

Turkmenistan

Update on the context and situation of children

Official statistics report the GDP growth of Turkmenistan at 6.2% both in 2022 and 2023. IMF estimates an economic growth of 1.6% in 2022 and 2.5% forecasted in 2023. The country's growing economy is driven by exports of hydro-carbon resources, mainly natural gas, which benefited from still-high energy prices in 2023 and accounted 74% of export revenues and 50% of GDP. As the world gradually shifts towards greener energy sources, the over reliance on fossil fuels and lack of economic diversification, will likely limit revenues from this sector in the future.

The complex external context marked by multiple crises in the region and globally continued to pose a level of uncertainty in Turkmenistan during the year, although the impacts on the country are estimated to be minimal, and the Government continued its external policy of neutrality, good neighborly relations, and promotion of dialogue as a guarantee of peace.

Limited data availability continues to be a major barrier to understand the impact of multiple overlapping external crises on the society and economy of Turkmenistan. In July 2023 the State Statistics Committee published the preliminary 2022 Census results announcing the latest total population figure of 7,057,841 people, and final disaggregated results are expected to become public by mid-2024. Together with MICS, which is being implemented, more evidence will become available in 2024 to understand the latest situation of children.

In 2023 Turkmenistan returned to unicameral parliament system merging Halk Maslahaty (Peoples Council) and Mejlis Milly Gengesh (National Council) in one forum. Substantial effects of this change are yet to be observed. A major milestone in the policy context was the approval by the President of Turkmenistan of the National Action Plan on realization of child rights for 2023-2028. The new Plan covers all aspects of CRC requiring acceleration, including the new areas of climate change adaptation and child participation, and strengthens the enabling environment for further realization of child priorities in Turkmenistan.

Turkmenistan is one of the most vulnerable countries to climate change impacts in the region and has a medium-high Children's Climate Risk Index. With 80% of its territory being a desert, the worsening global climatic trends are projected to increase average temperatures, resulting in hotter and longer summer heatwaves and droughts in Turkmenistan. This will have major implications on water availability and food security, lowering the quality-of-life conditions of the population, with children being affected the most.

Another potential emergency is looming with de facto authorities in Afghanistan rapidly building a massive canal (Qosh Tepa) to draw water from the Amudarya river for irrigation. This is expected to lead to water shortage, drought, and desertification potentially affecting millions including children living in Lebap and Mary regions. This may cause political and social tensions in the future and should be closely monitored for adaptation, preparedness, and response.

At the COP28 climate summit in Dubai President Serdar Berdimuhamedov officially announced Turkmenistan's accession to the Global Methane Pledge, confirming country commitment for implementation of the standards, and interest to strengthen cooperation with international organizations. This comes amidst the latest evidence placing Turkmenistan among the highest methane emitting countries per capita and with a share of 3.6% of the global emissions, which are caused mainly by the oil and gas sector.

Turkmenistan presented its second Voluntary National Review at the UN High-Level Political Forum on Sustainable Development in July 2023. The report reflected the country progress on 11 SDGs (5 of which were officially proposed and 6 additional SDGs), and recommitted to current and future priorities, broadening the partnerships, integration of green technologies, and strengthening youth engagement to accelerate progress.

Year 2023 at the national level was marked by the official motto “happy youth with Arkadag Serdar” and saw the launch of the new national Strategy of International Cooperation of the Youth of Turkmenistan for 2023-2030. A number of major events provided the space for young people to participate in national consultations during the year. To promote multilateral dialogue among young people in the region, a series of international youth conferences were held, including the youth forums “Dialogue is Guarantee of Peace” in October and December 2023.

According to official statistics, 75% of the state budget expenditures were spent on social needs in 2023. The social spending accounts to 8.8% of GDP (education 3.9%, health 1.6% and social protection 3.3%), which is generally low. These figures capture the expenditures under tier-1, and could be underestimated, as Turkmenistan uses a 2-tier budget classification. Although 67% of all households receive some type of social transfers, the size of the benefits is neither adequate nor adjusted to inflation, according to Common Country Assessment. Despite government subsidies, the prices on essential food items continued raising. To prevent vulnerable households from adopting negative coping strategies it remains critical to improve monitoring of their well-being, introduce national poverty measurement and assess the current design of the social safety net programmes.

The education system in Turkmenistan continued to improve, with the introduction of 12 years compulsory primary and secondary education, curricula enhancements and physical conditions in schools. The country still needs to invest in coverage of young children in pre-school education, inclusion of children with disabilities in regular schools, and to address societal gender norms and institutional challenges that prevent more girls from acquiring higher education and their participation in traditionally male-dominated STEM subjects.

The Mid-Term Review of 2021-2025 UNSDCF implementation, including agency contributions, was conducted in 2023. The review acknowledged the progress made towards planned results and continuing relevance of the TOC. It recommended to expand the good practice of common results achieved collectively through Joint Programmes with the Government, and to consider the creation of an MPTF to support under-funded areas.

Mid-way in its implementation, the 2021-2025 UNICEF Country Programme with the Government remains relevant without change in overall focus. Advancing health, transforming education, integrated social protection for the most vulnerable, and focus on young people are among continuing priorities of Turkmenistan, aligned with UNICEF Country Programme and National Commitments to SDG Transformation submitted at the SDG Summit.

Major contributions and drivers of results

Every child has access to inclusive social protection

In 2023, the national workforce capacity for inclusive community based social services was institutionalized with the launch of the first Social Work Bachelor Program at two higher education institutions of Turkmenistan. To make this happen, UNICEF provided technical support on curriculum and syllabi design, capacity building of faculty staff, and worked with the Ministry of Labour and Social Protection, Ministry of Education and involved universities in Ashgabat and Turkmenabat over the past two years. As a result, the first cohort of professional Social Work students started their academic education from September 2023.

With the support of UN SDG Fund, UNICEF led the development of the National Social Services Development Plan (NSSDP) with a results framework and financing strategy to ensure the sustainability of the ongoing social protection reform. National stakeholder consultations and capacity building activities enabled the identification of lessons learnt from the newly established social services practice, as well as monitoring its efficiency, documenting challenges and opportunities related to taking forward the reform. The study visit to Bulgaria for the representatives of the Cabinet of Ministers, MoFE, MoLSP and MoE, provided strategic advocacy and exposure widening the scope of the decision makers on institutionalization of community social services with financing and legal implications. Technical support in legislative revisions, economic analysis, and costing was provided to prepare a complementing package to the NSSDP operationalization. The draft NSSDP was submitted to the Cabinet of Ministers for adoption in 2024. Currently community based social services are provided in the capital and all five velayats. However, only 18 out of 52 communities have social work posts established to reach out to the most vulnerable. Adoption of NSSDP will accelerate country-wide scale up of the services and secure fiscal space for the structural changes and new positions to be created in every district of the country. With the UN SDG Fund support, six Social Service provision organizations in every region of the country were connected to the central network of the MoLSP. This is a first step to automate the case management data collection process for day-to-day analysis and policy making.

UNICEF engaged with the Government of Turkmenistan to ensure that the Social Protection System is ready for shocks. The Shock Responsive Social Protection Readiness Assessment was conducted and analysed the feasibility of emergency cash transfers to provide cash assistance during emergencies to people affected by shocks. The findings demonstrated the potential opportunities, barriers, and options (along policy, programmatic, systems, and related dimensions) for introduction of emergency cash transfers in the country. The Assessment mission focused on building national partners' capacities in humanitarian cash transfer design and modality, supporting partners from MLSP, Ministry of Defence (Department of Emergency and Rescue Operations), MoFE, Central Bank, NRCS in joining the sub-regional and in-country practical workshops. Results of the SRSP Assessment were presented to the national partners at the "Scaling Up Emergency Cash Transfers in Response to Crises" workshop and later at the IFRC Conference dedicated to Cash and Voucher Assistances.

One of the recommendations of the SRSP Readiness Assessment was to identify clear criteria on vulnerability, considering that Turkmenistan does not have a poverty line, and to conduct a wellbeing assessment to be able to design the shock response options based on the up-to-date data. A subsequent two-week virtual mission of the UNICEF Regional Social Policy and Child Poverty Specialist provided timely advocacy and valuable expertise on monetary and multidimensional well-being measurement discussions with the State Statistics Committee and contributed to capacity building of the national partners, including Turkmenstat, MoLSP, and MoFE on SDG 1.1 and SDG1.2 measurement. The work on child poverty measurement will continue in 2024 in collaboration with World Bank and ILO.

Every child survives and thrives

UNICEF continued supporting the country progress in accelerating the implementation of the Integrated Management of Childhood Illnesses (IMCI) program. UNICEF technically supported the Ministry of Health and Medical Industry in developing a five-year framework for IMCI capacity strengthening. An adapted IMCI training course was replicated and distributed, 12 child illness treatment protocols were developed and shared with primary healthcare workers, and 12 other protocols are in the process of being reviewed. 32 national IMCI trainers were trained with support of UNICEF, and the program was integrated in the postgraduate medical training for family doctors. An IMCI costing exercise assessed resource allocation, service coverage, efficiency, and needs in Turkmenistan with UNICEF regional office support. A working group learned the costing methodology and a service list with Standard Treatment Packages were developed. These efforts will

continue in 2024 to ensure implementation of IMCI at scale and with quality.

Optimization of the home visiting system was piloted in 2023 in three model Primary Health Care facilities using the first Application for Home Visitor, developed jointly by MoHMI and UNICEF. Preliminary results showed the efficiency of the proposed optimized Home Visiting standards which is expected to ease the huge workload of family doctors and nurses. UNICEF will continue to support the Home Visiting application in the following year to ensure its use across Turkmenistan.

UNICEF supported scaling up Early Childhood Development (ECD) services, with developmental monitoring provided by ECD demonstration facilities in all regions of the country and 1,700 health professionals trained in ECD and early identification of developmental delays. Over 10,000 children benefited from a developmental monitoring program, leading to early intervention for 1,551 children identified with delays. This success was further bolstered by launching the first ECD course for medical professionals, ensuring future expertise in early childhood development. Joint provision on early childhood intervention services (ECI) was finalized laying the foundation on cross-sectoral quality and continuity of ECI and to proceed with building early intervention pathways and referrals in selected childcare facilities in Ashgabat city.

UNICEF supported a study visit to the St. Petersburg Early Interventions Institute, leading to preparation of in-service training programs for trans-disciplinary specialists, on mental health of children of early age, and on communication. These materials are ready for introduction at the State Medical University to build institutional capacity on promoting trans- and multi-disciplinary ECI.

UNICEF supported establishment of the new specialty “medical-social worker” with a focus on providing inclusive services for young children with disabilities and their families. The current role and functional responsibilities of the medical-social workers at the PHC were further shaped to facilitate their emerging coordinating role for ECI service provision. In line with the national priorities for developing qualified ECD workforce for supporting young vulnerable children and their families, the medical-social work curriculum at the State Medical University was strengthened with finalization of 15 training manuals to teach subjects within the course on social inclusion for persons with disabilities. These manuals serve as foundational materials for further design of training programs in mental health of young children, physical and occupational therapy, communication, and assistive technologies. These subjects and disciplines are critically important for building qualified workforce for provision of the comprehensive services for vulnerable young children and their families.

Baby-Friendly Hospitals Initiative (BFHI) continued in 2023 with UNICEF support. Monitoring visits led to the certification of three healthcare facilities and recertifying one, greatly expanding access to breastfeeding-supportive care. 400 healthcare professionals received training on infant and young child feeding. Monitoring compliance with the Law on Promotion and Support of Breastfeeding also took place, leading to constructive recommendations for the Inter-sectoral Committee on Nutrition. The Committee recommended to continue similar monitoring and develop a comprehensive improvement plan in 2024.

Considering the high rates of anemia among women, UNICEF facilitated a training of 46 health professionals, community workers, and educators providing them with the knowledge and skills needed to become proficient trainers in nutrition counselling for women, pregnant women, and adolescent girls. This gender transformative initiative aims to create a cascading effect, where the trained participants will further share their expertise with a broader audience, improving nutritional outcomes across these vulnerable groups of women and girls in 2024 and beyond. These efforts align with the UNICEF Gender Action Plan and Country Programme gender focus and priorities.

UNICEF continued supporting MoHMI in uninterrupted delivery of immunization services. Through its procurement services, UNICEF provided Turkmenistan with timely access to WHO-approved

vaccines and safe injection equipment, safeguarding children against 14 vaccine-preventable diseases. This success was further strengthened by the government's US\$ 16,683,301 investment in immunization procurement in 2023.

In 2023, UNICEF for the first time brought solar power to a rural health clinic, ensuring uninterrupted care even during natural disasters and power disruptions. This project intends to introduce a model for clean and reliable power supply to rural health facilities in remote areas, aligning with the sustainability and environment protection agenda of the UN and the Government of Turkmenistan.

UNICEF continued to support the MoHMI in strengthening health system capacities by boosting oxygen access. Three containerized oxygen plants were installed, making continuous medical oxygen a standard part of the healthcare system for Turkmenistan's future preparedness. Oxygen Plants have been installed in Ashgabat and Tejen (Ahal Velayat).

Every child is protected from violence and exploitation

In 2023, UNICEF continued to advocate for an integrated approach to the provision of services to protect children and their families, in line with UNICEF's Strategic Plan to fulfill the rights of the most vulnerable families and children.

Referring to the findings of the Assessment of the Child Protection System in Turkmenistan, UNICEF promoted the policy of family-based care for children who cannot benefit from parental care for various reasons and encouraged the Government to reform the outdated legal framework of child protection referral bodies in line with international standards. A series of high-level round tables resulted in the development of the draft Regulations on Guardianship and Trusteeship and on the Commission on Minors' Affairs, which envisage the establishment of a separate department dealing with child protection and family support in each district Hakimlik (local authorities).

The Ministry of Labour and Social Protection (MoLSP) continued to demonstrate leadership to accelerate the introduction of inclusive quality community-based social and child protection services. In 2023, UNICEF continued to support MoLSP in providing four specialized social services that directly supported 53 vulnerable families including 18 children with disabilities and their families; 23 families with children in difficult life situations to prevent family separation; 6 infants in Baby homes and 6 young people leaving residential care institutions with the aim to reintegrate back in their families and communities. The provision of these services has transformed their lives supporting social inclusion and addressing complex social, psychological, and economic issues including disability, child protection, and gender-based violence.

The Government's increasing efforts on justice for children continued following UNICEF advocacy, specifically addressing the issues of investigation procedure with the involvement of victims and witnesses of crime. In 2023, UNICEF supported MoIA, Prosecutor General's Office (PGO), and Ministry of Justice in elaborating more than 50 amendments to criminal and civil legislation, that were submitted to the Parliament of Turkmenistan to better protect child victims and witnesses of crime.

UNICEF introduced the justice sector partners to best practices on diversionary measures and supported the PGO in drafting the Concept of Diversion with a Restorative Justice approach to be finalized and implemented in 2024. This is the first of its kind in Turkmenistan and aims to replace formal judicial proceedings and use the deprivation of liberty of a child as a measure of last resort.

To integrate child-friendly procedures for children in contact with the law, particularly for child victims and witnesses of crime, in the practice of police and prosecution investigators, MoIA established two child-friendly interview rooms at the pre-trial stage in Ashgabat and Turkmenabad police departments. UNICEF provided technical assistance to the MoIA to design and equip the child-friendly interview rooms and to train 30 police and prosecution investigators in forensic interviewing

of children. It responds to an important 2015 recommendation of the UNCRC to the Government of Turkmenistan to establish protection measures for children in contact with the law.

Every child learns

UNICEF supported skills building for 613 teachers and specialists of the education system in using interactive and child-centered classroom practices that support the development of both functional and transferable life skills and competencies. The national education system increased its capacity to engage parents in the education process by strengthening the skills of 68 parents in supporting their child's education with a focus on social-emotional learning skills, mental health, and girls' empowerment. Integration of modern teaching methods (educational robotics), engagement of communities, parents, and private sector representatives and motivating children to acquire twenty-first century learning skills have a stronger meaning in the education system following the Ministry's lead and active engagement organizing national-scale initiatives and competitions. The education system further increased its awareness of the significance of advancing adolescent girls' learning and skills development, including STEM focus, thanks to UNICEF advocacy. The development of a Model Educational Robotics Club in a secondary school has been initiated and will be opened in 2024 to serve as a hub for child-centered, activity-based, inclusive learning experiences.

The institutionalization of child-centred and interactive teaching increased in 2023 with the incorporation of additional digital and print-based learning materials and teaching tools, endorsed by the Ministry of Education, on educational robotics, gender-responsive education, STEAM subjects, climate change adaptation and disaster risk reduction, gender in emergencies, and assistive technologies. The education system continued to upgrade curricula with UNICEF technical assistance using the competency-based approach in teacher's manuals, developing an in-service teacher training program on gender-responsive education and a pre-service teacher training course on educational robotics. In the area of gender capacity, 50 girls strengthened their STEM skills, three manuals were developed for teachers, students, and parents, and 24 adolescents were trained in gender-responsive education.

During the reported period the Ministry of Education implemented specific activities aimed at the development of inclusive education, assistive technologies, teacher competency framework, a national learning assessment system, climate change adaptation and disaster risk reduction in the National Action Plan for Realization of Children's Rights in Turkmenistan for 2023-2028. This also contributed to the on-going work on finalization of the National Concept of Inclusive Education. Despite existing challenges in institutionalizing and budgeting for EMIS, the system's capacity to manage education data for monitoring and planning improved with the initiation of digital EMIS in 179 educational institutions at secondary and higher education levels.

Development of the first-ever Turkmen text-to-speech voice for use in screen-reader software on computers and talkback functionality in smartphones enabled all visually impaired learners in Turkmenistan to access digital applications and texts. It became a major step forward for the education system from the previous situation when visually impaired children had to rely on limited Braille-printed books, Braille display readers and human voice recordings to access information. With the new voice module, all educational institutions have the capacity to make all digital learning materials (PDF, web, other textbooks) accessible to visually impaired learners without any additional cost.

In 2023 UNICEF enhanced MoE and regional education authorities capacity and preparedness to implement the half-day pre-primary curriculum during 2024-2025 school year. This was possible due to increased advocacy and capacity building on SDG 4.2 costing methodology for Ministry of Education and Ministry of Finance and Economy delivered jointly with UNESCO. Continuous support to the Working group on ECD with active engagement of the MoE led to finalization of the joint provision on early childhood intervention (ECI) as a framework for quality and continuity of services for children with disabilities towards their inclusive education path.

Ministry of Education with UNICEF support mainstreamed Climate Change Adaptation (CCA) curriculum in primary and secondary education by distributing and rolling out Methodological Manuals for teachers. The Manuals integrate the CCA/DRR topics in 5 environment-related subjects and help the education system to be more resilient to climate change impacts. 200 teachers enhanced their capacities in interactive teaching methods. Ministry of Education and UNICEF also developed the digital educational information course on CCA for the Summer Health and Rehabilitation Centres for children.

Every child participates

In 2023, UNICEF expanded collaboration with youth, including Young SDG Ambassadors, digital content creators, eco activists and volunteers in programme initiatives, and in communication and advocacy as agents of change to promote child rights and SDGs, including in events dedicated to International Day of Child Protection, Earth Day, COY18, Eco Camps, regional Youth Forum and World Children's Day. More than 2,500 children were reached with UNICEF messages with support of young people.

UNICEF and partners promoted healthy lifestyle through sports in a football tournament targeting schoolchildren and youth of Dashoguz and Lebap velayats (regions). This was the first time UNICEF successfully partnered with the Football federation and the initiative had a positive impact in popularizing sports among hundreds of boys and girls, contributing to their health, academic performance and leadership qualities.

UNICEF co-hosted a dialogue with women and girls on the International Women's Day in March, which served as a platform for women and girls from different professional and academic areas to spotlight their accomplishments, share challenges and the ways to tackle them. The dialogue created a space for youth engagement on the importance of gender equality and empowerment of women and girls in Turkmenistan.

On 1st of June, during the International Day for Protection of Children events and launching the postal stamp dedicated to the 30th anniversary of Turkmenistan's ratification of the Convention on the Rights of the Child, children participated in letter writing to future children, expressing their dreams and aspirations for their next generation. These letters were collected by UNICEF to be kept and opened in 2033 in a similar event by the children of future.

During summer holidays, UNICEF and partners engaged children in summer camps on child rights and the rights of persons with disabilities. More than 250 children from all over Turkmenistan took active part in these sessions.

UNICEF supported a group of young activists to participate in major regional and global events dedicated to climate change and environment, including the global Conference of the Youth (COY18) on Climate Change action held in November-December 2023 in Dubai, UAE.

UN Collaboration and Other Partnerships

Joint Programmes to accelerate progress on SDGs

The mid-term review (MTR) of the 2021-2025 UNSDCF conducted in 2023 acknowledged the positive impact of UN Joint Programmes (JP) towards common objectives and stronger UN synergies. In 2022-2023, UN in Turkmenistan successfully completed two JPs, first supported by the UN SDG Fund, and another by the UN Human Security Trust Fund. UNICEF had a prominent role in both JPs (technical lead in one, and implementing agency in the other one). To continue this good practice the

UN country team, with Government agreement, identified key areas of collaboration and initiated the development of Joint Programme concepts for submission to potential funding agencies, including IFIs and contributions from the Government.

Building on the effective implementation of the JP on Social Services, UNICEF will continue to lead the development and implementation of the joint programme on “Strengthening the social protection system through job creation and scaling up integrated quality inclusive social services”, and expressed interest to participate as an implementing partner in the following potential JPs:

- Youth, Peace and Security
- Improving Public Financial Management to Increase SDG Financing in Turkmenistan
- Accelerating Improved Digital Governance to Deliver Citizen-Centric Digital Services and Population Policies
- Strengthening the capacity of the Office of the Ombudsman of Turkmenistan to protect Human Rights in line with the Paris principles.

The JPs will expand the UN collective efforts and coordination with the Government and support the acceleration of progress towards UNSDCF outcomes and SDG targets.

New partnership with the European Union

Due to its specific context, Turkmenistan continues not to benefit from much donor attention and prioritization.

In 2023, UNICEF established a new partnership with the EU Delegation, by successfully mobilizing a grant to support national Child Rights data and evidence generation capacities and systems including implementation of the Multiple Indicator Cluster Survey (MICS) in Turkmenistan.

Establishing this partnership took nearly a year of dialogue and the process entailed various strategies that UNICEF learned along the way. Advocacy and alliance of the UN Resident Coordinator’s Office was crucial in reinforcing UNICEF’s position as the partner of choice, and highlighting the need to invest in human rights and child rights evidence generation in the country.

This is a first funding agreement that UNICEF Turkmenistan signed with EU Delegation, which is an entry point to continue and expand our partnership going forward.

Leveraging partnerships with private sector

2023 marked the initiation of a new collaborative venture with Bouygues Turkmen, representing the first partnership of UNICEF Turkmenistan with a private company. In an event celebrating the Earth Day, UNICEF and Bouygues Turkmen mobilized young people and planted 17 trees symbolizing 17 Sustainable Development Goals at the premises of Carbon Co-Working Training Center in Ashgabat. While this collaboration did not entail direct financial contributions, it served as a first step towards fostering productive engagement with the private sector in Turkmenistan.

Partnership with NRCS strengthened Emergency Preparedness capacities

The partnership between UNICEF and the National Red Crescent Society of Turkmenistan (NRCS) expanded in 2023. The partners extended the Contingency Programme Document, the main humanitarian assistance framework, that can be activated within 24 hours from the onset of an emergency. This collaboration strengthened the national capacities on emergency preparedness following the series of school and community-based interventions on school disaster risk management, Gender in Emergency, WASH in Emergency, DRR and Accountability to the Affected Population reaching over 1,000 schoolchildren, 300 teachers, and 400 staff and volunteers of the National Red Crescent Society at the local level in Turkmenistan. These preparedness and skill-building interventions are particularly timely in a context of increased global and regional crises, and other potential risks exacerbated by worsening climate change. The contribution of USAID BHA regional

programme was catalytic in achieving these results.

Lessons Learned and Innovations

Putting Assistive Technologies at the Service of Children with Disabilities

In 2023, UNICEF in partnership with Global Partnership for Assistive Technology ATscale, Ministry of Education of Turkmenistan, and the Blind and Deaf Society of Turkmenistan (BDST) successfully developed the first Turkmen text-to-speech voice module. With introduction of this foundational assistive technology (AT), Turkmen-speaking people with visual or communication impairments, including children, became able to navigate the digital world of computers and smartphones.

UNICEF's leadership in identifying technological inclusion gaps allowed to address certain needs of children with disabilities by using the assistive technologies. People with visual impairments now can use screen reader software to navigate computers and smart devices, enabling them to audibly interpret on-screen content through text-to-speech voice technology.

Text-to-speech voices, commonly provided by major tech companies like Amazon, Google, or Microsoft, enhance accessibility by converting on-screen text into lifelike speech on various digital devices. While widely beneficial for children and adults with visual or communication impairments, these services often lack representation in commercially under-represented languages like Turkmen, creating barriers for communication and information access. For Turkmen language, spoken by around 10 million people, with the majority in Turkmenistan, and partially in neighbouring Tajikistan, Uzbekistan, Iran, and Afghanistan, the absence of a Turkmen text-to-speech (TTS) voice resulted in challenges, especially in education where the alternatives are the books in Braille or limited human voice recordings. The introduction of the Turkmen TTS voice addresses this gap, offering real-time speech generation at no extra cost, significantly improving accessibility for e-books, apps, and web content. A local visually impaired user noted a substantial reduction in reading time, from four months to ten days for a 100-page book, improving the overall reading experience.

The initiative originated in 2021 when the Ministry of Education and UNICEF identified the need for a Turkmen text-to-speech voice for screen reading software, which led to a request for UNICEF's technical support. Continuous research and consultations with relevant national partners and UNICEF Regional Office and Headquarters resulted in support from the Global Partnership for Assistive Technology ATscale. Turkmen was the first out of four languages targeted in its 2023 text-to-speech initiative. ATscale's investment facilitated collaboration with LouderPages, a company specializing in TTS technology. The Country Office played a key role in coordinating local partnerships, user testing, and providing technical and linguistic input. The Turkmen TTS voice, launched on World Children's Day 2023, further enhanced UNICEF's reputation as an organization delivering innovative and technically complex solutions for the benefit of local communities. It also strengthened UNICEF's leading role in disability inclusion agenda in Turkmenistan.

A key lesson learned from the project was the practical inclusion of people with disabilities in this technically complex initiative. People with visual impairments actively participated in the project at all stages. Notably, the Country Office hired a consultant with visual impairment, the first time in the office history, who participated in quality assurance, collaborating with other people with visual disabilities, and training the users, including teachers and community members of the BDST on text-to-speech applications. This inclusive approach allowed testing of UNICEF processes, such as Agora prerequisite courses and facility accessibility. Persons with disabilities were involved at every project stage: this included UNICEF specialists, software developers, national consultants and beneficiaries, showcasing the application of the "nothing about us, without us" principle and providing valuable insights for future projects.

Introducing innovative solutions to deliver uninterrupted health services

This year UNICEF supported solar electrification of a primary health care facility. This new pilot solar energy system was installed in the rural health centre of Pelvert in Halach etrap, Lebap velayat - the first primary health care facility in Turkmenistan fitted with solar electricity, enabling the health care facility to deliver uninterrupted health services, including during natural calamities.

In addition, UNICEF supported the Ministry of Health and Medical Industry in strengthening health system capacities for future preparedness, by delivering and installing three containerized “Oxygen Plants in a Box”. This innovative all-in-one solution proved that continuous medical oxygen can be an integrated service, making oxygen therapy a standard part of health systems. The Oxygen Plants are now available at the Center of Infectious Diseases and International Center of Traumatology in Ashgabat, and in Tejen City Hospital in Ahal velayat.

By successfully implementing these two innovative projects, UNICEF made remarkable strides in strengthening the health system, enabling it to provide uninterrupted health services. The new "Oxygen Plants in a Box" and "Solarization" initiatives showcased dedication to clean energy, climate change action and public health resilience, while demonstrating commitment to pioneering practical solutions that can positively impact the most remote communities.