




2025

# ANNUAL PROGRAMME NARRATIVE PROGRESS REPORT



Systematic Observations  
Financing Facility (SOFF)



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The Annual Programme Narrative Progress Report documents SOFF's transition from design to implementation, showing how the Facility helps countries close basic weather and climate observation gaps, strengthen GBON compliance, and improve data exchange for forecasts, early warnings, and climate resilience.

The operational updates in this report are based on the annual narrative reports from operational partners (see Annex II) covering the period January – December 2025. To provide the most up-to-date perspective on SOFF's progress, the fund-level figures are cumulative, covering the period from the start of SOFF operations in July 2022 through April 2026, at the time of the development of the report.

The report covers progress across the Readiness and Investment phases, scientific evidence from the ECMWF SOFF Impact Experiments, governance and Secretariat delivery, updates on Peer Advisors and Implementing Entities, regional learning, and the funding outlook, including the development of an innovative finance mechanism.

# SOFF in Numbers

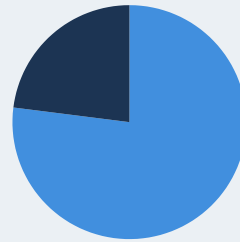
**USD 150M** pledged by 12 funding partners

**102** countries requested SOFF support

**61** countries receiving support *out of which* →

**23** countries in Investment phase

















**USD 126M** approved in investments



**77%**

of Least Developed Countries and Small Island Developing States are covered

## January 2025 to April 2026

<p><b>USD 46.2M</b> approved for SOFF Investment support to 10 additional countries</p>	<p><b>6</b> countries in the Investment pipeline</p>
<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="text-align: center;"> Bangladesh</div> <div style="text-align: center;"> Cuba</div> <div style="text-align: center;"> Guyana</div> <div style="text-align: center;"> Democratic Republic of the Congo</div> <div style="text-align: center;"> Madagascar</div> <div style="text-align: center;"> Malawi</div> <div style="text-align: center;"> Nauru</div> <div style="text-align: center;"> Timor Leste</div> <div style="text-align: center;"> Samoa</div> <div style="text-align: center;"> Zambia</div> </div>	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="text-align: center;"> São Tomé and Príncipe</div> <div style="text-align: center;"> Dominican Republic</div> <div style="text-align: center;"> Suriname</div> <div style="text-align: center;"> Antigua and Barbuda</div> <div style="text-align: center;"> Cambodia</div> <div style="text-align: center;"> Haiti</div> </div>

# Foreword

The Systematic Observations Financing Facility (SOFF), the UN fund dedicated to observations, is at a turning point. Momentum is building, and progress is becoming tangible. As this report shows, SOFF has moved decisively from design to implementation: 23 countries are already in the Investment Phase, bringing stations online, installing new ones, strengthening capacities, and beginning to share data internationally.

Most Least Developed Countries and Small Island Developing States are now receiving SOFF support. Many have identified their gaps and defined how to address them. More and more are now putting those plans into action. This progress reflects the commitment of countries and the growing confidence of partners. In 2025 alone, close to USD 50 million in additional funding was pledged to SOFF, including strong momentum at COP30, where governments announced new pledges and SOFF announced the creation of an innovative finance mechanism - the Systematic Observation Impact Bond.

This progress matters because every forecast and every early warning start with data. Weather prediction beyond a few days depends on observations from across the globe: when data is missing in one place, it affects forecasts everywhere. In 2025, scientific experiments demonstrated how strengthening observations in data-sparse regions improves forecast accuracy globally. SOFF's work is therefore not only about closing a technical gap, but about safety, resilience, and better decisions.

Behind this progress are committed people working together worldwide. Countries are leading the way, with Peer Advisors working side

by side with National Meteorological Services and sharing practical expertise to help get systems running. Implementing Entities are helping turn plans into reality. The World Meteorological Organization (WMO) is providing technical oversight. The Steering Committee is guiding SOFF and keeping it focused and accountable, while the SOFF Advisory Board connects the dots with the wider ecosystem supporting the early warnings value chain.

As momentum grows, so does the need to go further. Over 100 countries are requesting SOFF support, and additional USD 150 million is needed by 2027 to respond to countries ready to enter the Investment Phase. Looking further ahead, WMO governing bodies and UNFCCC SBSTA are pointing to the next frontier: scaling SOFF support to more developing countries, including middle-income countries in need, and exploring support for marine observations as part of a stronger Global Basic Observing Network (GBON).

With sustained investment and continued collaboration, we have a real opportunity to close the basic weather and climate data gap. Now is the moment to build on this progress: to invest, to scale up, and to ensure that every country can generate and share the observations on which better forecasts, early warnings, and climate resilience depend.



**Markus Repnik**  
*Director, SOFF Secretariat*

# 1. Science makes the case

In 2025, new evidence from the European Centre for Medium-Range Weather Forecasts (ECMWF) provided the clearest scientific confirmation to date that closing basic weather and climate data gaps leads to measurable gains in forecast accuracy.

The [ECMWF SOFF Impact Experiments](#) showed that adding surface and upper-air observations in data-scarce regions can reduce forecast errors by more than 30% in Africa and by up to 20% in the Pacific Islands. Upper-air observations in the tropics proved particularly impactful, with improvements the 12-hour weather forecasts.

These findings are especially significant given the scale of current gaps: According to the WMO GBON baseline, in Small Island Developing States and Least Developed Countries, only 9% of required surface stations and 13% of upper-air stations are reporting in line with internationally agreed standards. Across 39 fragile and conflict-affected states, just seven surface stations are reporting.

The experiments also confirmed the critical role of surface observations in forecast skill. Their absence leads to a marked deterioration in forecast accuracy and relatively modest investments in ground-based observing systems in resource-constrained regions can generate outsized global returns.

These results are shaping the next phase of study. In October 2025, the Steering Committee ([Decision 12.4](#)) endorsed further analysis to extend the experiments into the medium range (1–5 days, with exploration up to 10 days where feasible), assess the impact of observation gaps on tropical cyclone forecasting, explore the intersection between SOFF and AI-based forecasting, and quantify the socioeconomic benefits of improved observations, particularly in terms of avoided losses and strengthened early warning systems.

# 2. Action

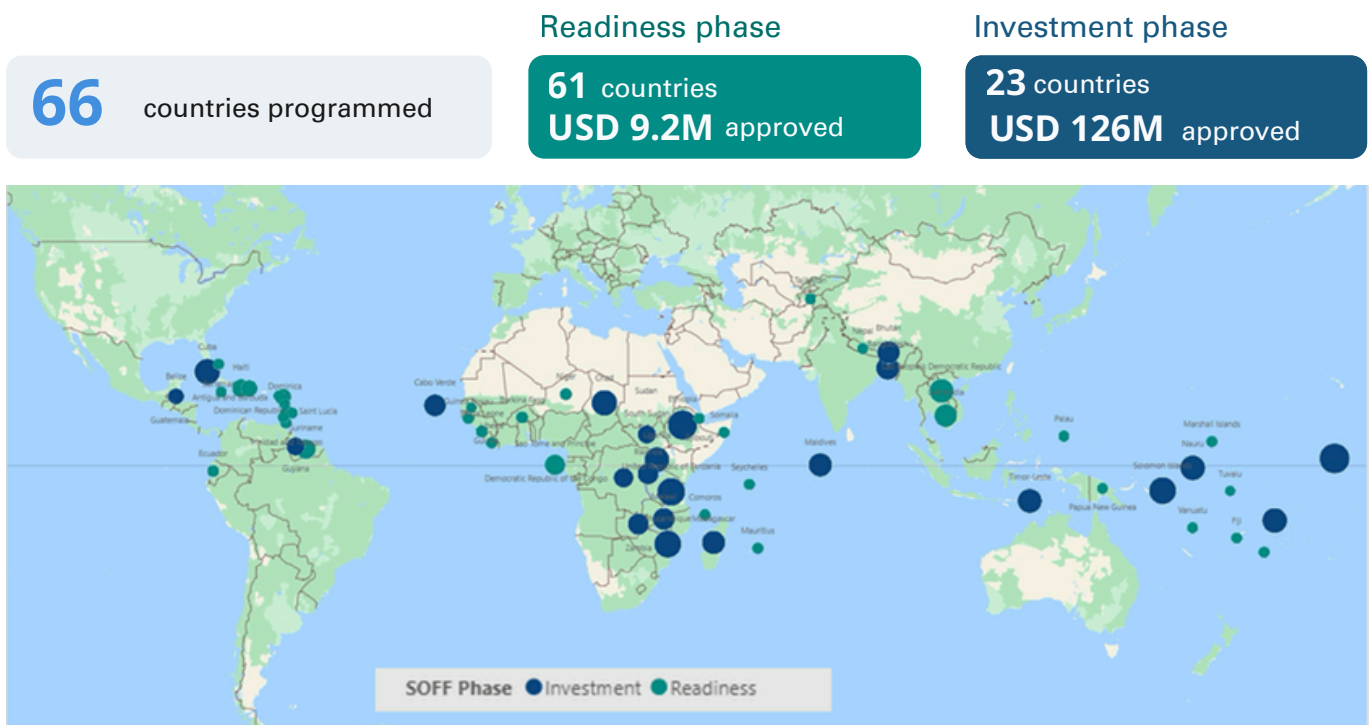
## 2.1 Overview

**With a growing operational portfolio SOFF demonstrated its ability to translate demand into delivery, supporting countries to close critical data gaps and strengthening the global foundation for forecasting and early warning systems.**

At the time of writing this report in April 2026, SOFF's portfolio covered a total of 66 programmed countries, with 61 receiving Readiness support. Twenty-three countries moved into the Investment Phase, where work was underway to rehabilitate existing infrastructure, install new stations, and strengthen technical and institutional capacity.

**Figure 1.** Overview of SOFF Operations (April 2026)

*The size of each bubble is proportional to the funding per country.*

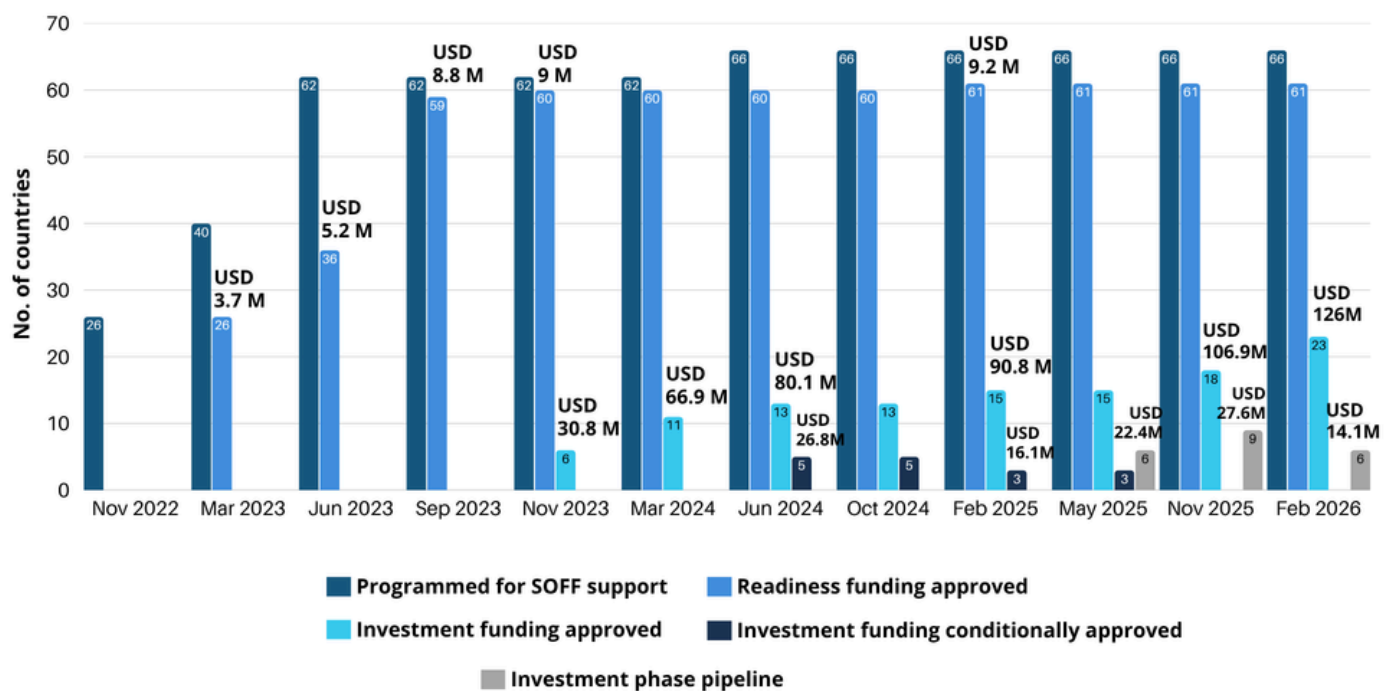


The SOFF portfolio evolved significantly since July 2022 with an increased number of countries that have completed the Readiness Phase and a steady pipeline ready to join the Investment

Phase, pending the Steering Committee approval and available funding. More granular information is available in the [SOFF Portfolio Dashboard](#)

**Figure 2.** Evolution of the SOFF Portfolio 2022-2026

The number of countries at each phase are represented by bars according to the legend (bottom) and the amount approved in USD displayed in text.

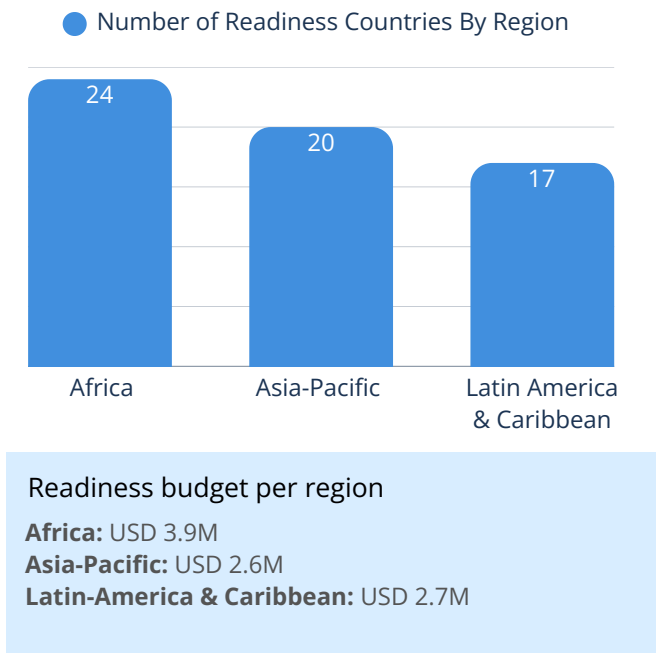


## 2.2 Readiness Phase: Identifying the Gaps

**During the Readiness Phase countries work with an advanced national meteorological service (Peer Advisor) to develop the Global Basic Observing Network (GBON) National Gap Analysis, National Contribution Plan, and the Country Hydromet Diagnostics.**

In April 2026, 61 countries were in the Readiness Phase, representing 77% of Least Developed Countries (LDCs) and Small Island Developing States (SIDS). Of these, 49 countries have completed Readiness. The total budget allocated to the Readiness Phase is approximately USD 9.2 million, supported by twenty Peer Advisors.

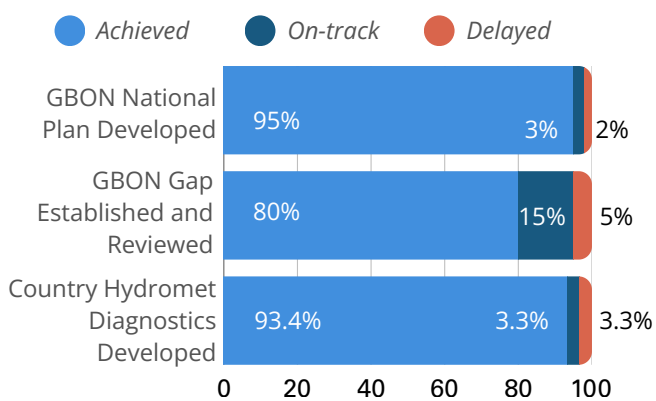
**Figure 3.** Regional distribution of countries and funding in SOFF Readiness Phase



Readiness outputs, with the large majority of countries having completed their outputs. By the end of 2025, 58 countries had completed their national GBON gap analyses, and 49 countries had developed National Contribution Plans to sustainably address these gaps.

In parallel, 56 countries concluded the Country Hydromet Diagnostics to assess their capacity to observe, forecast, and deliver weather and climate services.

**Figure 4.** Readiness Phase progress by December 2025

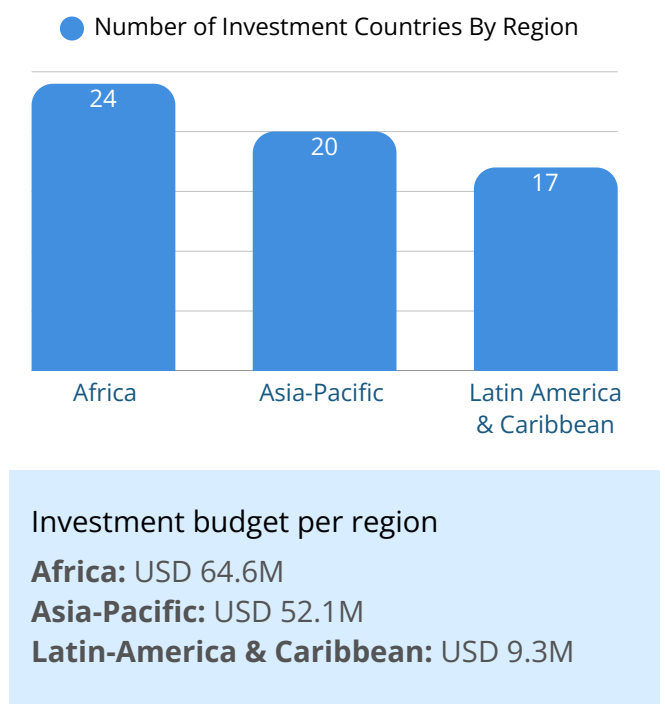


## 2.3 Investment Phase: Closing the Gaps

The number of countries with approved Investment Phase funding increased from 13 in January 2025 to 23 by April 2026, through [Decision 10.2](#) (February 2025), [Decision 12.2](#) (October 2025), and [Decision 13.3](#) (February 2026). Of these, 16 countries<sup>1</sup> were eligible for reporting for the January–December 2025 period. Additionally, six countries were in the SOFF Investment pipeline by April 2026.

The total budget allocated to the Investment Phase was USD 126 million, channelled through seven Implementing Entities and supported by 14 Peer Advisors. SOFF support targeted regions where enhanced observational capacity can deliver substantial benefits for global weather and climate monitoring.

**Figure 5.** Regional distribution of countries and funding in SOFF Investment Phase

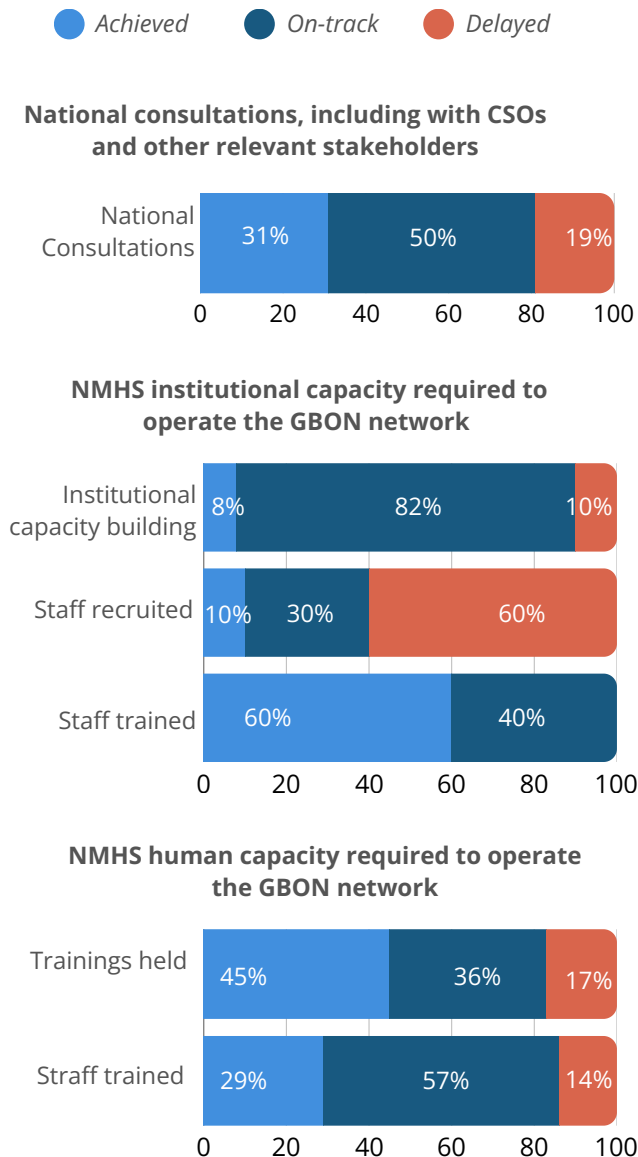


<sup>1</sup>As of December 2025, 16 of the 23 countries in the Investment Phase had begun implementation and were able to report on activities carried out between January and December 2025. The remaining countries joined the phase later and will provide updates in future reporting periods.

## Capacity Building

Significant capacity-building work was underway by December 2025 in SOFF-supported countries in the Investment Phase. Together, these efforts helped countries build the teams and institutional structures needed to operate and sustain their observing systems over the long term. Progress was strongest in staff training and national consultations, while staff recruitment to strengthen NMHS institutional capacity experienced the greatest implementation delays.

**Figure 6.** Investment Phase progress on building institutional and human capacity



## Country highlights

### Ethiopia

**+216** Staff across eleven regional centres were trained in installation, calibration, and troubleshooting of stations.

### Kiribati

**8** Staff completed the WMO-certified training program in Australia, with a balanced gender split, enabling them to manage instruments, and report data aligned with international standards.

### Bhutan

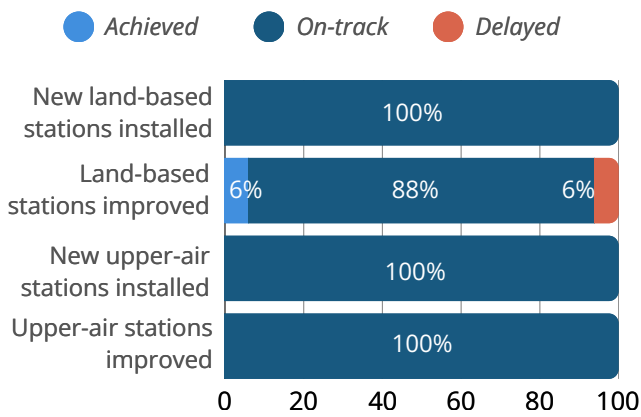
**14** National meteorological staff completed an eight-day hands-on training with a manufacturer, learning to configure, install, and troubleshoot automatic weather stations.

## Infrastructure

By December 2025, several countries had advanced with the installation of new stations and the rehabilitation of existing ones. Data from SOFF-supported stations started to flow into the WMO monitoring systems, demonstrating early results and providing proof of concept for SOFF’s model.

Infrastructure and equipment delivery, particularly the procurement and installation of new automatic weather stations and radiosondes, remained the main source of delays. These were largely driven by start-up challenges and external disruptions, including civil unrest and extreme weather. However, as presented in Figure 7., overall progress was mostly on track.

**Figure 7.** Investment Phase progress on GBON Infrastructure



## Country highlights

### Bhutan

- 3 Stations receiving maintenance and operational support from SOFF, as per the WMO GBON Compliance tool, were GBON-compliant in Q1 2026.

### Mozambique

- 1 National data collection system was installed, allowing data transmission from sites to a national server as an important step towards GBON compliance.

### Rwanda

- 3 Surface stations were physically upgraded and connected to WIS2.0, increasing GBON-compliant stations from one to four and enabling the international real-time transmission of hourly data.

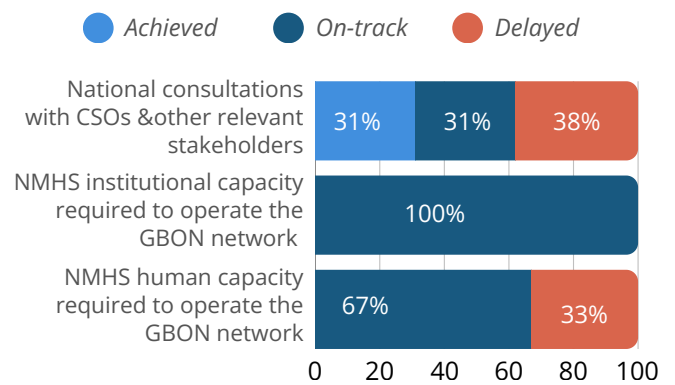
### Tanzania

- 3 Serviced upper-air facilities (Songwe, Mwanza and Kilimanjaro), including water and electrical systems, were near completion, with continuous on-site supervision and quality control in place.

## Gender Inclusion

In many countries, the limited number of women in meteorology and information and communication technology (ICT) remained a constraint. To address this, gender considerations are being integrated across the SOFF portfolio in line with the SOFF [Gender Action Plan](#). Countries took practical steps, including tracking participation in training, conducting gender workshops, developing policies, carrying out gender gap analyses and action plans and increasing women’s participation in technical roles and decision-making.

**Figure 8.** Investment Phase progress on Gender Inclusion



## Country highlights

- Cabo Verde, Kiribati, Nauru, and the Maldives developed Gender Action Plans and Gap Analyses to ensure long-term inclusivity.
- Encouraging participation rates were recorded in several regions, with Rwanda reaching 60% female participation in consultations and Kiribati achieving up to 69% in stakeholder workshops.
- To promote leadership, women were appointed to key project management positions in Rwanda, Chad, and Uganda,

which has established a Project Management Unit with a professional gender balance.

- Mozambique, a country with historically low women representation at its national meteorological service, planned for an awareness raising campaign to attract female students to the field.

### *Social & environmental safeguards*

Countries implemented a range of social and environmental safeguards. These safeguards were aligned with international standards, including UNDP's Social and Environmental Standards (SES), UNEP's Environmental and Social Safeguards Framework (ESSF), and, where relevant, the World Food Programme's safeguard requirements.

## **Country highlights**

### **Tanzania**

Environmental Impact Assessments were completed for new upper-air stations at Songwe, Mwanza, and Kilimanjaro airports in compliance with national regulations.

### **Bhutan**

Environmental screenings were carried out for civil works at the Tsirang automatic weather station and upper-air station with attention to ecological risks linked to the country's mountainous terrain.

### **Kiribati**

A joint safeguards session was organized to strengthen awareness and coordination on environmental and social safeguards.

## *Civil society and private sector participation*

Several countries have actively engaged civil society organizations (CSOs) and private sector stakeholders throughout different stages of project implementation.

## **Country highlights**

### **Cabo Verde**

Collaboration with municipal associations, Non-Governmental Organizations, and private companies took place during project planning.

### **Tanzania**

The private contractors supported weather station construction, while the Tanzania Red Cross Society contributes a humanitarian perspective through the Project Steering Committee.

### **Uganda**

The Department of Meteorology engaged civil society organizations on public education around weather and climate information; one organization monitors remote automated weather stations.

### **Rwanda**

The Meteorological Office worked with aviation and space-related entities on site selection and implementation planning.

### **Solomon Islands**

Private technical and engineering service providers were contracted to design upper-air stations and staff facilities, and to supply observation equipment, spare parts, and long-term maintenance services.

## 2.4 Collaboration and complementarity

SOFF investments complemented broader climate and development initiatives by strengthening observational infrastructure and capacity on which many of these programmes depend. By providing this foundation, SOFF is enabling larger climate investments, modernize observation networks, and support the implementation of [the United Nations Early Warnings for All initiative](#).

### Country highlights

#### Solomon Islands

SOFF implementation was aligned with projects funded by the World Bank, Weather Ready Pacific, CREWS, and EW4ALL to ensure complementarity and avoid duplication.

#### Bhutan

SOFF-supported projects were developed in technical coherence with existing infrastructure, including JICA-supported stations, providing system maintenance and data integration.

#### Mozambique

The Norway-funded Platform for Real-time Impact Situation Monitoring will integrate SOFF-supported observation data with satellite imagery to strengthen anticipatory action and climate risk management.

#### Maldives

The SOFF investment project implemented by United Nations Environment Program, provided funding for GBON-compliant stations. This enabled the country to secure a grant of USD 25 million from the Green Climate Fund for complementary activities, further strengthening early warnings.

### Green Climate Fund

In Cabo Verde, Maldives, Ethiopia, Zambia, and Timor-Leste, SOFF-supported activities were also closely aligned with Green Climate Fund-financed projects.

## 2.5 Mitigating Risks and Challenges

SOFF implementation is taking place in complex and often fragile operating environments. Delivery challenges have mainly stemmed from logistical complexity, varying levels of site readiness, and institutional capacity constraints.

In many countries, limited specialized expertise, particularly in upper-air operations and information and communication technology, has placed additional pressure on implementation.

To address these challenges, countries and Implementing Entities have adopted context-specific implementation approaches, strengthened coordination with partners, and provided targeted technical support. Continued monitoring of procurement, staffing, and coordination risks has helped sustain progress across the portfolio.

Coordinated procurement approaches are also increasingly being used to reduce risks and accelerate delivery. For example, In Chad, the World Food Programme (WFP) accelerated procurement by using the United Nations Development Programme's (UNDP) existing Long-Term Agreements.

Implementing Entities across all participating countries have established grievance redress mechanisms to monitor, report, and address complaints and incidents on a semi-annual and annual basis. No grievances were reported to the SOFF Secretariat during the reporting period.

## Country highlights

### Solomon Islands

Unexploded munitions from the World War II at construction sites required adjustments to rollout schedules.

### Mozambique

Field assessments revealed that a planned site in Chicualacuala was unsuitable because a nearby 15-meter building cast a shadow over the station.

### Madagascar

Challenges related to power supply, ICT infrastructure, and data systems have affected commissioning timelines.

### Cabo Verde

Severe flooding in August 2025 damaged existing weather stations and highlighted the vulnerability of infrastructure.

### Kiribati and Nauru

Remoteness has resulted in longer procurement timelines, increased logistical, and reliance on external suppliers

## 2.6 Spotlight: the Pacific in Action



**14 million** people



**15%** of the world's surface



**10%** of surface land stations are GBON compliant



**14 countries** programmed for support



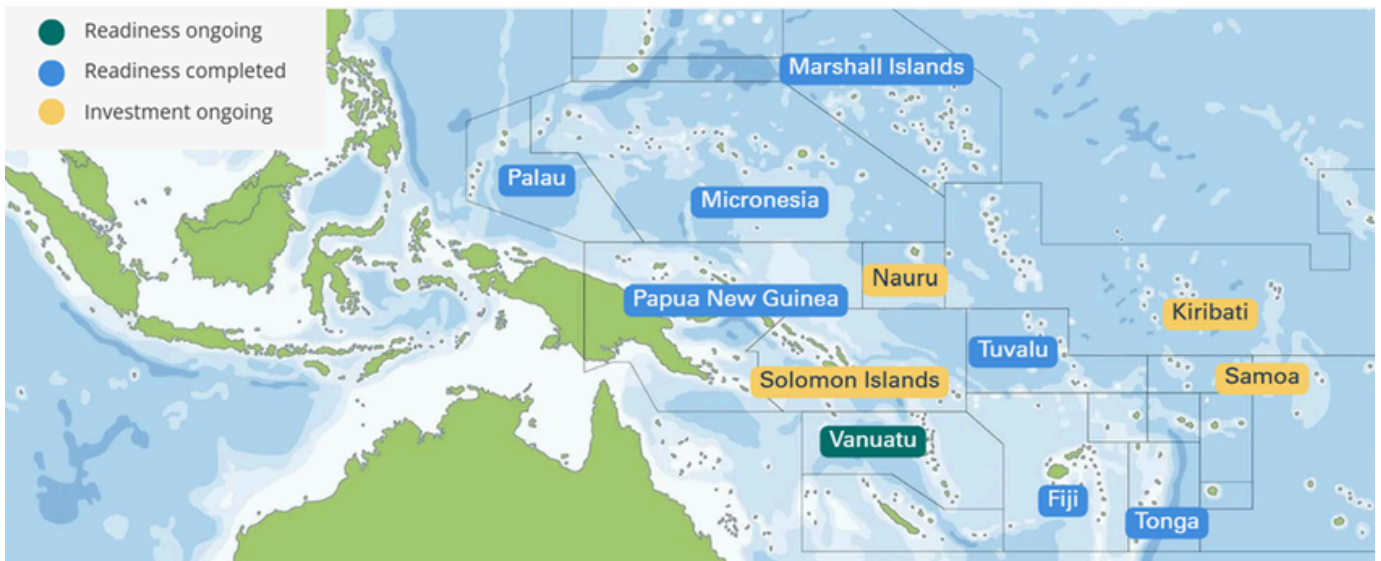
**4 countries** in the Investment Phase (USD 31.8 million)

Across the Pacific, the challenge of building a reliable observation network is not only about capacity; it is also about reaching and sustaining systems across one of the most dispersed geographies on Earth. While the region is home to some of the world's most climate-vulnerable countries, according to the WMO GBON baseline

assessment, only around 10% of surface stations are GBON-compliant alongside just six upper-air stations. [ECMWF experiments](#) provide scientific evidence that a single weather balloon launched over the data-sparse Pacific has a far greater impact than one launched over data-rich regions like Europe.

In this context, SOFF's engagement in the Pacific has been expanding. 14 countries have been programmed, with 12 already supported through the Readiness Phase (USD 1.4 million). Four countries, Samoa, Kiribati, Solomon Islands, and Nauru, have started the Investment Phase (USD 31.8 million), already installing infrastructure, setting up data exchange, and strengthening national capacity.

**Figure 9.** Status of SOFF-supported countries in the Pacific: Readiness and Investment Phases



### Strengthening Weather Observation Systems Across the Pacific




**Solomon Islands**

- In late 2025, **4** safety assessments were completed and all project sites were cleared from WWII unexploded munitions
- Work advanced on weather stations and upper-air systems while **10 young weather observers completed** six months of certified training



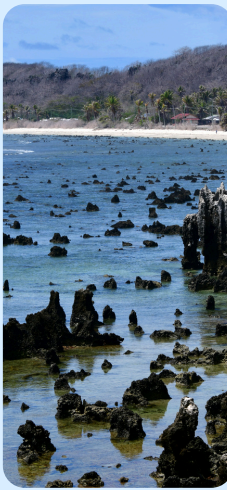
**Kiribati**

- A **USD 11.1 million investment** has been supporting the installation of **9** surface weather stations and **2** upper-air stations
- Upgrade of **5** additional surface stations and **1** upper-air station in close coordination with island councils, local communities, and regional partners



**Samoa**

- A **USD 6 million investment** is embedded within a USD 35 million World Bank resilience programme for supporting communities exposed to cyclones and flooding
- This enhances forecast accuracy and support preparedness, infrastructure planning, and decision-making.



**Nauru**

- **Builds on existing regional investments** in weather equipment and climate data systems
- Through regional coordination, it will ensure that locally collected weather data is shared and used in regional and global forecasting systems

# 3. Governance

## 3.1 The SOFF Steering Committee

**The Steering Committee serves as SOFF's decision-making body, responsible for setting strategic direction and overseeing implementation.**

At its [10th meeting](#) in February 2025, the Steering Committee approved Investment funding for Madagascar and Timor-Leste, enabling first disbursements, postponed decisions on requests from Bangladesh, Cuba and Zambia due to resource constraints, and approved a Readiness funding request for Sierra Leone.

At its [11th meeting](#) in May 2025, hosted by the Government of Ireland, the Steering Committee extended SOFF's First Implementation Period to June 2027 and advanced the development of the Systematic Observation Impact Bond, supported by a booster grant from the Nordic Development Fund. It considered new ECMWF evidence on forecast improvements from strengthened observations and marked Belgium's succession of Ireland as co-chair.

At its [12th meeting](#) in October 2025, the Steering Committee approved Investment funding for Samoa, Nauru and Malawi, added the Dominican Republic, Suriname and Antigua and Barbuda to the Investment pipeline. Additionally, it endorsed further scientific work under the ECMWF SOFF Impact Experiments, adopted updates to the Operational Manual and confirmed SOFF's participation in the Alliance for Hydromet Development.

At its [13th meeting](#) in February 2026, the Steering Committee approved Investment funding requests totalling nearly USD 19.5 million for five countries—Zambia, Cuba, Bangladesh, Guyana and the Democratic Republic of the Congo—and a revised request for South Sudan. It also advanced the Systematic Observation Impact Bond, endorsing next steps toward exploring the establishment of a Special Purpose Vehicle (SPV) to enable future bond issuances.



### 3.2 The SOFF Advisory Board

The SOFF Advisory Board brings together 16 organizations across the meteorological value chain to provide recommendations to the Steering Committee.

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### 3.3 The SOFF Secretariat<sup>2</sup>

The SOFF Secretariat is accountable to the SOFF Steering Committee and operates under its overall guidance. It is hosted by the World Meteorological Organization (WMO).

Led by the SOFF Secretariat Director, the core team covers functions such as portfolio coordination, resource mobilization, communications, monitoring and evaluation, data management, administration, and governance support. Since SOFF became operational in July 2022, the Secretariat has coordinated the set up and the rapid scale-up of the SOFF portfolio and demonstrated capacity to mobilize resources, increase visibility and innovate.

In 2025, SOFF Secretariat had a lean team of up to 10 staff, supported by interns, and three senior-level Global Facilitators. Despite continuously expanding portfolio, the total SOFF overhead costs, comprising expenses related to Implementing Entities fees, WMO Peer Advisors pass-through mechanism fees, Trustee fees, and the SOFF Secretariat costs, remained comparatively low, at 13.9%.<sup>3</sup>

During this period, the SOFF Secretariat strengthened operational delivery, governance coordination, and portfolio oversight in line with the approved [Work Plan](#) and [Operational Manual](#).

The Secretariat organized and supported in total eight Steering Committee and Advisory Board

<sup>2</sup>Reference: Project ID MPTF\_00281\_00001 (00133696) in UNMPTFO

<sup>3</sup>A benchmarking exercise with the climate funds with which SOFF signed a [Framework for Collaboration](#). The Adaptation Fund (AF), the Climate Risk and Early Warning Systems (CREWS) initiative, the Global Environment Facility (GEF), and the Green Climate Fund (GCF) report an average of 18.6% overheads, ranging from 15.9% to 23.4%. Source: UNMPTF financial data: <https://mptf.undp.org/fund/sof00>, retrieved on 31 March 2026

meetings, prepared documentation, supported consultations, and facilitated follow-up on recommendations made by the Advisory Board and decisions taken by the Steering Committee. It also coordinated operations with beneficiary countries, Implementing Entities, Peer Advisors, and WMO as the Technical Authority across the Readiness and Investment phases. This included supporting the preparation and review of country funding requests, tracking portfolio performance against the results framework, developing a monitoring dashboard, synthesizing early investment-phase lessons, and maintaining the SOFF [document library](#) as the central repository for governance, operational, and technical materials. Beyond core operations, the Secretariat helped fostering the SOFF community through knowledge exchange and two regional workshops.

In terms of fundraising, the SOFF Secretariat secured over USD 150 million in pledges. A major advance was the development and partner engagement around an innovative finance mechanism – the Systematic Observations Impact Bond (see 4. Funding).

The SOFF Secretariat also worked to raise visibility of the weather and climate data gap and the forthcoming Systematic Observations Impact Bond. It played a central role in preparing and coordinating SOFF's engagement during COP30, including by securing an event within the COP30 Action Agenda in partnership with the Brazilian COP30 Presidency and supporting the launch of the 2025 SOFF Action Report at an event hosted by UNFCCC.

It also mobilized funders, beneficiary countries, technical partners, and European meteorological institutions as advocates, helping position SOFF within broader discussions on climate adaptation, early warning, systematic

observations, and innovative finance. During the period, the Secretariat further strengthened SOFF's external visibility, contributing to a significant increase in social media followers and more than 50,000 views of the [flagship video](#) featuring the Systematic Observations Impact Bond.



# 4. Community

## SOFF Operational Community in Numbers

61

National Meteorological and Hydrological Services supported by SOFF

20

Active Peer Advisors from advanced National Meteorological and Hydrological Services

10

Implementing Entities (Multilateral Development Banks and UN agencies)

3

Partnership agreements

5

Regional workshops delivered in Africa, Asia, the Pacific and the Caribbean in 2024 and 2025

2

Peer Advisor and Implementing Entity workshops held in the Netherlands (2024) and in Morocco (2025)

## 4.1 Peer Advisors

**SOFF Peer Advisors are advanced national meteorological and hydrological services that provide long-term, hands-on technical support to countries working to close observation gaps and meet GBON requirements.**

As of April 2026, twenty National Meteorological and Hydrological Services (NMHSs) have been actively engaged as Peer Advisors, drawing on decades of operational experience. This collaboration is not one way. Through South-South cooperation, countries that once faced similar challenges have been guiding others. For example, the Nigeria Meteorological Agency (NiMet) advised countries in West Africa on station compliance with internationally agreed standards.

**Table 1.** Peer Advisors and the SOFF Countries they support

Peer Advisory	SOFF-supported Country
 <b>Argentina</b>	Ecuador
 <b>Australia</b>	Fiji, Kiribati, Nauru, Papua New Guinea, Samoa, Solomon Islands
 <b>Austria</b>	Chad, Djibouti, Dominica, Guyana, Lao People's Democratic Republic, Saint Vincent and Grenadines, South Sudan, Saint Lucia, Sierra Leone
 <b>China</b>	Lao People's Democratic Republic, Bangladesh
 <b>Denmark</b>	United Republic of Tanzania
 <b>Finland</b>	Bahamas, Barbados, Bhutan, Ethiopia, Jamaica, Maldives, Nepal, Rwanda, Saint Kitts and Nevis, Tajikistan, Timor-Leste, Trinidad and Tobago
 <b>Germany</b>	Madagascar, Sierra Leone
 <b>Iceland</b>	Malawi
 <b>India</b>	Mauritius
 <b>Indonesia</b>	Maldives, Timor-Leste
 <b>Morocco</b>	Comoros
 <b>Netherlands</b>	Cabo Verde, Senegal, Sao Tome and Principe, Suriname, Uganda
 <b>New Zealand</b>	Tuvalu, Tonga, Vanuatu, Palau, Federated States of Micronesia
 <b>Nigeria</b>	Burkina Faso, Liberia, Niger, Somalia
 <b>Norway</b>	Bangladesh, Ethiopia, Malawi
 <b>Portugal</b>	Guinea Bissau
 <b>South Africa</b>	Mozambique, Mauritius, Seychelles
 <b>Spain</b>	Burkina Faso, Cuba, Grenada, Dominican Republic
 <b>Switzerland</b>	Democratic Republic of the Congo, Ecuador, Haiti
 <b>UK</b>	Antigua and Barbuda, Belize, Cambodia, Marshall Islands, Zambia

## 4.2 Implementing Entities

**SOFF Implementing Entities are international organizations designated by countries receiving SOFF support to provide project management expertise for the preparation and implementation of SOFF investments.**

As of April 2026, SOFF is actively engaged with eight Implementing Entities that channel finance

and manage SOFF's investment grants in close collaboration with countries and Peer Advisors. They served as the operational bridge between SOFF funding and national implementation, ensuring that GBON upgrades were integrated into broader development and resilience programmes rather than implemented as stand-alone projects.

**Table 2.** Implementing Entities and the SOFF Countries they support

Implementing Entity <sup>4</sup>	SOFF-supported Country
<b>Asian Development Bank</b>	
<b>African Development Bank</b>	Comoros, Mauritius
<b>Food and Agriculture Organization of the United Nations</b>	Liberia, South Sudan
<b>International Fund for Agriculture Development</b>	Cambodia
<b>Islamic Development Bank</b>	Bangladesh, Senegal, Uganda
<b>Inter-American Development Bank</b>	Bahamas, Barbados, Belize, Ecuador, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Trinidad and Tobago
<b>United Nation Development Programme</b>	Antigua and Barbuda, Cuba, Djibouti, Ethiopia, Malawi, Madagascar, Nepal, Papua New Guinea, Rwanda, Sao Tome and Principe, Solomon Islands, Somalia, Suriname, United Republic of Tanzania
<b>United Nations Environment Programme</b>	Bhutan, Cabo Verde, Federated States of Micronesia, Guinea-Bissau, Kiribati, Maldives, Marshall Islands, Nauru, Nepal, Palau, Timor-Leste, Tuvalu
<b>World Food Programme</b>	Burkina Faso, Chad, Dominica, Dominican Republic, Democratic Republic of the Congo, Mozambique, Niger, Saint Lucia, Saint Vincent and Grenadines, Sierra Leone, Zambia
<b>World Bank</b>	Fiji, Lao People's Democratic Republic, Samoa, Seychelles, Tajikistan, Tonga, Vanuatu

<sup>4</sup>Of the total ten SOFF Implementing Entities, eight have signed the agreements with UNMPTF and are currently supporting SOFF countries that are either ongoing investment phase or are in pipeline.

## 4.3 WMO Technical Authority

**The WMO Technical Authority is a group of GBON experts in the World Meteorological Organization. It provides SOFF's core technical guidance on GBON, including support to Peer Advisors, Implementing Entities and beneficiary countries on GBON regulations.**

During the Readiness phase, it reviews the GBON Gap Analysis and National Contribution Plan, screens them against GBON requirements, and provides feedback to ensure the proposed investments are technically sound.

Since SOFF became operational, the WMO Technical Authority has supported key technical aspects of SOFF implementation, including the development of the SOFF Operational Guidance Handbook and the technical screening of 58 GBON National Gap Analyses and 50 GBON National Contribution Plans for the Readiness phase.

It has also provided technical expertise during 4 webinars for SOFF Operational Partners and contributed to ongoing technical engagement with operational partners through the SOFF Moodle platform.

## 4.4 Joining forces

**SOFF's Community of Practice brings together countries, experts, and partners to address shared implementation challenges and accelerate progress toward GBON compliance. It enables SOFF-supported countries and SOFF operational partners to learn from each other and apply practical solutions across technical and operational areas.**

Technical exchange was supported through the SOFF Learning Portal hosted on the World Meteorological Organization Moodle platform. In 2025, countries shared experience on upper-air system design, automatic weather station specifications, WIS 2.0 configuration, data quality management, and procurement practices. Engagement with the Hydro-Meteorological and Environmental Industry (HMEI) also helped align technical requirements with available solutions and plan for long-term maintenance.

### Regional highlights

#### In the Caribbean

The Caribbean Regional Implementation Workshop helped countries identify practical regional solutions to persistent surface, upper-air, marine observation, and data exchange gaps. Priorities included coordinated approaches to calibration, maintenance, spare parts, and WIS 2.0, including possible regional calibration hubs supported by national and mobile capabilities. The process also strengthened alignment with CREWS Caribbean 2.0 and Early Warnings for All.

#### In Africa

The Africa Regional Implementation Workshop supported peer learning among countries at different stages of SOFF implementation, with practical exchanges on procurement, site readiness, operations, data management, WIS 2.0, calibration, and the future Compliance Phase. Regional institutions, including the African Centre of Meteorological Applications for Development, the IGAD Climate Prediction and Applications Centre, and WMO Regional Centres, helped strengthen coordination, while countries worked to better align SOFF investments with Early Warnings for All, climate services, and monitoring and learning systems.

# 5. Funding

**SOFF's work is funded by contributions from sovereign donors, pooled through the UN Multi-Partner Trust Fund. These resources support countries to close basic weather and climate observation gaps and sustainably exchange data internationally.**

Against the backdrop of increasingly frequent and severe weather and climate-related events, demand for SOFF support is very high. More than 100 countries have requested assistance, while countries and intergovernmental processes, including [SBSTA](#), have recognized the need to strengthen systematic observations and consider expanding SOFF support beyond Least Developed Countries and Small Island Developing States. In parallel, [Europe's leading meteorological institutions](#) called for increased and more coordinated investment in systematic observations.

In this context, SOFF's resource mobilization strategy aimed to secure an increase in predictable resources for the Facility's growing portfolio, while diversifying its funding base. The SOFF Secretariat focused on two funding streams: direct contributions to the UN Multi-

Partner Trust Fund by sovereign donors (the only active stream) and development of an innovative finance mechanism to broaden the funders base beyond sovereigns and making long-term pledges available immediately through a bond structure.

## 5.1 Direct contributions

**At the time of writing this report in April 2026, 12 sovereign donors had contributed to the Systematic Observations Financing Facility, with total pledges amounting to USD 152,549,454.**

2025 was a particularly strong year for resource mobilization, thanks to close to USD 50 million of new pledges and contributions from Norway, Belgium, Netherlands, Ireland, Spain and Iceland. In addition, the Nordic Development Fund provided funding allowing to start the development and engagement on the Systematic Observation Impact Bond. Their valuable contributions demonstrated the growing funder confidence in SOFF's results-based model and its tangible impact.

**Table 3.** Pledges to the Systematic Observations Financing Facility (SOFF) from inception to April 2026

Contributor	Pledges in USD
Norway	29,185,784
Belgium	21,437,953
Netherlands	20,548,798
Ireland	20,193,794
Nordic Development Fund	16,356,740
United States of America	13,337,000
Spain	8,973,315
Denmark	7,322,380
Austria	6,249,267
Finland	5,850,013
Iceland	2,357,775
Canada	736,635
<b>Total</b>	<b>152,549,454</b>

## 5.2 Innovative finance

**In 2025, SOFF made significant progress in developing an innovative finance mechanism to complement direct contributions to the UN Multi-Partner Trust Fund.**

The forthcoming [Systematic Observations Impact Bond](#), a pioneering climate finance instrument, was designed to help SOFF respond more quickly to growing demand by frontloading funding from investors, supported by long-term donor commitments. Contributions would be tied to independently verified results, aiming at a five-fold increase in internationally shared weather and climate data.

The mechanism was also developed to diversify SOFF's funding base by creating a pathway for engaging philanthropies and benefiting private sector as potential donors. The work to develop the new finance mechanism was supported through a booster grant from the Nordic Development Fund. The work required also the mobilization of highly specialized senior level experts.

In 2025, the creation of the Systematic Observations Impact Bond was announced as part of the COP30 Action Agenda. A first contribution from a philanthropic partner was secured.

## SOFF at COP30



COP30 was a strong momentum around the urgency of closing the weather and climate data gap, with [SOFF participation in over 30 official meetings and events](#). These included a dedicated high-level event hosted by UNFCCC at their Pavilion, where SOFF launched its 2025 Action Report, showcasing three years of progress. The event featured testimonials from Bhutan and Rwanda, while new pledges demonstrated growing funder confidence in SOFF's results-based model. Europe's leading meteorological institutions — ECMWF, EUMETSAT, EUMETNET, together with WMO — also issued a [joint call for urgent and coordinated investment in surface-based observations](#).

COP30 positioned SOFF for its next phase of growth. With the support of the Brazilian

COP30 Presidency, the [Systematic Observation Impact Bond](#) was announced as part of the COP30 Action Agenda and featured as a key innovation in climate finance. In addition, [SBSTA](#) welcomed advances in systematic observations, recognized SOFF's role in supporting GBON compliance and early warning systems, and invited consideration of extending support beyond Least Developed Countries and Small Island Developing States. Together, these developments marked a step change in SOFF's visibility, resource mobilization, and strategic positioning as a mechanism for delivering systematic observations as a global public good.

### 5.3 Looking ahead: Closing the Funding Gap

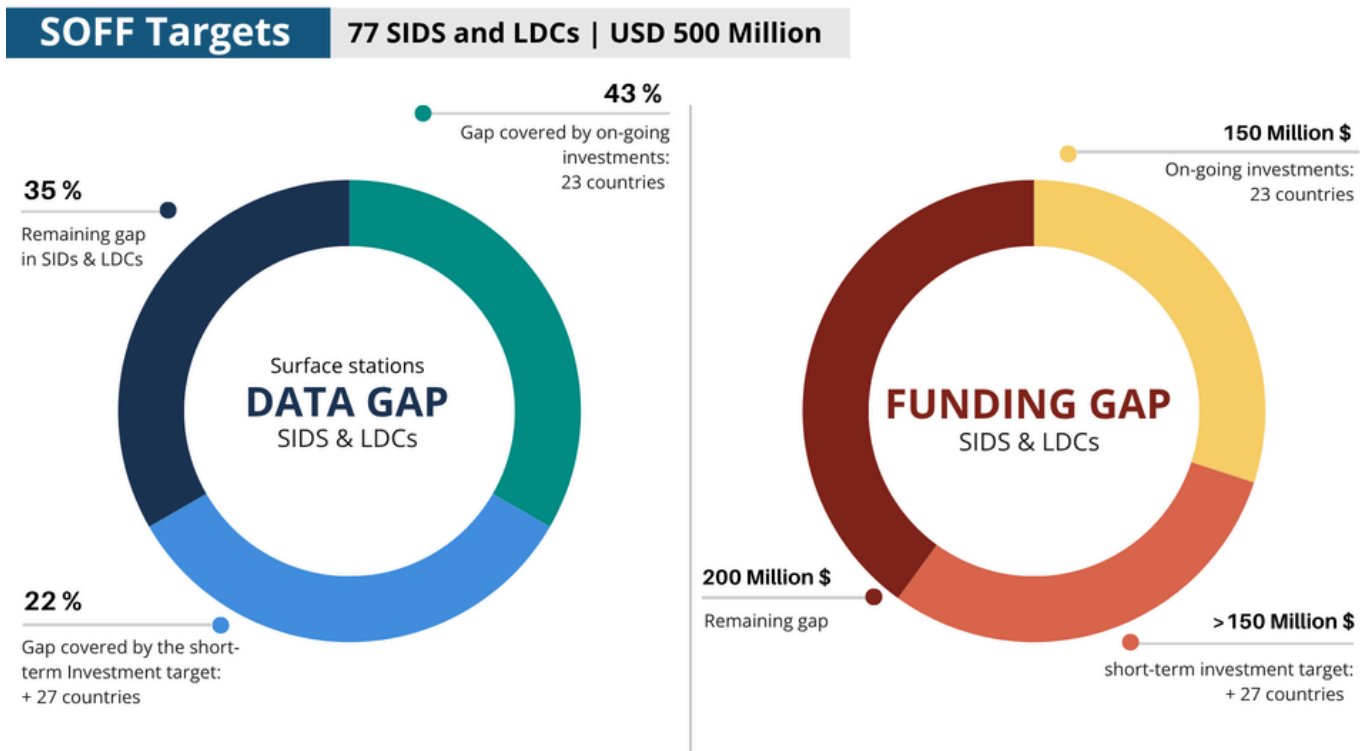
Despite significant progress, the scale of the challenge remains substantial. Ongoing investments in 23 countries are covering 43% of the surface-station data gap in Least Developed Countries and Small Island Developing States, with a further 22% to be addressed through the short-term investment target of an additional 27 countries. This would still leave a 35% remaining data gap.

This translates into an estimated USD 150 million additional funding needed by 2027 to finance investments in these 27 countries, currently completing or with a concluded Readiness Phase. A further USD 200 million will be required to close the remaining funding gap

in Least Developed Countries and Small Island Developing States. An estimated additional USD 50 million per year is required to sustain investments for all 77 LDCs and SIDS.

To address this challenge with the required urgency, SOFF will continue to invite investors, bilateral donors, philanthropies, and businesses to join a collective effort to close the funding gap. Together, these resources can accelerate implementation, expand support to additional countries, and strengthen the observations that underpin more accurate forecasts, early warnings, and climate services to protect lives and economies.

**Figure 10.** GBON Data Gap in LDCs and SIDS vs Funding Gap



**Annex 1.** Annual breakdown of the results at output and indicator levels across three SOFF phases for 2022-2025

Phases	Output	Indicator	Baseline 2022	Target	2023	2024	2025
		Total number of countries in SOFF Readiness phase		0	75	62	66
	Total number of countries in SOFF investment phase <i>Note: As of April 2026 there in total 23 countries approved and an additional 6 countries in pipeline.</i>		0	50	6	13	18
Readiness Phase	1. GBON gap established and reviewed	# of GBON gap reports produced and reviewed	0	75	12	53	58
	2. GBON national contribution plan developed	# of GBON national contribution plans developed	0	75	6	36	49
Investment Phase	3. GBON infrastructure in place	# of surface stations rehabilitated and/or installed with SOFF support	0	55	0	0	3
		# of upper air stations rehabilitated and/or installed with SOFF support	0	3	0	0	0
	4. GBON human and institutional capacity in place	# NMHS staff trained	0	150	0	120	333 <sup>5</sup>
		# Institutional capacity building activities	0	30	0	20	22
		# National consultations	0	60	0	0	73
Compliance Phase	5. Annual GBON compliance report and SOFF annual reports produced	Annual reports produced	0	0	0	0	0
	6. GBON data internationally shared and results-based finance provided	Total # of stations internationally sharing GBON data and receiving result-based finance	0	0	0	0	0
	7. On-demand GBON operational and maintenance advisory provided	# of countries receiving satisfactory advisory services delivered	0	0	0	0	0
	8. Weather and climate analysis products freely available through WMO Global Producing Centres	# of Global Producing Centres that provide free and open access to data	tbc	tbc	0	0	0

<sup>5</sup> Countries reporting staff trained: Ethiopia, Rwanda, Solomon Islands, Chad, Tanzania; Ethiopia training extended regionally, reaching 216 participants (113M/103F, 11 RMSCs, 64% improved) that strengthened regional capacity.

**Annex 2.** Investment Phase Country Reports, 2025

<b>Country</b>	<b>Link of the report</b>
<b>Belize</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>
<b>Bhutan</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>
<b>Cabo Verde</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>
<b>Chad</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>
<b>Kiribati</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>
<b>Ethiopia</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>
<b>Madagascar</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>
<b>Maldives</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>
<b>Mozambique</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>
<b>Rwanda</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>
<b>Solomon Islands</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>
<b>Timor-Leste</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>
<b>Uganda</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>
<b>United Republic of Tanzania</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>
<b>Malawi</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>
<b>Nauru</b>	<a href="#">SOFF Investment Phase Annual Narrative Report (2025)</a>