



United Nations Development Programme

Country: Turkmenistan

Annual Work Plan 2018

Project Title: Energy Efficiency and Renewable Energy for Sustainable Water Management in Turkmenistan

UN PFD Outcome(s):
Outcome 5: The national policy, legislative and institutional frameworks are aligned to reduce greenhouse gas emissions through promoting sustainable practices on energy efficiency, the use of renewables, urban development and waste management.

Outcome 6: The national policy, legislative and institutional frameworks are responsive to climate change issues by promoting climate resilience, adaptation, climate risk management and disaster risk reduction measures at sector and community levels.

Expected CP Outcome Indicator(s):
5.1. Number of current and new institutions that research, pilot and replicate energy efficiency initiatives for sustainable rural and urban development, and the use of renewables, urban development and waste management practices
5.2. Number of state laws, regulations and procedures developed or amended that incorporate energy efficiency standards and practices, and the use of renewables and sustainable waste management
6.1. Availability of solutions developed and implemented at national and subnational levels for climate change adaptation, sustainable management of natural resources and ecosystem services, as part of NAP
6.2. Strategic Plan indicator: 1.5.Hectares of land that are managed sustainably under a conservation, sustainable use or access and benefits-sharing regime

Expected Output(s):
Output 5.1: Institutions and mechanisms are in place and clear on their roles in relation to coordinating, and managing the implementation of NEPAAM and promoting sustainable energy efficiency initiatives and the use of renewables.
Output 5.2: Laws, regulations and procedures adopted that incorporate energy efficiency standards and the use of renewables
Output 6.1: New and innovative solutions developed and piloted at national and subnational levels for climate change adaptation, sustainable land, water, coastal management and ecosystem services, and safe waste disposal as part of NEPAAM
Output 6.2: Institutional capacities are strengthened at subnational level in adaptation/CRM planning and implementation , to promote stronger local livelihoods through sustainable use of water, land, biodiversity and coastal areas

Implementing partner: Ministry of Agriculture and Water Economy of Turkmenistan

Responsible Parties: Ministry of Agriculture and Water Economy

Ministry of Energy

State Committee for Environment Protection and Land Resources

Akhal Province Administration

Turkmen Agricultural University named after S.A. Niyazov

Water Research and Design Institute “Turkmensuvylymtaslama”

Brief Description

The proposed UNDP-GEF project will reduce greenhouse gas emissions associated with water management, prevent and remediate salinization of lands by improving water management and reducing water consumption in the agriculture and water sector of Turkmenistan. Through technology transfer, investment, and policy reform, this project will seek to promote an integrated approach to water management that is energy and water efficient, reduces root causes of land degradation, and enhances local livelihoods and public service delivery.

Programme period:	Country Programme 2016-2020	Total allocated resources:	\$1,684,405.00
Project Title:	Improving Energy Efficiency in the residential Building Sector of Turkmenistan	• UNDP	\$17,000.00
Start date:	<u>01/01/2018</u>	• GEF	\$1,667,405.00
End date:	<u>31/12/2018</u>		

Agreed: _____

Eminov

Ministry of Agriculture and Water
Economy of Turkmenistan

Date: *12.04.2018*

Agreed: _____

UNDP in Turkmenistan

Date: *13/18*



Annual Work Plan

UNDP/GIEF Project "Energy Efficiency and Renewable Energy for Sustainable Management of Water Resources in Turkmenistan"

01.01.2018 - 31.12.2018

\$1,684,405

Global Environment Facility, UNDP

Period:

Budget:

Source of financing:

EXPECTED INTERIM RESULTS	PLANNED ACTIVITIES	TIMEFRAME						PLANNED BUDGET								
		January	February	March	April	May	June	July	August	September	October	November	December	RESPONSIBLE PARTIES	Budget Code	Amount
Output 1.1: Piloting technological site and educational platform for water-saving irrigation and SLM of arable land developed and implemented																
1.1.1: Procurement of materials and equipment, construction and installation works on the installation of water-saving irrigation systems at the research site of the Institute "Turkmenesuvlymtasima"																
a	Procurement of materials and installation /construction of water-saving irrigation systems for drip and sprinkler irrigation (Turkish company BMS)													Contracting Company, PM, UNDP, project specialist in agriculture	72200-Equipment	\$319,510.78
b	Monitoring of the quality and conformity of the supplied materials and equipment to the requirements in the TOR and monitoring of the progress of construction and assembly works (National consultants B. Kurbanov and M. Tanykuliyev)													NC construction engineer, NC field hydraulic engineer, project specialist in agriculture	71300-National consultants	\$13,071.43
c	Supervision of the construction of water-saving irrigation systems on the research site by the design company (IE Guynesili Meydan)													Design company	72100-Contractual technical services	\$1,508.57
d	Controlling the quality of construction of water-saving irrigation systems on the research site by an international consultant (International Consultant Guy Fipps)													International Consultants for the control of construction quality	71200-International consultants	\$16,410.00
e	Test run of water-saving irrigation systems, carrying out the necessary system checks, troubleshooting, 5-day practical training of relevant specialists and national consultants of the project on operation and monitoring of water saving irrigation systems, reception of facilities from the contractor company													NC construction engineer, NC field hydraulic engineer, design company, project specialist in agriculture		
f	Development and printing of a manual (step-by-step instructions) for the operation and maintenance of drip and sprinkler systems on the site and familiarization with all responsible people													Project specialists, NC on scientific issues, UNDP, Institute u contractor	74200-Communication and publications	\$50.00
g	Purchase of a mud pump for cleaning the bottom of the desilting tank and the outposts of the pumping station No. 1													Project specialists, UNDP, Institute	72200-Equipment	\$4,000.00
h	Creation of a video film and an interactive map on the installation of drip, sprinkler and sprinkler systems at the research site in conjunction with national television													UNDP communication officer, PM, PA, project specialists	74200-Communication and publications	\$2,857.00
i	Payment of a guarantee payment [5%] for works completed in 2017 for the construction of irrigation networks, construction of a gravel road 420 m, construction of a pumping station and improvement of the site in Goldede (ES Yagchi Alamat, ES Sheker Cheshme)													Contracting company, PM, UNDP	72100-Contractual technical services	\$14,176.77
1.1.2: Preparation of land for planting crops and maintenance for irrigation infrastructure at the research site of the Institute "Turkmenesuvlymtasima"																
a	Complex reclamation and agrotechnical works, including plowing, conventional and laser planning, preparation of 62 hectares of acreage for washing operations and reconstruction of the reservoir 540 m													Contracting organization, project specialist in agriculture and UNDP	72100-Contractual technical services	\$19,515.00
b	Preparation of tender documents (RFQ) for the purchase of a tractor. Announcements of the international tender and selection of the winner.													project specialist in agriculture, PM and UNDP	72200-Equipment	\$44,000.00

Outcome 2:
Increased investment in the improvement of water management infrastructure

71400-Service contracts	\$46,699
71600-Trips	\$22,650
72100-Contractual technical services	\$366,680
72200-Equipment	\$90,000
74200-Communication and publications	\$21,787
75700-Workshops and meetings	\$2,000
Total GEF	\$563,244

EXPECTED INTERIM RESULTS	PLANNED ACTIVITIES	TIMEFRAME												PLANNED BUDGET		
		January	February	March	April	May	June	July	August	September	October	November	December	RESPONSIBLE PARTIES	Budget Code	Amount
Output 2.1: Construction of pipelines and/or waterproofing of canals for municipal water supply in Kaakha, with the replacement of non-isolated canals and wells, documenting results, and providing advice and analysis for the replication costs	<p>2.1.1: Purchase of necessary building materials, construction and operation of a gravity water pipeline in the city of Kaakha</p> <p>a Construction of a gravity water pipeline in the city of Kaakha.</p> <p>b Monitoring of construction and installation works, including the quality control of hidden work, construction of a gravity water pipeline in Kaakha by national experts (A. Nurseyev, B. Kurbanov, C. Annadurdyev).</p> <p>c Monitoring of construction and installation works, including control over the quality of hidden work, construction of a self-flowing water pipeline in Kaakha by international experts (Eneka).</p> <p>d The author's supervision of the construction of a gravity water pipeline in Kaakha by the design company (IE Guineeshii Medjan).</p> <p>e Regular visits by the project team, national consultants and partner representatives in Kaakha during construction events</p> <p>f Examining and commissioning of pipeline by relevant state agencies and opening of the water pipeline in Kaakha with participation of the MAWE leadership, local government institutions and UNDP.</p> <p>g Creation of a short video film about the construction of a water pipeline in Kaakha</p> <p>h Manufacturing and installation of a street information banner (2x3 m) about the constructed water pipeline in Kaakha</p> <p>i Report on the work done on the construction of a gravity water pipeline in the city of Kaakha.</p> <p>j Submission of the report of PAC, MAWE and other interested partners.</p> <p>k Working meeting with national partners, local authorities and all stakeholders to present the results of the work done on the construction of a gravity pipeline in Kaakha.</p> <p>l Development of TOR and hiring of a local consultant - hydrotechnical engineer.</p> <p>m Announcement and selection</p> <p>n Develop a TOR and hire a local consultant, an inspector to supervise the operation of the water pipeline, Announcement and selection</p> <p>o Preparation of a TOR for an international tender (RFQ) for the purchase of a wheeled excavator-loader and equipment for welding of plastic pipes. Announcement of the tender, selection of the winner and purchase of equipment.</p> <p>p Transfer of the purchased wheeled excavator-loader and welding equipment to the ownership of the Kaakha Water Department "Kakastushzholyk" of MAWE</p> <p>q Supervision of the operation of the water pipeline in Kaakha. Troubleshoot problems when necessary.</p> <p>r Introduction of innovative technologies, alternative materials and other cost-effective products for the production of waterproofing / anti-filtration materials</p>												Contracting company	72100-Contractual technical services	\$349,284.9	
Output 2.2: Waterproofing of inter-district canals in order to reduce water losses and to reduce the soil salinity using different technologies	<p>a Development of a TOR for a national consultant - a specialist in waterproofing / anti-filtration materials for working with the MAWE / Institute "Turkmensuylymlislama" and with specialists of plants for studying alternative waterproofing materials for canals. Announcement and selection</p>												PM, C, NC DCE, Hydraulic Engineer and Civil Engineer, Project Specialists, Kaksha Water Department "Kakastushzholyk" MAME, UNDP	71300-National consultants	\$19,857.14	
Output 2.3: Construction of pipelines and/or waterproofing of canals for municipal water supply in Kaakha, with the replacement of non-isolated canals and wells, documenting results, and providing advice and analysis for the replication costs	<p>a Construction of a gravity water pipeline in the city of Kaakha.</p> <p>b Monitoring of construction and installation works, including the quality control of hidden work, construction of a gravity water pipeline in Kaakha by national experts (A. Nurseyev, B. Kurbanov, C. Annadurdyev).</p> <p>c Monitoring of construction and installation works, including control over the quality of hidden work, construction of a self-flowing water pipeline in Kaakha by international experts (Eneka).</p> <p>d The author's supervision of the construction of a gravity water pipeline in Kaakha by the design company (IE Guineeshii Medjan).</p> <p>e Regular visits by the project team, national consultants and partner representatives in Kaakha during construction events</p> <p>f Examining and commissioning of pipeline by relevant state agencies and opening of the water pipeline in Kaakha with participation of the MAWE leadership, local government institutions and UNDP.</p> <p>g Creation of a short video film about the construction of a water pipeline in Kaakha</p> <p>h Manufacturing and installation of a street information banner (2x3 m) about the constructed water pipeline in Kaakha</p> <p>i Report on the work done on the construction of a gravity water pipeline in the city of Kaakha.</p> <p>j Submission of the report of PAC, MAWE and other interested partners.</p> <p>k Working meeting with national partners, local authorities and all stakeholders to present the results of the work done on the construction of a gravity pipeline in Kaakha.</p> <p>l Development of TOR and hiring of a local consultant - hydrotechnical engineer.</p> <p>m Announcement and selection</p> <p>n Develop a TOR and hire a local consultant, an inspector to supervise the operation of the water pipeline, Announcement and selection</p> <p>o Preparation of a TOR for an international tender (RFQ) for the purchase of a wheeled excavator-loader and equipment for welding of plastic pipes. Announcement of the tender, selection of the winner and purchase of equipment.</p> <p>p Transfer of the purchased wheeled excavator-loader and welding equipment to the ownership of the Kaakha Water Department "Kakastushzholyk" of MAWE</p> <p>q Supervision of the operation of the water pipeline in Kaakha. Troubleshoot problems when necessary.</p> <p>r Introduction of innovative technologies, alternative materials and other cost-effective products for the production of waterproofing / anti-filtration materials</p>												Project team	71500-Travel	\$1,000.00	
Output 2.4: Construction of pipelines and/or waterproofing of canals for municipal water supply in Kaakha, with the replacement of non-isolated canals and wells, documenting results, and providing advice and analysis for the replication costs	<p>a Development of a TOR for a national consultant - a specialist in waterproofing / anti-filtration materials for working with the MAWE / Institute "Turkmensuylymlislama" and with specialists of plants for studying alternative waterproofing materials for canals. Announcement and selection</p>												National partners and UNDP	75700-Workshops and meetings	\$2,000.00	
Output 2.5: Construction of pipelines and/or waterproofing of canals for municipal water supply in Kaakha, with the replacement of non-isolated canals and wells, documenting results, and providing advice and analysis for the replication costs	<p>a Development of a TOR for a national consultant - a specialist in waterproofing / anti-filtration materials for working with the MAWE / Institute "Turkmensuylymlislama" and with specialists of plants for studying alternative waterproofing materials for canals. Announcement and selection</p>												UNDP Communication Officer, PM, PA, Project Specialists	74200-Communication and publications	\$57.00	
Output 2.6: Construction of pipelines and/or waterproofing of canals for municipal water supply in Kaakha, with the replacement of non-isolated canals and wells, documenting results, and providing advice and analysis for the replication costs	<p>a Development of a TOR for a national consultant - a specialist in waterproofing / anti-filtration materials for working with the MAWE / Institute "Turkmensuylymlislama" and with specialists of plants for studying alternative waterproofing materials for canals. Announcement and selection</p>												UNDP Communication Officer, PM, PA, Project Specialists	74200-Communication and publications	\$1,715.00	
Output 2.7: Construction of pipelines and/or waterproofing of canals for municipal water supply in Kaakha, with the replacement of non-isolated canals and wells, documenting results, and providing advice and analysis for the replication costs	<p>a Development of a TOR for a national consultant - a specialist in waterproofing / anti-filtration materials for working with the MAWE / Institute "Turkmensuylymlislama" and with specialists of plants for studying alternative waterproofing materials for canals. Announcement and selection</p>												Project specialists, International and national consultants	74200-Communication and publications	\$1,715.00	
Output 2.8: Construction of pipelines and/or waterproofing of canals for municipal water supply in Kaakha, with the replacement of non-isolated canals and wells, documenting results, and providing advice and analysis for the replication costs	<p>a Development of a TOR for a national consultant - a specialist in waterproofing / anti-filtration materials for working with the MAWE / Institute "Turkmensuylymlislama" and with specialists of plants for studying alternative waterproofing materials for canals. Announcement and selection</p>												PM, IC and NC, DCE, Project specialists, UNDP, design engineers	74200-Communication and publications	\$1,715.00	
Output 2.9: Construction of pipelines and/or waterproofing of canals for municipal water supply in Kaakha, with the replacement of non-isolated canals and wells, documenting results, and providing advice and analysis for the replication costs	<p>a Development of a TOR for a national consultant - a specialist in waterproofing / anti-filtration materials for working with the MAWE / Institute "Turkmensuylymlislama" and with specialists of plants for studying alternative waterproofing materials for canals. Announcement and selection</p>												PM, project specialists, UNDP	71300-National consultants	\$7,142.86	
Output 2.10: Construction of pipelines and/or waterproofing of canals for municipal water supply in Kaakha, with the replacement of non-isolated canals and wells, documenting results, and providing advice and analysis for the replication costs	<p>a Development of a TOR for a national consultant - a specialist in waterproofing / anti-filtration materials for working with the MAWE / Institute "Turkmensuylymlislama" and with specialists of plants for studying alternative waterproofing materials for canals. Announcement and selection</p>												PM, project specialists, UNDP	72200-Equipment	\$90,000.00	
Output 2.11: Construction of pipelines and/or waterproofing of canals for municipal water supply in Kaakha, with the replacement of non-isolated canals and wells, documenting results, and providing advice and analysis for the replication costs	<p>a Development of a TOR for a national consultant - a specialist in waterproofing / anti-filtration materials for working with the MAWE / Institute "Turkmensuylymlislama" and with specialists of plants for studying alternative waterproofing materials for canals. Announcement and selection</p>												PM, project specialists, UNDP	71300-National consultants	\$7,142.86	

b	Study of alternative materials and other effective products in terms of environmental and economic benefits for waterproofing channels / preventing water filtration on canals produced and used in practice in other countries				Waterproofing specialist, PM, Project specialists		
c	Carry out marketing research and study the possibility of purchasing the necessary equipment and production lines for the organization of production of waterproofing / anti-filtration materials inside the country				Waterproofing specialist, PM, Project specialists		
d	Visiting foreign countries and participating in international forums and conferences to study best practices on canal lining and other types of filtration prevention, as well as visits to plants for the production of water-saving materials (3-4 project specialists and national partners will visit 2-3 countries).				Waterproofing specialist, PM, Project specialists	71600-Travel	\$21,150.00
e	Preparation of a report on baseline conditions, existing and alternative waterproofing materials and products, including recommendations of project specialists on alternative materials for pilot production				PM, project specialists		
f	PM, Project specialists, Project Assistants, Driver / Clerk				UNDP	71400-Service contracts	\$46,698.60
g	Project vehicle maintenance				UNDP	71500-Travel	\$500.00
h	Charges for internet, telephone, mobile communication, banking, as well as rental and internet services of UNDP				UNDP	74200-Communication and publications	\$500.00

71200-International consultants	\$55,030
71300-National consultants	\$36,571
71400-Service contracts	\$5,100
71500-Trips	\$11,000
72100-Contractual technical services	\$40,380
74200-Communication and publications	\$3,500
75700-Workshops and meetings	\$9,000
Total GFE	\$144,000

EXPECTED INTERIM RESULTS	PLANNED ACTIVITIES	TIMEFRAME		RESPONSIBLE PARTIES	Budget Code	Amount
		TIMEFRAME	TIMEFRAME			
	3.1.1: Activities for scientific research work on the site "Green Polygon", Installation of scientific equipment and activities for the collection and analysis of scientific data for subsequent development of relevant work and recommendations.	January	December	PM, UNDP, MAWE	71300-National consultants	\$14,285.71
	Conducting scientific research on the development of irrigation standards for water-saving irrigation technologies (drip and sprinkler irrigation) on a pilot plot of 6.2 hectares with the participation of young scientists and graduate students.	February	December	PM, UNDP	71300-National consultants	\$14,285.71
	a	March	December	PM, UNDP	71300-National consultants	\$14,285.71
	b	April	December	PA and NC field hydrotechnician with the support of the NC and IC on scientific issues	72100-Contractual technical services	\$29,760.00
	c	May	December	PA and NC field hydrotechnician with the support of the NC and IC on scientific issues	72100-Contractual technical services	\$2,450.00
	d	June	December	PA and NC field hydrotechnician with the support of the NC and IC on scientific issues	72100-Contractual technical services	\$3,200.00
	e	July	December	PA and NC field hydrotechnician with the support of the NC and IC on scientific issues	72100-Contractual technical services	\$4,970.00
	f	August	December	PA and NC field hydrotechnician with the support of the NC and IC on scientific issues	72100-Contractual technical services	\$4,970.00
	g	September	December	PA and NC field hydrotechnician with the support of the NC and IC on scientific issues	72100-Contractual technical services	\$4,970.00
	h	October	December	PA and NC field hydrotechnician with the support of the NC and IC on scientific issues	72100-Contractual technical services	\$4,970.00
		November	December	PA and NC field hydrotechnician with the support of the NC and IC on scientific issues	72100-Contractual technical services	\$4,970.00
			December	PA and NC field hydrotechnician with the support of the NC and IC on scientific issues	72100-Contractual technical services	\$4,970.00

2.1.1 Implementation of a program to improve the capacity of national specialists in the water sector in the rational use and management of water resources

Approval through official channels (Ministry of Foreign Affairs, Cabinet of Ministers) 3 candidates from MAWE for participation in a short study tour for the selection, monitoring, operation and maintenance of pumps in Denmark and Hungary

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infrastructure, irrigation, and other aspects of effective water management and SLM granted to local staff on the management of water resources planning and to farmers in all regions of Turkmenistan

EXPECTED INTERIM RESULTS	PLANNED ACTIVITIES	4.1.1: Assessment of existing standards and technical specifications for the operation and maintenance of pumps			
		RESPONSIBLE PARTIES	Budget Code	Amount	
January	a Extension of contracts of 3 national consultants (a lawyer and 2 hydraulic engineers) on the development of norms and technical rules for the operation of irrigation infrastructure	PM, UNDP	71300-National consultants	\$7,658.00	
February	b Development of norms and technical regulations for the operation (1) of collector-drainage (2) irrigation networks and (3) pumping stations, and (4) Regulations on the implementation of preventive maintenance of water management systems and facilities in Turkmenistan Working meeting to discuss the developed norms, rules, standards and provisions with the MAWE, the Institute "Turkmensuylymtaslama" and other interested parties and the coordination of the adoption of by-laws of the MAWE	National consultants	75700-Workshops and meetings	\$300.00	
March	c Preparation of TOR for 2 hydraulic engineers to develop regulations, procedures and technical rules for the operation of irrigation infrastructure. Announcement, selection and signing of contracts	Project Team, UNDP, National Consultants, MAWE	71300-National consultants	\$14,285.71	
April	d	PM, UNDP	71300-National consultants		
May	e Development of regulations, procedures and technical regulations in accordance with the Water Code of Turkmenistan, namely (1) On land allocation zones, (2) On monitoring and assessment of the meliorative state of irrigated lands, (3) On the use of drainage water for irrigation of crops and (4) On use of treated wastewater for irrigation of technical, fodder crops and green (forest) plantings.	National consultants	75700-Workshops and meetings	\$300.00	
June	f Working meeting to discuss the developed regulations, procedures and technical regulations with MAWE, the Institute of "Turkmensuylymtaslama" and other interested parties and agree on the adoption of these norms and rules of the MAWE	Project Team, UNDP, National Consultants	75700-Workshops and meetings	\$300.00	
July	g Summing up the results of an audit of the technical condition of pumps by national consultants and discussion with the MAWE experts of the issues of interest to improve the energy efficiency of pumps (V. Babaev and D. Kurbanbaev)	NC hydraulic engineers-mechanics for pumps	71300-National consultants	\$15,514.08	
August	h Analysis of data collected during an audit of the technical condition of pumps by an international consultant and recommendations to national partners to improve the energy efficiency of pumps (Grundfos, Kazakhstan)	NC hydraulic engineers-mechanics for pumps	72100-Contractual technical services	\$7,800.00	
September	i Preparation of the TOR for the national consultant - electrical hydroengineer and diesel pumps. Announcement, selection and signing of a contract	PM, Specialist on water issues, UNDP	71300-National consultants	\$2,857.14	
October	j Development of a tender for the replacement and repair of selected pumps.	PM, Specialist on water issues, UNDP	72100-Contractual technical services	\$4,712.00	
November	k Preparation of TOR for recruitment of 2 national consultants - electrical hydroengineer and hydraulic mechanical engineer for the analysis of working capacity of replaced and repaired pumps. Announcement, selection and signing of a contract	PM, Specialist on water issues, UNDP	71300-National consultants	\$2,857.14	
December	l Preparation of the TOR for hiring an international consultant or company to analyze the efficiency of replaced and repaired pumps. Announcement, selection and signing of a contract	Project team and consultants - ICN NC	71600-International consultants	\$2,200.00	
	m Trips to the velayats to assess the technical condition and energy efficiency of replaced pumps used in inter-farm canals. Agreement of the travel program with national partners	Project team and consultants - ICN NC	71600-Travel	\$1,000.00	
	n Implementation of a study trip abroad for 3 MAWE specialists and project specialists to Denmark and Hungary in cooperation with Grundfos to study best practices in the selection, monitoring, operation and maintenance of pumps and pumping equipment (50% of the budget from the 1st component)	UNDP, MAWE and Grundfos company	71600-Travel	\$7,500.00	
	o Study of experience and practice of norms and technical requirements for energy efficiency and operation of pumps used in developed countries and preparation of proposals and relevant recommendations on improvement of national norms and requirements in this field	Project team			

Output 4.2: Recommendations on strategic structure for water consumption measurement, control of water consumption in the water sector and transition to the end-use tariffs developed		4.2.1: Best practices in regulating the measurement of water consumption and the application of water tariffs in relation to the soil and climatic conditions of Turkmenistan		4.2.2: Best practices in regulating the measurement of water consumption and the application of water tariffs in relation to the soil and climatic conditions of Turkmenistan		4.3: Support to MAWE and other ministries and departments in the development of the Water Development Program of Turkmenistan for 2018-2030		4.4: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030	
p	Regular field trips (including relayats with partner representatives) to measure and record water costs (and for preliminary review and evaluation of the various types of pumps used by the MAWE in the relayats) to assess the impact of project activities on water and energy savings								
a	Regular field trips (including to relayats and partner representatives) to measure and record water costs for systematization of water accounting in irrigation systems and to assess the impact of project activities on water and energy savings								
b	Organization with the participation of MAWE experts and project specialists of the round table to discuss with partners the issues of creating a Strategic Framework and a Program for measuring water consumption, monitoring energy consumption in the water sector and moving to tariffs for final water use. Decision on the development of the 'Procedure for calculating tariffs for water supply services to water users' in accordance with the Water Code of Turkmenistan.								
c	To determine the needs for irrigation water for land users, to develop a methodology for compiling "Intra-economic water use plans" with traditional and water-saving irrigation technologies in accordance with the Water Code of Turkmenistan.								
d	To determine the requirements for irrigation water in etraps and basin districts, develop a methodology for development of water use plans for irrigation systems in accordance with the Water Code of Turkmenistan.								
e	Development of a TOR for a national consultant on accounting for water consumption in internal and inter-farm irrigation systems. Announcement, selection and hiring of a specialist.								
f	Development and installation of control and measuring equipment for water accounting at on-farm and inter-farm irrigation canals.								
g	Consultations with stakeholders and project partners on mechanisms for implementing recommendations on administrative reform								
h	Printout of materials, brochures and manuals								
i	PM, Project specialists, Project Assistants, Driver / Clerk								
j	Project vehicle maintenance								
k	Charges for internet, telephone, mobile communication, banking, as well as rental and internet services of UNDP								
Output 4.3: The political structure and the framework of public funding for the widespread deployment of improved irrigation efficiency and water infrastructure are adopted and implemented		Advising the MAWE and other ministries and agencies of Turkmenistan on the rational use of water resources, modern irrigation methods taking into account the natural and climatic conditions of the country, advanced technologies for rational water use, improving land reclamation and other issues of improving the national water sector in the long term.		Project team and project consultants		\$105,470		\$105,470	
Output 4.4: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.1: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
a	Advising the MAWE and other ministries and agencies of Turkmenistan on the rational use of water resources, modern irrigation methods taking into account the natural and climatic conditions of the country, advanced technologies for rational water use, improving land reclamation and other issues of improving the national water sector in the long term.								
4.4.2: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.3: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.4: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.5: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.6: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.7: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.8: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.9: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.10: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.11: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.12: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.13: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.14: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.15: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.16: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
4.4.17: Best practices in the implementation of the Water Development Program of Turkmenistan for 2018-2030									
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Office rental, other expenses		\$1,200.00
Workshops and meetings		\$2,600.00
Other contingencies		\$5,200.00
		\$71,060.00
		\$1,684,405.00

Abbreviations:

- PCE - Project Chief Engineer
- GEF - Global Environment Facility
- PSC - Project Steering Committee
- MFA - Ministry of Foreign Affairs of Turkmenistan
- IC - International Consultant
- PM - Project Manager
- MAWE - Ministry of Agriculture and Water Economy
- NC - National Consultant
- PA - Project Assistant
- UNDP - United Nations Development Program
- TOR - Terms of Reference
- SLM - Sustainable Land Management
- ITB - Announcement of International Tender
- RFQ - Request for Quotation (tender)