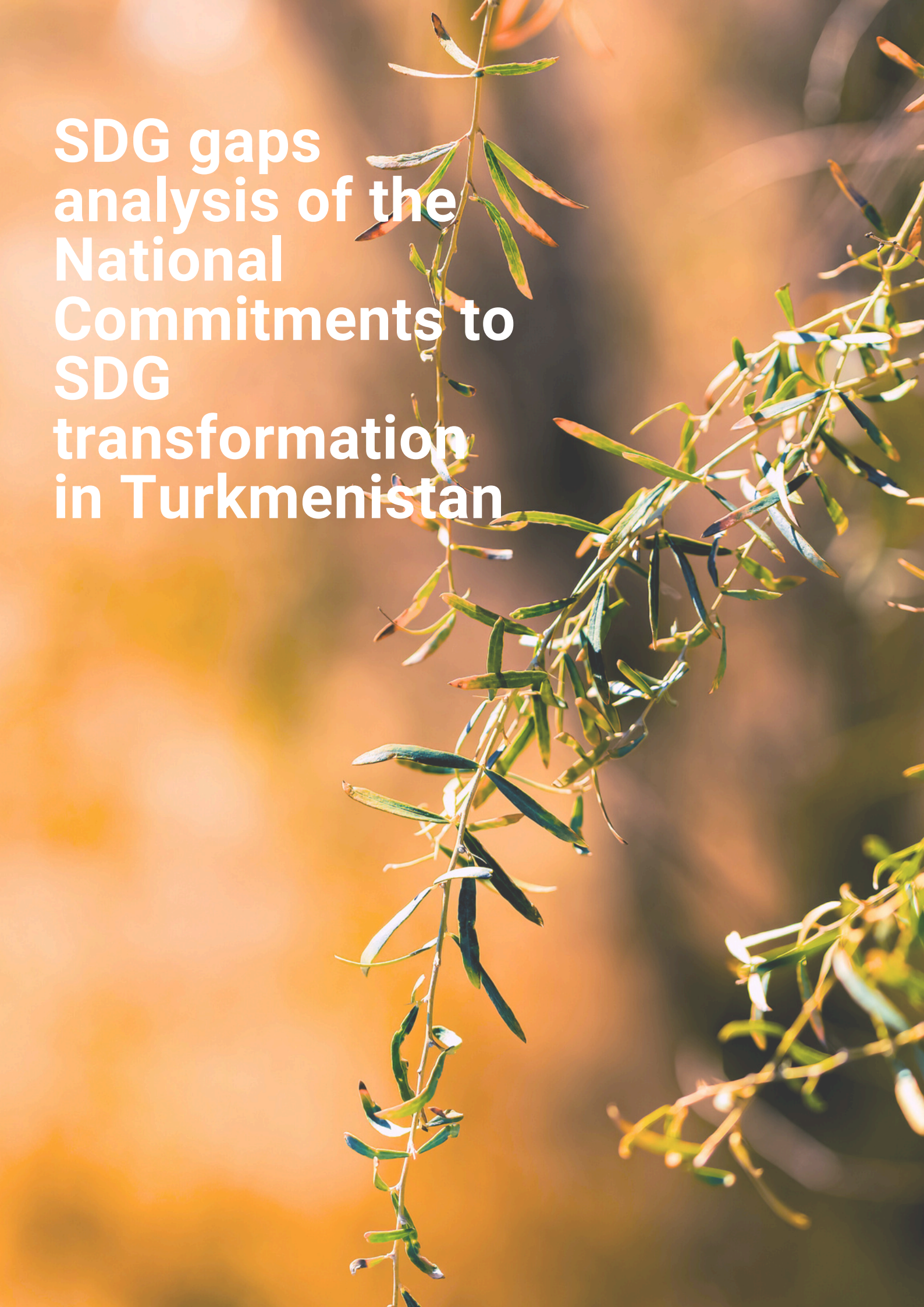
SDG gaps analysis of the National Commitments to SDG transformation in Turkmenistan



SDG gaps analysis of the National Commitments to SDG transformation in Turkmenistan

The long-term national vision for Turkmenistan's development is guided by the "The Programme for the Revival of a New Era of a Powerful State: The National Programme for the Socio-Economic Development of Turkmenistan in 2022-2052" approved in 2022. The socio-economic policy of Turkmenistan set in the Programme is aimed at ensuring sustainable economic development, consistent improvement of the public administration system, increasing social protection of the population, further improving well-being, and a prosperous and happy life.

Through the joint SDG GAPS ANALYSIS conducted jointly with the Ministry of Finance and Economy and Statistics Committee the document integrates systems thinking, capturing the interconnections, resources, information, institutions, and capacities needed to address SDG transitions pathways to achieve the Agenda 2030. The SDG financing gaps were estimated for the following SDG transitions with high potential for systemic impact: **(1) food security and water management; (2) green energy transition; (3) digital connectivity; (4) education; (5) jobs and social protection; and (6) climate change, biodiversity loss and pollution. In addition, (7) universal health coverage and (8) peace and security**.
The analysis shows that to reach the SDG targets recommended at the national level for 2026-2030 to progress on National commitments to accelerate the SDGs, additional government funding in the amount of 46.1 billion manats (13 billion USD) will be required[1]. According to the analysis, the SDG financing gap amounts to 2.8 % of GDP annually during 2026-2030 to achieve suggested national SDG transition targets and 5.5% of GDP to achieve globally set targets.
Limited data availability continues to be a major barrier to understanding the country's complex development financing landscape. For securing sustainable SDG financing the GoT with the support of UN partners should focus on the implementation of the Integrated National Financing Frameworks and PFM reforms to address the SDG financing gaps at the country level. In terms of partnership arrangements, the Government of Turkmenistan remains the main partner for the UN development activities, while partnership is being secured with other international players (although their presence is limited in the country), and cooperation is expanding with the private sector, academia and civil society. The UN assistance remains crucial to Turkmenistan's economic and social development, leveraging financing, partnerships, and technologies to support SDGs achievement. The UN comparative advantages include the ability to offer a global perspective, neutrality, a vast network, world-class expertise, and credibility. It plays a key role in addressing development roadblocks and advocating for inclusive, sustainable growth.

As endorsed by the UNSDCF Steering Committee in April 2024, the UN country team in Turkmenistan jointly with the Ministry of Finance and Economy of Turkmenistan (MoFE) and the SSC of Turkmenistan conducted the SDG gaps analysis as part of the CCA.

The analysis is focused on progress of Turkmenistan's national commitments to implement the SDGs. The aim of the SDG gaps analysis in alignment with the national priorities of socio-economic development of the country is to set the national targets where absent, identify key areas of acceleration and risks, assess the funding of the SDGs and the financing gaps in meeting National commitments to accelerate the implementation of the SDGs in Turkmenistan, announced at the SDG Summit in 2023.[10]

Priority transformations of the SDGs constitute an integral part of accelerating progress in the implementation of the 2030 Agenda.

Global transitions[11] cover SDGs 1, 2, 4, 6, 7, 8, 9 and 13, and are interlinked with other SDGs with high potential for systemic impact in most countries, including Turkmenistan. Additional priority SDG transformations for Turkmenistan include 'Health' (SDG 3) and 'Peace and security' (SDG 16). Concurrently, the prioritized 10 SDGs are closely related to all the others, especially SDGs 5, 11, 15 and 17.

As part of the analysis, identification of representative SDG indicators for each of the eight key transformations was followed by defining the SDG accelerator indicators.

This was based on:

1. Turkmenistan's national commitments announced at the SDG Summit in 2023;
2. The results of the assessment of financing for the transformation of the UNCTAD SDGs (the list of UNCTAD indicators used for the global assessment and target indicators up to 2030);[12]
3. The analysis of the SDG PUSH by UNDP;[13]
4. SDG indicators and other important socio-economic indicators for which basic data is available.

In the analysis, representative SDG indicators were selected using official data from the second Voluntary National Review of SDGs[14] and the National SDG Database for 2015-2023.[15]

National target values were determined for selected representative SDG indicators in transformations.

In determining the target values, both national indicators and global goals from the UNCTAD assessment were used, and trends in the Central Asian region were taken into account where relevant. In determining individual targets, the expert assessments of the UN country team and consultants were applied.

Guided by UNCTAD's recommendations, the costs of the SDGs were calculated and financing gaps to accelerate progress were assessed.

The following approach and assumptions have been employed in assessing the gaps for eight SDG transitions:

-Identifying indicators and trends in economic sectors to achieve the SDGs using official data (published in the Statistical Yearbook, industry statistical compendia, etc.).

-Preparing tables with calculation of current financing, based on official data on expenditures of the first-tier state budget (public sector), according to the functional classification for 2019-2023, extrapolated to 2030 to predict future expenditures.

-Applying expert approaches based on weighted averages and long-term development where any data on government current financing was missing (e.g. climate issues).

-In order to fully cover the sources of public financing, the revenues of state-owned enterprises disaggregated by economic activities published in statistical compendia were taken as the second-tier state budget spending, extrapolated to 2030, using approaches based on weighted averages and long-term development.

-Expert calculations of the volume of expenditures of the consolidated budget in economic sectors on cross-cutting SDGs were used in assessing the state financing of the SDGs.

-All calculations on the assessment of public financing of the SDGs were carried out through the prism of the contribution of a certain segment of the economy to the country's GDP. In assessing the country's macroeconomic indicators for the future, both official data and expert estimations, along with weighted

10. 2023 SDG Summit. National commitments. https://sdgs.un.org/national-commitments-sdg-transformation/22302
11. Six SDG Transitions (2024). https://sdgs.un.org/sites/default/files/2024-07/Six Transitions English.pdf
12. SDG costings, UNCTAD (2023). https://unctad.org/sdg-costing/about
13. SDG Push diagnostic for Turkmenistan, UNDP (2023). https://sdgdiagnostics.data.undp.org/TKM
14. Turkmenistan Voluntary National Review of SDGs (2023). https://turkmenistan.un.org/en/239049-voluntary-national-review-turkmenistan-progress-implementation-global-agenda-sustainable
15. Turkmenistan data for Sustainable Development Goals

average approaches, and, in some cases, assessments by international organizations were used.
-Expert calculations of GDP in current and comparable prices until 2030 were made, based on the GDP growth rate 6.6-6.7% for 2025-28 (based on the PPSED 2022-2028).
-To fully cover the sources of public financing for achieving the SDGs in transformations, available data on investment projects identified in the national programmes, in particular the PPSED 2022-2028, were used. The volume of investments in construction or other investment activities for 2024-2028 were included in estimates of possible amounts of state financing.[16]
-When assessing the amount of funding for each transformation, an expert assessment of the cost of accelerator indicators until 2030 was carried out, since this level of expenditure will allow other SDG indicators to be reached within the framework of the transformation. The costs were determined both in total for 2026-2030 and in average values per year.
-Based on the cost of accelerator indicators until 2030, estimates of government spending and the financing gap were calculated according to two scenarios (reaching national targets and reaching global targets), and key areas of acceleration were identified.
Possible risks contributing to the acquisition and integration of data from the multidimensional risk analysis of the SDGs were analysed and a brief description of the risks for each transformation was prepared.

The analysis shows that to reach the SDG targets recommended at the national level for 2026-2030 to progress on the National commitments to accelerate the SDGs, additional government funding in the amount of 46.1 billion manats will be required.

This translates to 2.8% of GDP annually during 2026-2030 to achieve national SDG transformation targets by 2030 (the recommended national targets and assessments of financing gaps for their achievement by SDG transitions are presented in the Annex). To achieve globally set targets the additional financing totals to 5.5% of GDP annually during 2026-2030.

Table 1: SDGs financing gaps to reach targets for national commitments to SDG transitions

SDG transitions	National level targets		Global level targets	
	Financing gap, million manats	% of GDP on average per year	Financing gap, million manats	% of GDP on average per year
Jobs and social protection	6,119	0.37	13,086.9	0.79
Food security and water management	5,431	0.33	9,921.3	0.60
Education	3,507	0.21	4,039.4	0.25
Green energy transition	5,579	0.34	14,698.7	0.89
Digital connectivity	6,275	0.38	10,817.2	0.66
Climate change, biodiversity loss and pollution	8,657	0.53	9,472.9	0.58
Universal health coverage	7,935	0.48	24,396.8	1.48
Peace and security	2,640	0.16	4,125.6	0.25
Total	46,143	2.8	90,558.7	5.5

Source: Expert assessment of UN consultants and UNCT in Turkmenistan as part of the 2024 CCA

The resulting cost estimates for the SDG transition pathways range from USD 13 billion (achieving suggested national SDG targets) to USD 25 billion (achieving global SDG targets) annually from 2026 to 2030, which is between $373 and $733 per person per year.
The initial findings from CCA financial landscape analysis suggest that key sources for financing sustainable development in 2023 alone reached 135 billion manats, or over 60% of the GDP (see Chapter 6). It should be noted though, if the risks of lower economic growth materialize given the reduced hydrocarbon sector revenues as discussed above, the SDG financing gap to achieve global targets will increase to 8% of GDP annually during 2026-2030.

16. On a global scale Turkmenistan has one of the lowest ratios of State budget revenues to GDP, which amounted to 15.0% of GDP in 2023 compared to 26% in the EMMIE group.

The SDG gaps analysis suggests that health, climate, digitalization, jobs and social protection pathways command the highest costs while they are incremental for ensuring the conditions for achieving the SDGs.

The education and peace pathways prove to be the least expensive, even though they cover a wide range of targets critical for wellbeing.
The estimate of additional financing to cover the gaps by dimensions of sustainable development is presented bellow: the social dimension – 1.23% of GDP, the economic dimension – 1.05% of GDP, the environmental dimension – 0.53% of GDP annually in 2026-2030.

Table 2: SDG financing gap to achieve national SDG targets by sustainable development dimensions

SDG transitions	Financing gap, % of GDP annually in 2026-2030	Share in total SDG financing gap
Social	1.23	44%
Economic	1.05	37%
Environmental	0.53	19%
Total	2.80	100

Source: Expert assessment of UN consultants and UNCT in Turkmenistan as part of the 2024 CCA

Overall, these are substantive investments and 44% of them would focus on boosting human capital and supporting the most vulnerable. Another 37% would be required to enable economic transformation through structural changes by moving labour and other resources from lower-to higher-productivity sectors (from agriculture to manufacturing and renewables) and raising within-sector productivity growth (digitalization, green economy and transforming food systems). Successful economic transformation requires smart macroeconomic and structural policies, including deregulation, eliminating corruption, privatization and private sector development, and a better investment climate. The remaining 19% of the financing gap is required to support the environmental pillar of development by adapting to and mitigating climate change, biodiversity loss and pollution.

SDG Transition "Jobs and Social Protection"
Commitment: Providing more decent jobs and strengthening social protection

Accelerators	SDG Transition "Jobs and Social Protection" Indicators	Baseline SDG indicator [17]	2030 Target	
			National	Global
✓	8.3.1 Proportion of informal employment in total employment by sector and sex Female Male	 29.66 18	 20 12	 - -
	8.6.1. Proportion of youth (aged 15-29 years), not in education, employment or training, %	14.9	12	-
✓	1.a.2 Number of professional social workers to provide social support services to vulnerable populations	45	2,000	4,000
✓	Coverage of social transfers and benefits, % [18]	67	75	80

Accelerator: Number of professional social workers to provide social support services to vulnerable populations (indicator 1.a.2)

As a part of the Joint Program to improve the social protection system, a new model of social services at local level has been introduced. The Law on Social Services from 2021 created fiscal space for the first cohort of **45 social work specialists** in 18 out of 52 etraps of the country.

17. SDG Database, State Statistics Committee of Turkmenistan
18. According to the MICS-6: Multiple Indicator Cluster Survey, State Statistical Committee of Turkmenistan, UNICEF, 2019.

To reach out to the most vulnerable populations (estimated 2% of the total population), at least 2,000 professional social work specialists (national target value: 1 specialist per 3,500 population) will need to be recruited across the country by 2030.[19]

- The expenditures of the state budget of the first tier on social protection are estimated to amount to 17,360.5 million manats in 2030. To secure 2,000 jobs for professional social workers, approx. **131 million manats** will need to be allocated from the state budget by 2030 (calculated based on average wages).

Accelerator: Coverage of social transfers and benefits

67%[20] of all households received at least some kind of social transfer in 2019. Informal employment continues to be one of the main challenges of the labour market. Percentage of women in informal economy is significantly higher than among men (29.6% and 18.0% in 2023, accordingly).[21]

- To achieve the national target for informal employment by 2030 (men - 12%, women - 20%), about 312.3 thousand people should be added into formal employment (the calculation was made without considering population growth). If 23% (the current situation) of this number are employed by the public sector, additional 4,229.4 million manats from the state budget will be required for wages. Considering all those to be employed in both the public and the non-public sector, inflows into the social insurance fund will increase by estimated 3677.7 million manats (on average 20% of the payroll fund). To reach the target value of 75%, an additional **805.9 million manats** will be required.
- Thus, in general, the transformation will require an additional **6,118.9 million manats, or 0.37% of GDP** on average per year during 2026-2030, provided the targets adopted at the national level are reached. To reach global targets (that is the number of social workers - 4,000, coverage of social transfers and benefits - 80%, informal employment - 5%), an additional 0.79% of GDP will be required.

Financing of SDG transition "Jobs and Social Protection"	Baseline (million TMT)	National	Global
Gap in financing to reach targets, million TMT, % of GDP on average per year during 2026-2030	**17,360**	**6,119 (0.37%)**	**13,087(0.79%)**

Key success elements

- Expanding social protection coverage and employment services to address the vulnerabilities related to socio-economic situation, informal employment and unemployment;
- Expanding social services to the community level, ensuring relevant structural changes to secure presence of the Social Protection Department in every etrap (district) and region (velayat);
- Improving the methodology for measuring poverty and establishing a national wellbeing minimum and average line;
- Overcoming the limited financial space for the development of integrated inclusive social services for the most vulnerable populations;

Main risks factors (largely due to climate change)

- Lack of a national poverty baseline and national poverty estimates
- Insufficiently effective mechanism of targeted social assistance, especially for PWD
- High CPI affecting negatively real incomes
- Insufficiently high proportion of education and healthcare expenditures in GDP
- Lack of professional social workers to provide social support services to vulnerable populations (children, youth, women and girls, PWD etc.)
- High level of informal employment
- Increased proportion of youth, not in education, employment or training
- Decrease in GDP growth per employed person
- Lack of data on households affected by climate change

19. UNICEF-Government of Turkmenistan Analysis: Recommendations for social service system development in Turkmenistan, Joanna Rogers, 2023
20. MICS-6: Multiple Indicator Cluster Survey, State Statistical Committee of Turkmenistan, UNICEF, 2019.
21. See at https://sdg.stat.gov.tm/en/indicator/8-3-1 and Chapter 2.

SDG Transition "Food Security and Effective Water Management"
Commitment: Ensuring food security and effective management of water resources.

Accelerators	SDG Transition "Food security and effective water management" Indicators	Baseline SDG indicator [22]	2030 Target	
			National	Global
✓	2.a.1 The agriculture orientation index, determined by the structure of government expenditures	0.32	0.7	1
	2.2.2 Prevalence of malnutrition among children under 5 years of age by type (wasting and overweight)	3.1	2.5	-
✓	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	82.9	70	50

Accelerator: The agriculture orientation index (indicator 2.a.)

0.32% Agriculture orientation Index is considered low, while the target national value is recommended to be set at 0.7. Trends in the Central Asian region were used to determine the target value. The target value of this indicator at the global level is 1.

- In 2023, the proportion of expenditures on the agro-industrial complex in government expenditures of the first tier was 3.6%. The revenues of state-owned agricultural enterprises amounted to 2.1 billion manats, which are accepted provisionally for the budget of the second tier. Extrapolating the current dynamics until 2030, the expenditures of the state budget of the first tier on agro-industrial complex (considering the specialized funds of the Ministry of Agriculture) are estimated to amount to 2,315.4 million manats in 2030; the revenues of state-owned agricultural enterprises will amount to 2,765.6 million manats. Accordingly, the expenses of the consolidated budget were estimated at 5081.0 million manats. To achieve the national target for the agriculture orientation Index **6,888.4 million manats** will be required, i.e., the funding gap is 1,807.4 million manats.

Accelerator: Level of water stress (indicator 6.4.2)

82.9% level of water stress reported in 2023 is very high (water stress over 75% is considered a critical level), with agriculture being the primary water consumer in Turkmenistan (about 90%).

- Investments in water management under the PPSED 2022-2028 are underway. The estimated volume of investments in water management still needed till 2028 is around 3844.1 million manats. Considering the revenues of state-owned water supply enterprises, the total cost of transformation is estimated at 5301.0 million manats. Given the planned investments in water management, 10,732.5 million manats will be required, resulting in the financing gap of **5,431.5 million manats** or 0.33% of GDP (0.6% of GDP if global targets are reached) on average per year during 2026-2030.

Financing of SDG transition "Jobs and Social Protection"	Baseline (million TMT)	National	Global
Gap in financing to reach targets, million TMT, % of GDP on average per year during 2026-2030	5,301	5,431 (0.33%)	9,921.3 (0.60%)

Key success elements

- Maintaining food availability and affordability;
- Increasing the production of import-substituting food products;
- Securing access of smallholder farmers to government support and financial resources;
- Shifting production, distribution, retailing and consumption towards more sustainable and resilient agrifood systems;
- Ensuring more rational use of water resources, rational methods of land and water management;

22. SDG Database, State Statistics Committee of Turkmenistan

Main risks factors (largely due to climate change)

- Scarce and vulnerable water resources, insufficiently effective management of water and land resources, leading to an increase in land salinization and a decrease in productivity and the amount of land available for food and livestock production;
- Desertification and land degradation, affecting crop yields and reduction of the agro-industrial complex productivity;
- Insufficient seed and fodder resources;
- Slow pace of digitalization and innovations in the agro-industrial complex;

SDG Transition "climate change, biodiversity loss and pollution"

Commitment: Mitigate the impact of climate change and ensure the transition to 'green' energy, in order to reduce greenhouse gas emissions. The GoT plans to achieve zero growth in greenhouse gas emissions in the midterm, starting from 2030, and a significant annual reduction in emissions in the long term.

Accelerators	SDG Transition "Climate Change, Biodiversity Loss and Pollution" Indicators	Baseline SDG indicator [23]	2030 Target	
			National	Global
	6.3.1 Proportion of domestic and industrial wastewater flows safely treated	48.7	75	100
✓	15.3.1 Proportion of land that is degraded over total land area	17.7	17.7	-
✓	13.2.2 Total greenhouse gas emissions per year (Gigogram CO2-equivalent)	111,728	82 261,6	-
	Including Abating methane emissions by 30% according to Global Methane Pledge, million metric tons of CH4	0	1.2	

Due to the lack of any data on public climate financing, expert approaches based on weighted averages and possible long-term development were applied.

Accelerator: Total greenhouse gas emissions per year (indicator 13.2.2)

In 2010, greenhouse gas emissions in Turkmenistan amounted to 66.36 million tons of CO2 equivalent with a proportion of methane emissions of 41.28% (about 27 million CO2 equivalent).[24] In 2022, Turkmenistan submitted NDC under the Paris Agreement to the Secretariat of the United Nations Framework Convention on Climate Change and communicated the ambition to reduce greenhouse gas emissions by 20% by 2030. Further, in December 2023, at the 28th session of the UNFCCC Conference of the Parties, Turkmenistan acceded the Global Methane Pledge. The next NDC that is currently being prepared foresees a 30% reduction in emissions.

- To achieve a 30% reduction in emissions, according to UNEP estimate, an estimated $2,000 million USD or 7,000 million manats in funding will be required. The Presidential Program for 2022-2028 plans the investments of 865 million manats during 2024-2028. The Government of Turkmenistan plans to establish a Regional Climate Technology Centre for Central Asia in Turkmenistan under the auspices of the United Nations. Initially, the Centre will be funded by the GoT and the planned dedicated budget is 17,5 million manats.

Accelerator: Proportion of domestic and industrial wastewater flows safely treated (indicator 15.3.1)

48.7% was the level of domestic and industrial wastewater that flows safely treated in 2023, and it is on increase.

- To reach the national target value of 75%, approximately **774.4 million manats** will be required.

The total cost of transformation is estimated at **8657.0 million manats** (or **0.53% of GDP** on average per year) during 2026-2030. When global targets are reached (the proportion of domestic and industrial wastewater flows safely treated is 100%), the transformation costs will amount to **9472.9 million manats** or **0.58% of GDP** on average per year during 2026-2030.

23. SDG Database, State Statistics Committee of Turkmenistan.
24. According to the Third National Communication on climate change.

Financing of SDG transition "Climate Change, Biodiversity Loss and Pollution"	Baseline (million TMT)	National	Global
Gap in financing to reach targets, million TMT, % of GDP on average per year during 2026-2030	-	8,657 (0.53%)	9,472.9 (0.58%)

Key success elements

- Creating enabling environment for reducing greenhouse gas emissions, especially abating methane emissions, improving waste management, etc.;
- Pursuing transition to a 'green' economy policy;
- Shifting to more sustainable water management strategies to prevent land salinization, pasture degradation and desertification;
- Ensuring zero growth of degraded lands (achieving LDN);
- Shifting to sustainable consumption and production patterns in high-impact sectors like food systems, tourism, construction, textiles and plastics;

Main risks factors (largely due to climate change)

- CO2 emissions continue to rise;
- Slow transition to a circular economy;
- Insufficient implementation of 'green' technologies in economic sectors;
- Low coverage of protected areas, land degradation and desertification;
- Insufficient adaptation measures in the agricultural sector;
- Insufficiently effective water resources management along with water-intensive irrigation methods;
- Exposure to floods, droughts and earthquakes, as well as the increasingly harsh consequences of extreme climatic events especially for vulnerable populations;
- The impact of the Aral Sea crisis, especially on the population of the Dashoguz velayat;

SDG transition "Education"

Commitment: enhancing access and quality of education and vocational training at all levels and ensuring education for all as one of the priorities of the country's socio-economic development.

Accelerators	SDG Transition "Education" Indicators	Baseline SDG indicator [25]	2030 Target	
			National	Global
✓	4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex, %	49.8	100	-
✓	4.a.1. Proportion of schools offering basic services by Internet access, %	41.7	50	100

Accelerator: Participation rate in organized learning (indicator 4.2.2)

49.8% participation rate in organized learning in 2023.[26] For advancing on the SDG 4 indicators, all pre-primary age children should be enrolled in pre-primary education one year before entering school.

- The expenditures of the state budget of the first tier on education are estimated to amount to 16,638.4 million manats in 2030, while the revenues of state-owned enterprises in the education sector[27] amount to 2,673.3 million manats in 2030. Based on the estimated value of the preprimary budget of 6,503 manats per child/year,[28] achieving full coverage of preprimary children with education services will require approx. 1,400.8 million manats from the state budged (without taking into account the population growth dynamics). If the national Rural Development Program delivers the investments of 284 million manats for the construction of preprimary institutions, **1,684.8 million manats will be still required to reach the national target.**

25. SDG Database, State Statistics Committee of Turkmenistan
26. According to the MICS-6 survey. https://mics.unicef.org/sites/mics/files/Turkmenistan%202019%20MICS%20SFR_English.pdf
27. Provisionally applied for second-tier budget expenditures
28. Calculated based on the state budget expenditures on preprimary education and the number of children in preprimary institutions

Accelerator: Schools offering basic services by internet access (indicator 4.a.1)

41.7% is the current share of schools covered by the Internet.[29]

- To reach the 50% target, estimated 838.0 million mans will be required, and 1370.2 million mans will be needed to reach the global target of 100%.[30] Taken into account the national Rural Development Program's investment commitment of 984.3 million manats for schools' construction, **1,822.3 million manats is the financing gap for the indicator.** This implies on average additional 3,507.2 million manats (or 0.21% of GDP) per year for reaching the national target (or 0.25% of GDP for reaching the global target) for internet-based services.

Financing of SDG transition "Education"	Baseline (million TMT)	National	Global
Gap in financing to reach targets, million TMT, % of GDP on average per year during 2026-2030	19,312	3,507 (0.21%)	4,039 (0.25%)

Key success elements

- Improving quality and relevance of education, including through the application of new methods of interactive and distance learning;
- Transition to lifelong learning;
- Accessibility and inclusiveness of education with focus on the most vulnerable learners, poorly literate youth and adults;
- Increasing the coverage of children by preprimary education;
- Sufficient and consistent investments in education;

Main risks factors (largely due to climate change)

- Insufficient provision of inclusive education due to inadequate resource allocation;
- Gender disparity in higher and secondary vocational educational institutions;
- Internet coverage in rural areas;
- Insufficient coverage of preprimary education for children, especially from vulnerable population groups due to lack of resources;
- Insufficient match between education and the labor market;
- Deficit of distance learning opportunities and evening and distance and evening learning in vocational education and higher education institutions;

SDG Transition "Green Energy Transition"

Commitment: Ensure the transition to "green" energy for reaching the SDG targets on affordable and clean energy and emission reduction.

Accelerators	SDG Transition "Green Energy Transition" Indicators	Baseline SDG indicator[31]	2030 Target	
			National	Global
	7.3.1 Energy intensity measured in terms of primary energy and GDP (tons of oil equivalent/thousand manats)	**0.156**	**0.093**	**-**
✓	**7.2.1 Renewable energy share in the total final energy consumption**	**0**	**10**	**25**

Accelerator: Renewable energy share in the total final energy consumption (indicator 7.2.1)

0% of electricity is so far generated by Turkmenistan from renewable energy sources but the construction of a multifunctional solar and wind power plant with a capacity of 10 MW is currently underway, and the construction of another 100 MW solar power plant is planed under the National Program 2022-2028.

29. 2023, SDG Database, State Statistics Committee of Turkmenistan. https://sdg.stat.gov.tm/en/
30. Calculated based on the cost of additional services in schools and the number of schools.
31. SDG Database, State Statistics Committee of Turkmenistan

A solar power plant with a capacity of 100 MW can produce electricity on average 300 million kWh per year and reduce emissions by 100 thousand tons of greenhouse gases per year. If both planned solar power plants operate at full capacity, they would generate an average of 330 million KWt/h per year. This will amount to only 0.8% of the planned electricity generation. Thus, reaching the national 10% target implies a need to build another 12 solar power plants with a capacity of 100 MW. If all these power plants operate it will allow reducing GHG emissions by 1,200 thousand tons annually, and the investments in renewable energy sources will also have a synergy effect for environmental protection.

- To reach the 10% national target for the share of renewable energy by building 12 solar power plans will require investments of some **5,579.2 million manats (or 0.34% of GDP on average per year)** during 2026-2030. To reach global targets (25%), an additional 0.89% of GDP will be required on average per year during 2026-2030.

Financing of SDG transition "Green Energy Transition"	Baseline (million TMT)	National	Global
Gap in financing to reach targets, million TMT, % of GDP on average per year during 2026-2030	7,359	5,579 (0.34%)	14,699 (0.89%)

Key success elements

- Acceleration of the implementation of energy efficiency measures through the introduction of 'green' technologies;
- Intensification of the development of alternative energy sources, including solar and hydrogen power;
- Focusing on new technologies and business models to lower the cost of clean energy solutions;

Main risks factors (largely due to climate change)

- Energy intensity is decreasing at a slower pace on the background of rapid increase in GHG emissions;
- Further development of industrial enterprises, leading to an increase in the energy intensity of GDP;
- Lack of a large-scale electricity production from renewable energy sources;
- Lack of tax preferences and tax benefits for investors in the renewable energy sector;

SDG Transition "Digital connectivity"

Commitment: Digitalization of the economy and the use of digital technologies in all spheres of life. Making digitalization a contributor to the achievement of various SDG targets, as it triggers both real and social sectors.

Accelerators	SDG Transition "Digital Connectivity" Indicators	Baseline SDG indicator [32]	2030 Target	
			National	Global
✓	9.5.1 Research and development expenditure as a proportion of GDP	0.14	0.20	2
	9.2.1 Manufacturing value as a proportion of GDP and per capita	16.4	20	20
✓	17.6.1 Number of internet subscribers, million	3.19	4	5

Due to the lack of data on state budget expenditures for financing digital technologies, expert approaches based on weighted averages and possible long-term development were applied.

Accelerator: Total number of Internet subscribers (indicator 17.6.1)

3.19 million internet subscribers were registered in Turkmenistan in 2023,[33] while the national target is 4.0 million and the global target is 5 million, recommended based on the global trends in the development of digital services.

32. SDG Database, State Statistics Committee of Turkmenistan
33. See the UNCT Policy Brief on Digital Public Infrastructure. https://turkmenistan.un.org/en/259052-common-country-analysis-2023-update

- If the current dynamics of revenues of state-owned enterprises in the information and communications sector is maintained, which are provisionally applied for second-tier budget expenditures, the total revenues will reach 6,092.9 million manats in 2030. It is estimated that to reach this level **3,920.5 million manats will be required** to reach the national target for internet subscription.

Accelerator: Research and development expenditure as a proportion of GDP (indicator 9.5.1)

0.14% share of research and development expenditure in GDP is rather low compared to the national target 0.2% and given the importance of science in activating the development of digital systems.

- In order to reach the national target of financing research and development by the year 2030 in the estimated amount of **395.8 million manats** will be required.

Concurrently, the National Programs foresee investments in digitalization at the amount of some 2,000 million manats. Thus, in order to reach the accelerating targets adopted at the national level, a total of 12,368 million manats will be required for the transition "Digitalization". That means **the funding gap will amount to 6,275 million manats** (or **0.38% of GDP** on average per year) during 2026-2030. To reach global targets for the accelerator indicators an additional 0.66% of GDP will be required.

Financing of SDG transition "Digital Connectivity"	Baseline (million TMT)	National	Global
Gap in financing to reach targets, million TMT, % of GDP on average per year during 2026-2030	6,093	6,275 (0.38%)	10,817 (0.66%)

Key success elements

- Making full use of opportunities for universal meaningful connectivity, especially for remote and marginalized communities;
- Leveraging satellite applications and space-based connectivity;
- Increasing the quality and speed of Internet, along with connectivity coverage;
- Advancing the introduction of digital public services;
- Development of inclusive, human-centered digital public infrastructure;

Main risks factors

- Number of Internet subscribers is increasing, but the Internet speed is still low;
- Low R&D costs remain, which slows down the introduction of innovations in all industries;

SDG Transition "Universal Health coverage"

Commitment: Achieving universal health coverage through high-quality and affordable medical care aimed at ensuring the health and well-being of the nation.

Accelerators	SDG Transition "Universal Health Coverage" Indicators	Baseline SDG indicator[34]	2030 Target	
			National	Global
✓	1.a.2 Proportion of total government spending on health, % of GDP	1.8	5	10
	3.1.1 Maternal mortality ratio (per 100, 000 live births)	1.6	1	-
	3.2.1 Under-5 mortality rate (per 100, 000 live births)	38	25	-
	3.8.1 Coverage of essential health services (UHC)[35]	75	85	100

34. SDG Database, State Statistics Committee of Turkmenistan
35. WHO (2022). https://data.who.int/indicators/i/3805B1E/9A706FD

Accelerator: Participation rate in organized learning (indicator 1.a.2)

1.8% of GDP reported as the proportion of healthcare spending in 2023 became the indicator baseline value. The national target value 5% of GDP by 2025 was defined by the Sustainable Development Cooperation Framework 2021-2025 between Turkmenistan and the UN, while the global target was set at the level of 10% of GDP.

- Based on the extrapolation of the current spending dynamics until 2030, the expenditures of the state budget of the first tier on health care are estimated at the amount of 6,614.8 million manats. The revenues of state-owned enterprises in the healthcare sector (provisionally applied for second-tier budget expenditures) would reach the amount of 1,912.4 million manats in 2030. Thus, the expenses of the consolidated budget for financing healthcare should total to 8,527.2 million manats. If reaching the national target for total government spending on health requires some 16,462 million manats, **the estimated funding gap amounts to 7,935 million manats** during 2026-2030 (or 0.48% of GDP on average per year). Attaining the global target will require additional 1.48% of GDP.

Financing of SDG transition "Universal Health Coverage"	Baseline (million TMT)	National	Global
Gap in financing to reach targets, million TMT, % of GDP on average per year during 2026-2030	8,527	7,935 (0.48%)	24,396.8 (1.48%)

Key success elements

- Improved universal health coverage;
- Expanding the package of free services for mothers and children;
- Advancing the application of digital health information and management systems;
- Improving emergency preparedness, resilience and response to public health emergencies and other crises;
- Reducing the impact of climate and environmental change on health and well-being;
- Strengthening the capacity of global and regional cooperation on health and related sectors between Turkmenistan, WHO and partners;

Main risks factors

- Discrepancy between national and global data on maternal and child mortality;
- Low proportion of healthcare costs in GDP;
- Slow pace of digitalization of the healthcare system;
- High proportion of out-of-pocket expenses by the population for health services;

SDG Transition "Peace and Security"

Commitment: Peace, justice and security, empowerment of youth, women and vulnerable populations recognized as important objectives of the socio-economic development of the country.

Accelerators	SDG Transition "Peace and Security" Indicators	Baseline SDG indicator [36]	2030 Target	
			National	Global
✓	16.1.4 Proportion of population that feel safe walking alone around the area they live, %	72.3	90	100
	16.2.1: Proportion of children aged 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month	0.3	0	0
	5.2.2: Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence, %	68.6	20	0
✓	17.18.1 Proportion of sustainable development indicators adopted by Turkmenistan for which reporting is provided	73.8	100	-

36. SDG Database, State Statistics Committee of Turkmenistan. https://sdg.stat.gov.tm/en/

Accelerator: Population that feels safe walking alone around the area they live (indicator 16.1.4)

72.3% the proportion felt safe walking alone around their area in 2023[37] (which made the baseline measure), while the national level target was set at the level of 90% and the global at the level of 100%.

- Based on the information regarding the state budget expenditures on security and extrapolations of the current dynamics up to 2030, the expenditures of the first-tier state budget on security will amount to 10,744.8 million manats in 2030. To reach the national target value, **an additional 2,630.5 million manats will be required.**

Accelerator: Sustainable development indicators adopted by Turkmenistan for which reporting is provided (indicator 17.18.1)

73.8% of sustainable development indicators adopted by Turkmenistan were reported upon in 2023, while the value target is set at the level 100%.

- **An estimated 9 million manats will be required**, according to the estimated investments calculated during the preparation of the 'Roadmap to increase the SDG statistical capacity'.

Thus, in general, the transition will require **2,640 million manats,** i.e. the financing gap is 0.16% of GDP on average per year during 2026-2030. To reach global targets, an additional 0.25% of GDP will be required.

Financing of SDG transition "Peace and Security"	Baseline (million TMT)	National	Global
Gap in financing to reach targets, million TMT, % of GDP on average per year during 2026-2030	-	2,640 (0.16%)	4,125.6 (0.25%)

Key success elements

- Active empowerment of youth, women, and vulnerable populations;
- Introduction of measures for elimination of all types of violence, including towards women and children;
- Speeding up digitalization of the justice sector;
- Speeding up introduction of e-government;
- Focusing on the most vulnerable learners, poorly literate youth and adults;

Main risks factors

- Insufficient ensuring of inclusivity;
- High proportion of children experienced psychological aggression;
- Slow pace of digitalization of the justice sector hindering access and objectivity of treatment (basically preventing corruption);
- Insufficient statistical capacity to report on indicators under the SDGs 16;

37. According to the MICS-6 survey. https://mics.unicef.org/sites/mics/files/Turkmenistan%202019%20MICS%20SFR_English.pdf