



Investment Phase: Progress update

United Republic of Tanzania

July 2026

Systematic Observations
Financing Facility

**Weather
and climate
data for
resilience**



General Information

Country	United Republic of Tanzania	
Implementing Entity	UNDP	
Agreement effectiveness date	20 May 2024	
Duration	42	
Anticipated end date	20 November 2027	
Reporting period	From: 01 January 2026	To: 30 June 2026
Approved amount	Total: USD 9,067,503.87 UNDP: USD 8,437,337 WMO: USD 630,166.87	
Disbursed amount	Total: USD 8,647,371.62 UNDP: USD 8,437,337 WMO: USD 210,034.62	

Summary

The SOFF Investment Phase in the United Republic of Tanzania became effective in May 2024, with implementation commencing in July 2024. The initiative seeks to close key gaps in the national meteorological observation system by strengthening institutional capacity and putting in place the infrastructure and operating arrangements required to meet Global Basic Observing Network (GBON) standards.

During January–June 2026, implementation moved from planning and procurement preparation into practical delivery. The period combined staff training and station registration with equipment contracting, renewed construction activity, technical advice, field mobility and financing. Activities were implemented across the project's three outcomes:

1. **Outcome 1:** GBON institutional and human capacity developed;
2. **Outcome 2:** GBON infrastructure in place; and
3. **Outcome 3:** GBON compliance and international data exchange sustained.

Outcome 1: GBON institutional and human capacity developed

Implementation priorities for 2026 were agreed through a technical coordination meeting held in Dodoma on 22 January and the third Project Steering Committee meeting convened in April. The meetings focused the work programme on 34 activities across the three outcomes and helped unlock the practical work that followed, particularly the upper-air equipment contract, construction inspections, station registration, observer training and transfer of operational vehicles.

A five-day training on OSCAR/Surface registration, metadata input and assignment of GBON stations was conducted in Morogoro from 4 to 8 May 2026. Ten TMA staff responsible for observation infrastructure, data, ICT and technical services learned how to create WIGOS Station Identifiers, register stations, enter and clean metadata, and assign stations within OSCAR/Surface. Experts from the WMO Regional WIGOS Centres in Morocco and South Africa joined the training to clarify registration procedures. By the end of the exercise, all 11 TMA meteorological stations designated for the GBON network had been successfully registered in OSCAR/Surface.

This was followed by station-based training for meteorological observers on coding and transmitting observational data through WIS 2.0. Conducted from 15 May to 12 June, the first phase reached 101 meteorological experts working at Dodoma, Singida, Mwanza, Tabora, Kaliua, Mpanda, Karema, Kigoma, Bukoba, Shinyanga and Musoma. TMA engineers travelled between the stations to provide practical instruction to personnel responsible for daily synoptic observations and transmission. Together, the two exercises established the station identities, metadata and operational skills needed for the designated stations to begin exchanging observations internationally in line with GBON requirements.

Technical collaboration with the Danish Meteorological Institute was reinforced through a Peer Advisor mission from 8 to 12 June 2026. The four-person DMI team worked with TMA and UNDP in Dodoma and Dar es Salaam and visited the Dodoma station, the JNIA surface and upper-air facilities, the Instrument and Calibration Unit, the Forecasting Centre, the National Calibration Centre and the Tsunami Centre. Sessions covered OSCAR metadata and WDQMS monitoring, calibration, maintenance and spares, data communication, UDCS redundancy, backup and disaster recovery, fire

protection, renewable backup power, and practical training needs. Dr Agnes Kijazi of WMO also participated in the mission. The resulting recommendations provide a practical basis for TMA's operations and maintenance planning and for continued technical support during the Compliance Phase.

SOFF was represented at the WMO Fourth Operational Climate Prediction meeting (OCP-4), held in Arusha from 29 June to 3 July 2026. TMA and UNDP supported an information booth showcasing Tanzania's SOFF implementation and joined technical discussions on observation networks, climate services and early warning systems. This strengthened SOFF visibility and regional knowledge exchange. As the meeting continued into July, participation commenced during the reporting period.

Implementation capacity was further strengthened through project financing. Approximately 94 per cent delivery of the first UNDP-managed tranche had been reported by 22 April. The second tranche of SOFF funds, amounting to USD 3,374,934.80, was received on 24 June 2026, securing resources for continued equipment contracting, civil works, installation preparation, training and operational support.

Outcome 2: GBON infrastructure in place

A major milestone was achieved on 26 March 2026 when the purchase order for three new automatic upper-air systems for Mwanza, Songwe and Kilimanjaro International Airport was issued. Supplier implementation began through a formal kick-off meeting on 15 April. The package covers Robotsonde automatic systems, hydrogen generation and storage, manual backup systems, radiosondes and balloons, software, training, warranty and support. Monthly implementation meetings were established to track technical surveys, tax exemptions, advance shipping documents, performance security and site readiness. A fire at the supplier's premises in France affected inventory and testing equipment and introduced an estimated delay of 30–45 days; the supplier secured alternative premises and maintained a revised target for factory acceptance testing and training before the end of November 2026.

The upgrade of the existing upper-air station at Julius Nyerere International Airport was brought to award readiness during the reporting period. The purchase order was issued on 1 July 2026, immediately after the reporting period.

The Universal Data Collection and Dissemination System was also taken through technical evaluation and commercial negotiation. The work focused on rationalising high service, customisation and online-support costs while protecting the core functions needed to collect, store and transmit observations from Government- and SOFF-supported stations to WMO systems. The procurement reached award readiness by the end of June, and the purchase order was issued on 7 July 2026.

Civil works for the new upper-air buildings at Mwanza, Kilimanjaro International Airport and Songwe remained the main implementation constraint. The original contract had expired in October 2025 when the three buildings were approximately 70–80 per cent complete. In April 2026, a joint UNDP–TMA inspection verified completed work, assessed contractor claims and reviewed reported flood damage; no significant damage corresponding to the claims was identified. A revised amendment was signed in May and works resumed through a phased Mwanza-first approach. A Clerk of Works was assigned to strengthen supervision, and weekly technical meetings commenced on 4 June.

By 30 June, ongoing works at Mwanza included fire-rated doors, air-conditioning, ICT installations, waterproofing, plumbing, skimming and associated finishes. Outstanding items included hardwood doors, power and water meters, relocation of an overhead electrical cable, remaining finishes and completion documentation. Mwanza was therefore still under construction at 30 June, while reactivation of the KIA and Songwe sites remained linked to verified progress and satisfactory contractor performance at Mwanza.

During the report period, the PSC also approved the reallocation of savings generated by re-scoping the calibration-equipment activity. Following technical advice from DMI, the original provision of USD 639,000 for seven zonal mobile calibration sets was revised to USD 300,000 for zonal verification equipment and centralised calibration, creating savings of USD 339,000. Of this amount, USD 100,000 was approved for construction of an upper-air building at Mtwara, including a Clerk of Works. This was intended to address an urgent infrastructure gap after the former building was demolished to accommodate Government plans for airport expansion. Although the Government had already procured the upper-air equipment, funds were not available to construct a replacement building. A subsequent site survey by TMA's Director of Infrastructure and Technical Services found the proposed new Mtwara site to be inaccessible. TMA therefore proposed Kigoma as the location for the fifth upper-air station. As the PSC approval was specific to Mtwara, the proposed change to Kigoma remains subject to technical confirmation and formal approval.

Five Toyota Hilux vehicles procured for TMA were customised with canopies, insured, registered and officially handed over at TMA headquarters in Ubungu, Dar es Salaam, on 23 June 2026. The vehicles give technical teams the mobility required to reach stations across the country, including remote sites, for installation, preventive maintenance, calibration, fault response and performance monitoring.

Outcome 3: GBON compliance and international data exchange sustained

The period established the first operational building blocks for sustained compliance. Registration of all 11 designated stations in OSCAR/Surface created the authoritative station identities and metadata required by WMO, while the WIS 2.0 training prepared 101 station personnel to code and transmit the observations generated by the network. The next operational step is to verify that data from each station are exchanged regularly and meet availability and quality requirements, using the WMO Data Quality Monitoring System and routine metadata maintenance.

At system level, the UDCS procurement and work on station-to-central transmission advanced the data pathway needed to collect, store and disseminate observations internationally. The DMI mission also identified practical measures for keeping that pathway reliable, including communications redundancy, backup and disaster-recovery arrangements, calibration capability, spare-parts and consumables planning, preventive maintenance schedules and clear equipment-replacement provisions. These actions are being carried into the TMA operations and maintenance framework and preparations for the SOFF Compliance Phase.

Overall, January–June 2026 marked a clear shift from preparatory work towards delivery. Tanzania contracted the three new upper-air systems, registered designated GBON stations, trained staff at central and station levels, advanced surface-station and data-system procurement, restarted stalled construction under stronger supervision, completed a targeted DMI technical mission, transferred five operational vehicles to TMA and received the second SOFF tranche. Priorities for the second half of 2026 are to complete and hand over the upper-air buildings, implement the issued purchase

orders, prepare sites for delivery and installation, verify international data exchange through WDQMS, and finalise sustainable operations and maintenance arrangements.

Progress of implementation

Output	Indicator	Target					Actual					Status	Milestones achieved	Challenges and risks	
		Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5				
1. GBON institutional and human capacity developed															
1.1 National consultations , including with CSOs and other relevant stakeholders conducted	Number of workshops with stakeholders (1.1.9)	1	1	1	0	0						Not yet started	0 workshops completed. The consultation is scheduled for Q3 2026	No immediate challenge. Stakeholder mapping and invitations should be completed early to avoid scheduling delays.	
	Percentage of women participating in SOFF consultations with CSOs and the private sector <i>(Please also indicate the actual number)</i> (1.1.6)	50	50	50	0	0						Not yet started	Not yet measurable, as the consultation has not taken place. The target remains 50%	Ensure balanced invitations and targeted engagement of women-led CSOs and private-sector organisations.	
1.2 NMHS institutional capacity required to operate the GBON network developed	Number of TMA Senior Management trained (1.2.19)	0	10	0	0	0		32				Achieved	Training for 32 TMA Senior Management (8 women, 24 men) Staff on Project Management for Capital Expenditure (CapEx) was successfully conducted at the Institute of Accountancy Arusha from 15–19 December 2025.	No major challenge. Skills should be reinforced through application to ongoing SOFF capital investments.	
	Number of Team members trained in project Management (1.2.6)	5	0	0	0	0		5				On-track	5 Team members (2 women, 3 men) participated in the Project Management for Capital Expenditure (CapEx) training held at the Institute of Accountancy Arusha from 15–19 December 2025. The training strengthened project management capacity within TMA.	No major challenge. Continued on-the-job application and knowledge sharing will sustain the training results.	

Output	Indicator	Target					Actual					Status	Milestones achieved	Challenges and risks
		Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5			
	Percentage of women participating in the capacity-building activities (<i>Please also indicate the actual number</i>) (1.3.5)	50	50	50	0	0	0	40	40			On-track	Partially achieved	Women's participation was below target. Future nominations will prioritise qualified women, and gender-disaggregated participation will be monitored.
1.3 NMHS human capacity required to operate the GBON network developed	Number of TMA Engineers and ICT staff trained (1.3.24)	15	0	10	0	0	0	0	10			On-track	From 4–8 May 2026, ten TMA engineering, ICT and technical personnel were trained in Morogoro on OSCAR/Surface registration, station metadata management and assignment of GBON stations. The training enabled all 11 TMA stations designated for GBON to be registered successfully in OSCAR/Surface. Five additional staff remain to be trained to achieve the target.	Five additional engineering and ICT personnel still need to be trained to achieve the target. Delays in equipment installation may limit opportunities for immediate practical application of the skills acquired. Follow-up coaching and hands-on training will be required once the new systems are installed.
2. GBON infrastructure in place														
2.1 New land-based stations and related equipment, ICT systems, data management systems and standard operating practices in place	# of new stations installed as per the GBON National Contribution Plan (2.1.1)	0	9	0	0	0						On-track	Procurement of nine new Automatic Weather Stations was completed and purchase orders issued. During the reporting period, implementation focused on equipment manufacturing, logistics, site preparation and coordination of delivery and installation. No new station had been installed and	Installation may be delayed by manufacturing, customs, site-readiness and connectivity issues. Supplier schedules, exemptions and site preparations will be monitored in advance.

Output	Indicator	Target					Actual					Status	Milestones achieved	Challenges and risks
		Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5			
													commissioned by 30 June 2026.	
2.2 Improved land-based stations and related equipment, ICT systems, data management systems and standard operating practices in place	# of stations improved as per the GBON National Contribution Plan (2.2.1)	0	7	0	0	0						On-track	Procurement for upgrading seven existing land-based stations was completed and purchase orders issued. Preparations for equipment delivery, installation and integration were underway. No station upgrade had been fully installed and commissioned by 30 June 2026.	Site conditions, equipment compatibility and disruption to observations may delay upgrades. Technical assessments and phased installation will minimise disruption.
2.3 New upper air stations and related equipment, ICT systems, data management systems and standard operating practices in place	# of new stations installed as per the GBON National Contribution Plan (2.3.1)	0	3	0	0	0						On-track	The purchase order for three automatic upper-air systems for Mwanza, Songwe and Kilimanjaro International Airport was issued on 26 March 2026, followed by the supplier kick-off meeting on 15 April. Equipment manufacturing and technical preparations commenced. A fire at the supplier's premises resulted in an estimated delay of 30–45 days. Civil works at the three sites also remained incomplete, although works resumed at Mwanza following the contract amendment signed in May. No new upper-air station had	Incomplete civil works and the supplier fire may delay installation. Weekly construction supervision, monthly supplier reviews and early site and shipping preparations are continuing.

Output	Indicator	Target					Actual					Status	Milestones achieved	Challenges and risks
		Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5			
													been installed by 30 June 2026.	
2.4 Improved upper air stations and related equipment, ICT systems, data management systems and standard operating practices in place	# of stations improved as per the GBON National Contribution Plan (2.4.1)	0	1	0	0	0						On-track	Technical and commercial negotiations for upgrading the JNIA upper-air station were completed during the reporting period. The purchase order was issued on 1 July 2026, immediately after the reporting period. No upgraded station had been installed by 30 June 2026.	Delivery, airport access and integration with existing systems may affect the schedule. A detailed implementation plan and early integration testing will be undertaken.
3. Sustained compliance with GBON														
3.1 GBON land-based stations' commissioning period completed , country-specific standard cost for operations and maintenance established, and data sharing verified by WMO Technical Authority	# of stations commissioned as per the GBON National Contribution Plan (3.1.1)	0	0	0	27	0						On-track	No land-based stations had completed the full commissioning and WMO verification process by 30 June 2026. However, 11 TMA stations designated for GBON were registered in OSCAR/Surface, and 101 meteorological personnel across 11 stations were trained on coding and transmitting observations through WIS 2.0. Procurement of the UDCS was also brought to award readiness; its purchase order was issued on 7 July. Full commissioning will follow equipment installation, sustained data exchange and	Commissioning depends on station installation, UDCS operation and reliable data transmission. OSCAR metadata, WDQMS monitoring, SOPs and maintenance arrangements will be completed.

Output	Indicator	Target					Actual					Status	Milestones achieved	Challenges and risks
		Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5			
													verification through WDQMS.	
3.2 GBON upper air stations' commissioning period completed , country-specific standard cost for operations and maintenance established, and data sharing verified by WMO Technical Authority	# of stations commissioned as per the GBON National Contribution Plan (3.2.1)	0	0	0	5	0						On-track	No upper-air station had completed commissioning and WMO verification by 30 June 2026. Procurement of the three new systems advanced, the JNIA upgrade reached award readiness, and civil works resumed at Mwanza. The DMI technical mission also provided recommendations on calibration, maintenance, spare parts, communications redundancy and operations planning. Commissioning remains dependent on completion of the buildings, equipment installation, establishment of operating and maintenance arrangements, and verification of sustained data exchange.	Civil works, equipment delivery and the unresolved fifth-station location may delay commissioning. Kigoma will be technically assessed and formally approved, while operating procedures, consumables and maintenance arrangements are finalised.

Editable Section - Any other relevant information