing climate-related health threats, and Goal 15 by promoting biodiversity conservation to prevent zoonotic diseases. It also supports Goal 2 by ensuring food safety and sustainable agriculture.

25. Laws, policies and programmes aimed at safeguarding vulnerable populations are reaching those furthest behind in many countries, extending healthcare coverage to vulnerable populations, emphasizing maternal and child health and rebuilding healthcare facilities destroyed in conflict. In addition, countries have enacted laws and implemented policies and programs aimed at safeguarding and extending healthcare coverage to vulnerable populations, particularly focusing on maternal and child health. Some Governments also provide comprehensive sexuality education and services aimed at preventing child marriage and adolescent pregnancy.[16] Such solutions can empower youth with the knowledge and resources they need to make informed decisions about their health and well-being.

Leveraging technology and digital health solutions

26. Technological innovations offer transformative potential to overcome health care barriers, from diagnostics to service delivery. The COVID-19 pandemic underscored the value of telemedicine and e-health platforms in maintaining healthcare services amid disruptions. Digital health technologies can further advance health promotion, enhance disease prevention, and support the achievement of UHC and health related targets.

27. Utilizing data analytics is crucial for informed health policy and resource allocation. The use of data to drive impactful actions can ensure that health interventions are evidence-based and effectively address the most pressing health challenges. This approach enables the identification of health trends, efficient

[14] See: https://extranet.who.int/uhcpartnership/.
[15] The One Health High-Level Expert Panel is the scientific and strategic advisory group to the Quadripartite organizations—the Food and Agriculture Organization of the United Nations, the United Nations Environment Programme, the World Health Organization and the World Organisation for Animal Health—in their collaboration on One Health.
[16] United Nations, Department of Economic and Social Affairs, "*2024 Voluntary National Reviews Synthesis Report*".

allocation of resources, and monitoring of intervention outcomes to inform future strategies.

Goal 5: gender equality and women's empowerment

28. Goal 5 is a cross-cutting imperative for achievement of all the Goals. Despite progress, women remain underrepresented in decision-making roles due to discriminatory laws, weak enforcement mechanisms, and entrenched societal norms. Gender-based violence is still a serious barrier to progress, exacerbated by inadequate legal protections and harmful traditional practices such as child marriage and female genital mutilation (FGM). Digital spaces present new risks of harassment. Addressing these barriers requires a multifaceted approach that integrates legal and policy reforms, economic empowerment, and societal transformation.

Strengthening legal frameworks and addressing harmful cultural and social norms

29. While most countries have laws against gender-based violence, weak enforcement and cultural resistance hinder progress. Governments must take steps to prioritize regional and national implementation of existing human rights and legal frameworks, including the Beijing Declaration and Platform for Action and the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). Stronger partnerships among grassroots, national and international organizations are essential for ensuring unified efforts.

30. Legal reforms that monitor both laws and their enforcement require effective policies, allocation of resources, training and collection of sex-disaggregated data to ensure implementation.[17] Dedicated courts for domestic violence and sexual assault cases can reduce case backlogs, increase conviction rates, and improve survivor outcomes. Well-implemented protection orders can reduce repeat offences, especially when combined with law enforcement training. Countries that criminalize marital rape and outlaw harmful traditions like child marriage and FGM have seen declines in these practices.

31. Women's access to sexual and reproductive health rights (SRHR) is a critical aspect of poverty eradication and sustainable development with a focus on integration of SRHR into healthcare systems, leveraging the synergies with Goal 3. Some countries have prioritized impactful initiatives that support women's access to sexual and reproductive health care, such as women-controlled HIV prevention.

32. Dismantling discriminatory laws and practices requires strong political leadership and targeted investment in women and girls. When leaders advocate for women's rights, they challenge the harmful cultural and social norms deeply embedded in societies that perpetuate gender discrimination. Grassroots awareness programs support implementation of women's rights and promote gender equality through positive portrayals of women in leadership, entrepreneurship and STEM fields, to change outdated stereotypes. Advocacy through social media and online platforms can raise awareness about the importance of gender equality.

Promoting equal access to education and leveraging technology for women's economic empowerment

33. Education is a fundamental driver of gender equality, yet millions of girls remain out of school due to poverty, gender-based violence or inadequate sanitation facilities. Girls are underrepresented in STEM fields. To overcome barriers and increase girls' access to education, basic measures to support safe transportation, gender-sensitive infrastructure and awareness programs on harassment can keep girls in school. Cash

[17] UN-Women and DESA. 2024. "*Progress on the Sustainable Development Goals: The Gender Snapshot 2024*". New York: UN-Women and DESA.

transfer programs for adolescent girls have significantly reduced dropout rates and early pregnancies; gender-sensitive sanitation facilities and the distribution of free menstrual hygiene products have increased school attendance.

34. Closing the digital gender divide, addressing digital violence and increasing women's and girls' leadership in STI requires sustained investment in education, ensuring that girls can go to and stay in school. Incentives and measures to engage women in STEM fields catalyzes progress across the SPI. Expanding access to STEM education for women and girls and improving digital literacy are thus essential for bridging gender gaps in education and employment and strengthening gender representation in sustainable development. Schools and universities should promote STEM education for girls through mentorship programs, career guidance and scholarships. Countries can support gender-focused digital technology agendas with increased funding and policy prioritization, including for e-learning platforms that provide educational opportunities for girls in remote areas, and online job platforms connecting women to flexible employment options.

35. Leveraging Goals 5 and 8 can achieve progress for women's economic empowerment and access to decent work, reducing poverty and gender disparities, preventing gender-based violence and enabling women to escape harmful situations. Targeted interventions and gender-responsive social protection systems through synergies with Goal 3 can break the intergenerational cycle of feminization of poverty. Providing financial training and credit access to women enhances their economic independence. Expanding microfinance programs, reducing collateral requirements, promoting women-led cooperatives and providing vocational training and digital skills programs all enhance women's employability and entrepreneurship. Incentives that encourage companies to implement gender-inclusive workplace policies, including maternity leave and childcare support, further reduce economic inequalities. Policies for equal pay in some countries have led to measurable reductions in the gender pay gap.

36. Rural and indigenous women are often the custodians of local knowledge and innovation related to agricultural systems, biodiversity conservation and climate resilience. Successful adaptive farming practices and climate-resilient technologies require that women can access and mobilize resources for entrepreneurial support, including apprenticeships and training. Participatory extension methodologies, such as farmer field schools, have proven effective, as have initiatives that increase the number of female extension agents to improve women's comfort in seeking advice and adopting sustainable practices. Gender-transformative approaches that challenge discriminatory norms limiting women's economic agency should be promoted.

Inclusive governance

37. An inclusive approach to governance is necessary for ensuring equitable policies and resource allocation. Integrating gender perspectives into national budgets has improved outcomes in healthcare, education, and social services in many countries, with increased investments in maternal healthcare, educational scholarships for girls and women-led business initiatives.

38. Successful governance also relies on participatory data collection and policymaking. Addressing barriers to gender data, including disaggregation across all levels and expanding age brackets in surveys, is crucial. Governments and research institutions must invest more in gender-focused data collection and analysis, integrate citizen and community-led data into national systems, to design effective interventions and provide evidence for policy action.

39. Countries that have implemented gender quotas have seen significant increases in female participation in governance. Leadership training programs and mentorship networks equip women with skills needed for political engagement and inspire young

women to enter political careers. Prioritizing women's leadership in the public sector fosters effective and inclusive governance, as emphasized by CEDAW General Recommendation No. 40 (2024), which advocates for 50:50 gender parity in decision-making. Women's equal participation in decision-making strengthens institutional legitimacy, ensures diverse perspectives in policymaking, and leads to more equitable outcomes. Addressing barriers such as biased promotion practices and limited leadership opportunities can enhance gender-responsive governance, advancing both women's rights and all Sustainable Development Goals.

Goal 8: decent work and economic growth

40. Goal 8 promotes sustained, inclusive, and sustainable economic growth, alongside full and productive employment and decent work for all. Protecting labour rights is central to this Goal, with a focus on eradicating modern slavery and child labour. It also stresses the importance of access to banking and financial services, enabling broader opportunities for entrepreneurship and innovation, and underscores that economic growth must not compromise the environment, setting targets for resource efficiency and promotion of sustainable tourism.

41. Sustained and inclusive economic growth is challenging. Recent global crises have subdued economic growth, and projections estimate a relative stabilization in 2025.[18] Income inequality remains a critical issue, with the labour income share in GDP continuing to decline and the global gender pay gap persisting. Workers' rights have faced setbacks, including deteriorating compliance with fundamental principles and rights at work. Child labour has worsened, with 160 million children engaged in child labour globally.[19] Informal employment affects 58 per cent of the global workforce,[20] undermining decent working conditions and social protection.

42. Overcoming barriers to Goal 8 requires comprehensive and integrated approaches that can accelerate changes in a complementary manner, minimize trade-offs, and leverage synergies.

Ensuring inclusive and sustainable economic growth

43. Investing in emerging sectors like the green, digital and care economies can accelerate economic transformation and create millions of jobs, supporting a low-carbon, resource-efficient economy. Strengthening policies and aligning them with employment strategies can improve job quality and quantity. Effective policies and social dialogue are essential to protect workers affected by these shifts; new forms of social protection for a mobile workforce are needed to ensure inclusivity.

44. Micro-, small, and medium-sized enterprises (MSMEs) are vital drivers of inclusive economic growth, productivity and job creation, but face challenges like productivity gaps and limited access to finance. An integrated "productivity ecosystem" approach involving social dialogue among Governments, businesses and workers can enhance performance and help integrate MSMEs into the digital economy and global value chains.

45. Well-functioning labour markets depend on strong institutions, including labour unions, to ensure productivity growth translates into wage growth, especially for low-income workers. Wages and labour incomes are crucial for workers' well-being and drive consumption, investment and sustainable economic growth. Labour protection must extend beyond fair wages to include safeguards against sickness, disability,

[18] United Nations (2025). *World Economic Situation and Prospects 2025*. New York.
[19] ILO (2025). *2024 HLPF Thematic Review of SDG 8*. Background paper for Experts Group Meeting 6-7 February 2025.
[20] United Nations (2024). *The Sustainable Development Goals Report 2024*. New York.

workplace hazards, informality and exploitation. Ratifying and implementing key International Labour Organization conventions and recommendations strengthen labour market frameworks, while enforcing labour standards through improved regulations and advocacy ensures safe workplaces for all, including women, domestic workers and migrant workers.

46. Social protection must be part of an integrated approach to promote inclusive and sustainable development, supporting just transitions during economic shifts. These systems aid unemployed workers through income security measures and reskilling programs, while family-friendly policies like childcare and parental leave enhance family income security and women's workforce participation. During recent crises, many countries introduced emergency social protection measures, significantly increasing expenditures to $3 trillion in 2020–2021. However, these measures waned by the end of 2021, risking a poverty trap for beneficiaries. Consistent long-term efforts are essential, as robust social protection strengthens the economy by pooling risks, increasing resilience and boosting demand.[21]

47. Forward-looking strategies should also consider new forms of social protection for a highly mobile workforce, ensuring no one is left behind in this transformative process. While digital transformation and artificial intelligence are expected to boost productivity, without adequate policy interventions they could also worsen inequalities. The ability of Governments, employers and employees to navigate challenges and capitalize on opportunities presented by these recent trends in digitalization and artificial intelligence will be determinant for successful structural transformations to accelerate Goal 8.

48. The potential of emerging sectors is underutilized due to gaps in skills development. Continuous investment in skilling, reskilling and upskilling is essential for successful structural transformation and job creation. Education systems must align with future needs, focusing on high-quality, compulsory education that fosters core competencies and social skills, especially in low-income countries. Recruiting and retaining women and young people requires addressing barriers like household responsibilities and gender gaps in ICT skills. Comprehensive efforts to upskill women and create pathways into STEM fields require transformative, inclusive policies grounded in international labour standards.

49. Inclusive and integrated national planning must be supported by adequate fiscal resources. Governments should develop plans promoting full employment and decent work, with pro-employment macroeconomic policies boosting domestic demand through fiscal measures and progressive taxation. Long-term public investments should stimulate private sector innovation, especially in rural development, care and green economies. Integrated financing strategies combining domestic resource mobilization, private investment, and official development assistance are crucial to close the financing gap.

Eliminating child labour

50. A coherent policy framework is needed to eliminate child labour by addressing its root causes, through strengthening social protection systems, improving access to education and creating decent work opportunities for parents and caregivers. Conditional and unconditional cash transfers have proven effective in reducing child labour by providing income security, improving living standards, and increasing school attendance. In-kind transfers like school feeding programs also help but are less flexible than cash transfers. Integrated social protection programs, or "cash plus"

[21] United Nations (2024). *World Social Report 2024*. New York

initiatives combine cash transfers with complementary services such as health insurance, education and awareness campaigns, reducing reliance on child labour, especially during crises.

51. It is also important to address the financing gap in social protection systems, as many countries underinvest in this area. To ensure a social protection floor, low- and middle-income countries require an additional investment of $1.4 trillion or 3.3 per cent of the aggregate GDP (2024) of these countries.[22] Innovative financing strategies, including progressive domestic financing and international support, can help bridge this gap. The international community must collaborate to ensure that debt service burdens do not undermine social development priorities and that countries have the resources needed to respond to crises effectively. Countries are encouraged to integrate the financing of social protection floors aligned with International Labour Organization recommendations into their country-led plans and strategies, and support countries that aim to increase social protection coverage by at least two percentage points per year.[23]

52. Additionally, there must be a reaffirmation of adequate national policy space within multilateral agreements, especially enabling developing countries to pursue policies that prioritize full employment, fair wages, and strengthened social protection and ensure adequate and uninterrupted funding on appropriate terms of social protection and other essential social spending during shocks and crises, for example by strengthening the consideration of social protection and social spending in IMF-supported macroeconomic adjustment programmes. Leveraging international frameworks, such as the Global Accelerator for Jobs and Social Protection for Just Transitions, can also support countries in building robust social protection systems.

Goal 14: life below water

53. Goal 14 aims to achieve conservation and sustainable use of the oceans, seas and marine resources. It is the most underfunded of the Goals—on average, only 1.1 per cent of national research budgets are allocated for ocean science, with percentages ranging from around 0.01 to 9.5 per cent.[24] The portion of gross domestic expenditure on research and development devoted to ocean science is miniscule, given that oceans cover more than 70 per cent of Earth's surface and contribute an estimated $3 trillion to $6 trillion to the global economy,[25] support livelihoods for approximately 1.5 billion people and sustain the social and cultural connections of coastal and ocean communities.

54. Oceans are the largest heat sink on the planet, absorbing 90 per cent of the excess heat caused by climate change, and approximately 30 per cent of the anthropic carbon emissions, which has led to significant changes in marine ecosystems, including biodiversity loss, ocean acidification and rising sea levels. The oceans' capacity as a carbon sink is directly affected by the impacts of climate change on ocean health, creating a vicious cycle. Marine pollution, overfishing and habitat destruction disproportionately affect small island developing States and least developed countries.

55. Overcoming these barriers requires a multifaceted approach that integrates scientific, policy and community-based solutions in synergy with climate action (Goal 13) to reduce ocean acidification, and with decent work (Goal 8) to strengthen measures for sustainable fisheries and tourism. The One Health approach is also

[22] International Labour Organization, "Closing the Financing Gap for Universal Social Protection", Financing Policy Brief Series, Inter-Agency Task Force on Financing for Development, 2024.
[23] Draft outcome document of the Fourth International Conference on Financing for Development, 2025.
[24] UN DESA, Financing for Sustainable Development Report 2024.
[25] *Trade and Environment Review 2023: Building a sustainable and resilient ocean economy beyond 2030* (United Nations publication, 2023).

applicable here, in addressing ocean health and reducing pollution from land-based sources.

Monitoring and protecting the ocean-climate-biodiversity nexus

56. The health of marine ecosystems is fundamentally a global issue that requires international cooperation through partnerships among countries, organizations and communities to share knowledge, technologies and resources. However, national monitoring networks are central for providing real-time data on acidification levels, helping policymakers to implement targeted measures to protect vulnerable marine ecosystems. Regional collaboration involving scientific research and capacity-building initiatives reinforces and supports national and local data collection and adaptation measures.

57. Numerous countries have undertaken large-scale restoration projects for mangroves, coral reefs and wetlands that protect coastal resilience, biodiversity and marine habitats while boosting local livelihoods. The Kunming-Montreal Global Biodiversity Framework's "30x30" target leverages progress towards Goal 14 by championing the establishment and management of marine protected areas (MPAs) and increases in MPAs in many countries have given rise to calls for creation of accountability systems focusing on geographical integrity, quality and fairness. The effectiveness of MPAs as solutions to advance Goal 14 should be linked to ratification of legal instruments such as the High Seas Treaty and the Agreement on Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction.[26]

Transitioning to a blue economy

58. Country efforts to protect and restore coastal and ocean ecosystems support the transition to a sustainable blue economy, which could generate up to $1 trillion annually in net benefits for developing countries alone.[27] This requires innovative financing mechanisms, partnerships with the private sector, and the integration of environmental, social and governance criteria into investment decisions. Blue bonds and debt-for-nature swaps, along with groundbreaking advancements in ocean technologies—from aquaculture practices to marine renewable energy—are expanding and flourishing in many regions, offering economic opportunities while contributing to the resilience of marine ecosystems.

59. An enabling environment that encourages research, investment, innovation, implementation and collaboration among diverse stakeholders is key to fully harness the potential for advancing sustainable ocean economies. The establishment and operationalization of the Global Biodiversity Framework Fund and the launch of the Cali Fund, agreed at the 16th Conference of the Parties to the Convention on Biological Diversity as part of the Multilateral Mechanism on the fair and equitable sharing of benefits from the use of digital sequenced information on genetic resources, aim to mobilise new streams of funding from private sources for biodiversity action at the global level, while recognizing the role of indigenous peoples and local communities as custodians of biodiversity.

Promoting scientific collaboration

60. Scientific research provides data and insights needed to understand the complexities of ocean ecosystems and the impacts of human activity. Knowledge and practices of indigenous peoples and local communities offer invaluable perspectives on sustainable resource management. Fostering collaboration between these different

[26] Lubchenco, J., Camp, E.F., Vargas, C.A. *et al.* Priorities for progress towards Sustainable Development Goal 14 'Life below water'. *Nat Ecol Evol* **7**, 1564–1569 (2023). https://doi.org/10.1038/s41559-023-02208-4.

[27] UN Trade and Development, UNCTADstat.

knowledge systems, ensuring that policies and practices are informed by a comprehensive understanding of oceans, advances inclusive solutions that are grounded in evidence.

61. Partnerships are instrumental for implementing and enforcing sustainable fishing practices, which preserve marine biodiversity and help ensure long-term food security. International research collaboration such as the Global Ocean Observing System provide valuable data and insights that inform national policy decisions and support conservation efforts. The adoption of the Agreement on Fisheries Subsidies in 2022 as the first global, legally binding framework that limits subsidies for illegal, unreported and unregulated fishing and fishing of overfished stocks is a promising step forward.

62. The United Nations Decade of Ocean Science for Sustainable Development (2021-2030) supports such agreements by providing a common framework to ensure that ocean science can fully support countries' actions to utilize the SPI to sustainably manage the oceans and their resources.[28] Additionally, the outcomes of the United Nations Ocean Conference held in June 2025, the Antigua and Barbuda Agenda for Small Island Developing States adopted in May 2024, and the ongoing work of the Intergovernmental Oceanographic Commission, all call on and support countries' collaboration for partnerships and best practices that promote sustainable ocean-based economies.

Goal 17: partnerships

63. In a rapidly changing geopolitical landscape, with increasing trade barriers and retreat from commitments to global solidarity and development assistance, multilateral cooperation is more important than ever. The gap between development aspirations and financing dedicated to meet them has widened to an unprecedented $4 trillion annually.

64. Government revenues in emerging economies have yet to recover to pre-pandemic levels. While concessional financing has increased, sustainable development grants decreased. Remittances remain crucial for low- and middle-income countries. Debt remains high, with rising interest rates increasing debt-servicing costs.

65. To overcome barriers to Goal 17, efforts must focus on enhancing financial predictability, affordability and sustainability for developing countries, by expanding investment promotion, reducing remittance costs and ensuring accessible concessional financing. A large-scale impact-focused investment push and an ambitious international finance architecture reform are needed to close the financing gap for the Sustainable Development Goals. Innovative financing solutions leveraging public and private resources are also needed to bridge the investment gap.

Leveraging science, technology and innovation

66. Part II of the present report stressed the importance of STI in driving transformative change. Although data, monitoring and accountability efforts have improved, with increased international support for data development, digitalization and artificial intelligence, global investment in research and development remains concentrated in high-income countries, while the full potential of new technologies remains untapped in developing countries due to inadequate funding, limited capacity and conflicts of interest. Without investment in human and physical capital, many countries risk falling further behind in the global digital transformation.

[28] See: https://oceandecade.org

67. Strengthening support and partnerships to benefit developing countries is essential to addressing STI challenges. Localized, demand-driven solutions that leverage local expertise and build community, national and regional capacities can foster technological advancements that benefit all, particularly the most vulnerable populations, with inclusive and innovative approaches alongside sustained investments in human and physical capital. For example, small island developing States are adopting a whole-of-society transformational approach, contributing both with their "know-how" and "show-how" to enhance the application of STI across regions. Systematic efforts are needed to transition this group into "small island digital States," ensuring they remain competitive in an evolving technological landscape.

Engaging stakeholders and building capacity

68. Multistakeholder approaches are essential for leveraging STI and deploying low-cost technologies to meet local needs, especially in rural communities. Investments in digital infrastructure, integrated agricultural research, and vocational training can help bridge gaps. Collaboration between public and private sectors fosters locally driven innovation and integrates indigenous knowledge while ensuring that women play a central role in these advancements.

69. Governments should commit to increasing research funding, with an annual boost of 3.7 per cent from 2025 to 2029. Attracting new investors, for instance by securing private sector co-funding and leveraging innovative financial tools, will accelerate STI-driven solutions. To maximize impact, public research funders should coordinate efforts and strengthen partnerships with the United Nations system.

70. Scientists, Governments, universities, civil society and the private sector must work together to bridge technology gaps and ensure equitable access to innovation. Governments can promote STI collaboration through technology transfers, South-South and triangular cooperation, and inclusive partnerships that integrate local and indigenous knowledge.

71. Promoting open science and accessibility initiatives is equally important to ensure that research findings are widely available, fostering global exchange of knowledge and innovation. Capacity-building efforts have made significant progress in recent decades—in 2023, 57 per cent of all research publications worldwide included authors from low- and middle-income countries, reflecting a more inclusive and distributed research landscape.

72. Engaging national practitioners in multi-stakeholder networks for successful technology transfer and capacity-building—for example through the Technology Facilitation Mechanism[29]—brings knowledge and stakeholders together to advance the SPI and has led to many complementary multi-stakeholder partnerships and actions. Improving communication and knowledge-sharing between United Nations entities, research funders and other stakeholders will align global research efforts with the Goals and maximize the impact of investments.

IV. Conclusion and recommendations

73. The present report makes the following recommendations for advancing sustainable, inclusive, science- and evidence-based solutions for the 2030 Agenda:

[29] See: https://sdgs.un.org/tfm.

a) Countries must identify specific measures to break down barriers to coordinated policy implementation.

b) Deployment of technologies that promote equitable access to information and gender-focused data can support the science-policy-society interface at multiple levels.

c) Leveraging mechanisms such as inclusive, gender-responsive governance, capacity building, technology, finance, legislation and collective action for changing mindsets boosts multiplier effects across multiple Goals and creates scalable models for actions at multiple levels.

d) Through building capacity at the national level, countries should establish or strengthen national multi-disciplinary scientific advisory bodies that can serve as knowledge brokers and engage effectively with Government ministries and stakeholders.

e) Strengthening national scientific and statistical institutions, including human capital, and capitalizing on knowledge-sharing at the regional level builds consensus and increases momentum for advancing progress.

f) Countries should develop strategic foresight capacities in governance at the institutional, organizational and individual levels through collaborative research and capacity building, using foresight processes and tools that prioritize inclusiveness and advance the Goals by identifying drivers of change, and integrating foresight into decision-making to adapt to future scenarios and enhance long-term planning processes.

g) Models and scenarios should effectively translate and communicate results in a way that enables policymakers to design effective, gender-responsive interventions that are put into practice through coordinated and demand-driven development, including by incorporating indigenous knowledge and stakeholder inputs.[30]

h) Countries should engage with parliaments, scientific institutions, civil society, supreme audit institutions and peer review mechanisms to strengthen accountability mechanisms that support monitoring and evaluation, especially where follow-up processes and assessments are available but underutilized.

i) Advancing implementation through localization requires bringing science- and evidence-based solutions to the communities and people that are left behind, inviting them to share their experiences to guide others.

j) Countries can leverage networked multilateralism and digital solutions, for instance through the Global Digital Compact, by partnering with private sector and private foundations for science-based solutions in important areas such as artificial intelligence.

k) In line with the Declaration on Future Generations, countries are called upon to facilitate science- and evidence-based decision-making by developing diverse capabilities, including anticipatory planning, foresight and futures literacy, and systematically promoting long-term and intergenerational thinking at all levels.

l) The United Nations system has a central role to play in guiding and supporting countries to implement science- and evidence-based solutions through

[30] Pradhan, P., Weitz, N., Daioglou, V. *et al.* Three foci at the science-policy interface for systemic Sustainable Development Goal acceleration. *Nat Commun* **15**, 8600 (2024). https://doi.org/10.1038/s41467-024-52926-x.

its scientific and technical advisory bodies, and countries are encouraged to take advantage of coordinating with relevant United Nations entities that are custodians of data and knowledge.