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OUTCOME EVALUATION

of the Energy and Environment Programme (EEP) - UNDP Tajikistan
Final Report

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March 2016

TABLE OF CONTENTS

LIST OF TABLES	II
LIST OF ABBREVIATIONS AND ACRONYMS	III
ACKNOWLEDGEMENTS	V
1. MAIN CONCLUSIONS AND RECOMMENDATIONS	1
1.1. BACKGROUND - INTRODUCTION	1
1.2. CONCLUSIONS	2
1.3. RECOMMENDATIONS	6
2. INTRODUCTION	9
2.1. OBJECTIVES.....	9
2.2. SCOPE	9
2.3. METHODOLOGY	9
2.3.1. <i>Overall Approach</i>	10
2.3.2. <i>Evaluation Instruments</i>	10
2.4. LIMITATIONS AND CONSTRAINTS	11
3. THE ENVIRONMENT AND ENERGY CHALLENGES IN TAJIKISTAN.....	11
3.1. ENVIRONMENTAL SECTOR	11
3.2. ENERGY SECTOR	14
3.3. ENVIRONMENT AND ENERGY NATIONAL PRIORITIES.....	17
4. UNDP RESPONSE.....	19
4.1. UN PLANNING INSTRUMENTS.....	19
4.2. EEP PORTFOLIO OVERVIEW	23
4.3. UNDP PARTNERSHIP STRATEGY	24
5. CONTRIBUTION TO RESULTS	25
5.1. RELEVANCE.....	25
5.1.1. <i>Towards National Priorities and UN Planning Framework</i>	25
5.1.2. <i>Towards Other Donors</i>	28
5.1.3. <i>Towards Gender Mainstreaming</i>	29
5.2. EFFECTIVENESS.....	30
5.2.1. <i>Achievements and Progress Towards Outcomes</i>	30
5.2.2. <i>Theory of Change</i>	36
5.3. EFFICIENCY	39
5.3.1. <i>Management Approach</i>	39
5.3.2. <i>Resource Mobilization</i>	40
5.3.3. <i>Monitoring and Evaluation</i>	42
5.4. SUSTAINABILITY	42
5.4.1. <i>Socio-economic Risk to Sustainability</i>	42
5.4.2. <i>Financial Risk to Sustainability</i>	43
5.4.3. <i>Institutional Capacity and Governance Risk to Sustainability</i>	44
6. LESSONS LEARNED	45
ANNEX 1: TERMS OF REFERENCE	47
ANNEX 2: EVALUATION CONSULTANT CODE OF CONDUCT AND AGREEMENT FORM	54
ANNEX 3: EVALUATION MATRIX.....	55
ANNEX 4: LIST OF DOCUMENTS REVIEWED.....	61
ANNEX 5: INTERVIEW GUIDE.....	62
ANNEX 6: EVALUATION MISSION AGENDA.....	64
ANNEX 7: LIST OF PEOPLE INTERVIEWED	68
ANNEX 8: LIST OF PROJECTS UNDER THE EEP.....	69

List of Tables

Table 1: Steps Used to Conduct the Evaluation.....	10
Table 2: UNDAF 2016-2020 – Indicators to Monitor Resilience and Environmental Sustainability.....	20
Table 3: CPAP Expected Results in Crisis Prevention and Environment.....	21
Table 4: EEP 2011-2015 Expected Results.....	22
Table 5: Brief Overview of EEP Portfolio of Projects.....	23
Table 6: Overview of EEP Achievements.....	31
Table 7: EEP Projects Timelines.....	41

List of Abbreviations and Acronyms

ADB	Asian Development Bank
APR	Annual Progress Report
AReT	Alternative and Renewable Energy Technology
CDM	Clean Development Mechanism
CEP	Committee for Environmental Protection
CIF	Climate Investment Fund
CP	Community Programme
CPAP	Country Programme Action Plan
CPD	Country Programme Document
CRM	Climate Risk Management
DCC	Donor Coordination Council
DDP	District Development Plan
DIM	Direct Implementation Modality
DRMP	Disaster Risk Management Programme
DRR	Disaster Risk Reduction
EE	Environmental Education
EEP	Energy and Environment Programme
EL	Environmental Learning
EU	European Union
GBAO	Gorno-Badakhshan Autonomous Region
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse Gas
GPS	Global Positioning System
HCFC	Hydrochlorofluorocarbon
HPP	Hydro Power Plant
IWRM	Integrated Water Resources Management
JCPS	Joint Country Programme Strategy
JICA	Japan International Cooperation Agency
JRC	Jamoat Resource Center
LITACA	Livelihood Improvement in Tajik-Afghan Cross-border Areas
LPDP	Livestock and Pasture Development Project
LSIS	Living Standards Improvement Strategy
MDG	Millennium Development Goal
M&E	Monitoring and Evaluation
MEDT	Ministry of Economic Development and Trade
METT	Management Effectiveness Tracking Tool
NAPA	National Adaptation Programme of Action
NBBC	National Biodiversity and Biosafety Center
NDS	National Development Strategy
NIM	National Implementation Modality
NTF	National Trust Fund
ODS	Ozone Depleting Substance
PA	Protected Area
PEI	Poverty and Environment Initiative
PPCR	Pilot Program for Climate Resilience
PSC	Project Steering Committee
PM	Project Manager
PMU	Project Management Unit
POP	Persistent Organic Pollutant
PRS	Poverty Reduction Strategy
RES	Renewable Energy Source
SCF	Strategic Climate Fund
SHP	Small Hydro Power
SHPP	Small Hydro Power Plant
SI	Stakeholder Involvement
SLM	Sustainable Land Management
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
SPNA	Specially Protected Natural Areas

TajWSS	Tajikistan Water Supply and Sanitation
TNC	Third National Communication
TOR	Terms of Reference
UN	United Nations
UNCT	United Nations Country Team
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEG	United Nations Evaluation Group
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollar
USSR	Union of Soviet Socialist Republics
WASH	Water Sanitation and Hygiene

Acknowledgements

This report was prepared by Mr. Jean-Joseph Bellamy, International Evaluator (JJ@Bellamy.net). The Evaluator would like to express its gratitude and appreciation to all stakeholders it interviewed. Their contributions were most appreciated, and the facts and opinions they shared played a critical part in the conduct of this outcome evaluation.

The Evaluator would also like to extend special thanks to the personnel of the United Nations Development Programme (UNDP) who supplied key information and key contacts. A special thank you to Mr. Khurshed Kholov, Environment and Energy Programme Manager at UNDP as well as Ms. Malika Khakimova and Ms. Surayo Nazirova from UNDP who helped in organizing the one-week fact-finding mission in Tajikistan, including setting up an agenda and the collection of key documents. They all provided invaluable support that contributed to the successful fact-finding mission.

DISCLAIMER

This report is the work of an independent consultant and does not necessarily represent the views, or policies, or intentions of the United Nations Development Programme (UNDP) and/or of the government of Tajikistan.

1. Main Conclusions and Recommendations¹

1.1. Background - Introduction

This report presents the findings of the Outcome Evaluation of the UNDP Environment and Energy Programme (EEP) in Tajikistan. This outcome evaluation was performed by an Independent International Evaluator, Mr. Jean-Joseph Bellamy on behalf of the United Nations Development Programme (UNDP).

Despite progress being made, much is left to do in the environment sector in Tajikistan. As stated in the National Development Strategy (NDS) for the period to 2015, *“despite an advanced legislative framework for environmental protection, compliance with these legal norms is unsatisfactory due to inadequate implementation mechanisms and insufficient inter-agency coordination. As a result, the goal of promoting environmentally sound activities in various sectors of the economy is not being met. There is no analysis of the impact of the privatization process on the environment”*. Furthermore, it described environmental monitoring as weak and ineffectual. Statistical reporting on environmental conditions is incomplete. Inadequate funding for environmental protection measures is also aggravated by poor environmental awareness among those using natural resources.

The current situation in the energy sector in Tajikistan is complex. On one hand, it remains the lead producer of eco-friendly hydro-energy, whilst on the other, reducing the energy deficit requires diversification of energy sources through the construction of new coal fired power plants. This is an environmentally hazardous way of producing electricity, but at the same time a necessary measure. According to the Third National Communication under the UNFCCC (2014) Tajikistan is the world's leader in terms of its hydro energy potential (3.6 million kWh/1 km²/year). Almost all current energy needs of the country are met through hydro power.

Challenges in these 2 sectors are numerous but the government of Tajikistan is tackling them. It identified a set of priorities through its planning process; mainly its Poverty Reduction Strategy (PRS) and its National Development Strategy (NDS). The PRS for the period 2010-2012 included three main priorities to achieve environmental sustainability, which were used to develop an action plan covering seven distinct areas; these priorities are to:

- Strengthen the institutional capacity on environment in order to promote environmental sustainability;
- Address the issues of natural disasters through prevention and the effective natural resources management;
- Maintain and manage biodiversity and the ecosystem.

On the energy side, the PRS established three key tasks to address the most critical energy challenges:

- Constructing, rehabilitating and renovating the country's energy facilities, including the implementation of a programme to build small HPPs to improve the electricity supply in the remote regions of the country
- Completing investment projects and promoting new investment ones in the energy sector;
- Constructing electricity transmission lines in order to supply the districts of Zarafshon Valley with electricity of domestic production.

Regarding the water sector, the PRS goals are:

- Give access to drinking water, in compliance with government standards, to 96 percent of the urban population and 51 percent of rural residents;
- Give access to basic sanitation and hygiene services to 47 percent of the urban residents and 37 percent of the rural population.

The National Development Strategy (NDS) to 2015 states as one (out of 3) general priority the need to expand the country's energy potential, which should include covering the existing electricity shortage and increasing electricity exports. A long-term development programme for the energy sector to 2025 was

¹ Conclusions and Recommendations are in Chapter 1 with a brief background section. It is structured as an Executive Summary and a stand-alone section presenting the highlights of this outcome evaluation.

planned to be developed and aligned with NDS and PRS priorities. Regarding the access to water supply and sanitation, the NDS priorities are to reform the system as a whole through the improvement of sectoral policy and the creation of new ownership entities; to make the sector more attractive from an investment standpoint; and to make effective use of the sector's existing potential. Finally, in order to promote environmental sustainability, the NDS priorities are to strengthen the institutional potential with a view to promoting environmental sustainability, including the improvement of environmental legislation and monitoring; to resolve problems associated with natural disasters through their prevention and the effective management of natural resources; and to promote conservation and proper management of biodiversity and ecosystems.

UNDP in Tajikistan is also addressing these challenges in partnership with the government. Environment and Sustainable Development is one area of focus of the UNDP country programme for the period of 2010-2015 with the aim of contributing to the related objectives set out in the National Development Strategy (NDS) of the Republic of Tajikistan. In close partnership and coordination with the Committee for Environmental Protection (CEP), UNDP strives to contribute to national goals related to environmental sustainability and sustainable natural resource management, as well as related UN's Millennium Development Goals.

The response from UNDP to these environment and energy challenges and priorities was identified in key planning frameworks, including the United Nations Development Assistance Framework for Tajikistan (UNDAF) 2010-2015, the Country Programme Document for Tajikistan (CPD) 2010-2015, the Country Programme Action Plan (CPAP) 2010-2015 and the Energy and Environment Programme Document for the period 2011-2015. The goal of the latter was to support Tajikistan's transition to low emission and climate resilient development as a prerequisite for sustainable human development.

Over the last five years, the EEP has provided a mix of policy advice, project development and implementation services, knowledge management and advocacy services through projects, benefitting from UNDP global initiatives and also from synergies with other programmes of UNDP-Tajikistan such as the Communities Programme (CP) and the Disaster Risk Management Programme (DRMP). It includes a portfolio of over 18 projects in such areas as water and sanitation policies, biodiversity and climate change, environmental information management, renewable energy and chemicals management, with an overall budget of over USD 45.7M. It also includes a pipeline of 9 projects in the process of being developed with an indicative budget of over USD 27.9M.

This outcome evaluation report documents the achievements of the EEP over the last 5 years and includes six chapters. Chapter 1 presents the main conclusions and recommendations; chapter 2 briefly describes the objective, scope, methodology and limitations of the evaluation; chapter 3 presents an overview of the challenges in the environment and energy areas in Tajikistan; chapter 4 presents the UNDP response; chapter 5 presents the contribution of the UNDP EEP to results. Lessons learned are presented in chapter 6 and relevant annexes are found at the back end of the report.

1.2. Conclusions

Relevance

a) The EEP is very relevant in the context of Tajikistan's development to address environment, energy and water issues in Tajikistan.

The EEP has been very relevant for addressing energy, water and environment issues in Tajikistan and responding to national priorities and strategies in these relevant sectors. The EEP is well aligned with the implementation of the *NDS to 2015* and also the *LSIS 2013-2015*. When considering the *NDS to 2015* general priorities, the EEP programme has been implementing projects to increase the efficient use of water and energy and also protect the environment while restoring the productive functions of the land. Vis-à-vis the LSIS, the EEP has been implementing projects to strengthen the management of the environment through better legislation, better monitoring and increased population awareness. The programme also supported the development of additional small Hydro Power Plants (sHPPs) to provide additional electricity to rural communities. It also supported the improvement of the public transportation services in Dushanbe, which should contribute to a reduction of GHG emissions.

b) The EEP is complementary to other UNDP interventions in Tajikistan.

The EEP complements a coherent UNDP strategy through the UNDAF and CPAP to address critical issues in Tajikistan and respond to existing national priorities. There are clear links between the EEP and the outcome #6 of the UNDAF 2010-2015 “*There is a more sustainable management of the environment, energy and natural resources*”; as well as the expected outcome #6 of the CPAP: (6) Sustainable natural resources management, improved environmental protection, and increased access to alternative renewable energy. The EEP also coordinates many of its activities with other UNDP interventions such as the Community Programme (CP) and the Disaster Risk Management Programme (DRMP).

c) UNDP involvement in the Joint Country Partnership Strategy (JCPS) and more recently in the Donor Coordination Council (DCC) provided a good planning framework for a coherent and coordinated EEP with national priorities but also with other donors’ priorities.

UNDP partnership strategy in Tajikistan has been guided by the Joint Country Partnership Strategy (JCPS) that was developed in 2009. As part of this strategy, development partners and the government of Tajikistan identified themes and sectors to be supported through aid programmes and to be aligned with national strategies and programmes. Following this process, a coordination mechanism was created – the Donor Coordination Council (DCC) – and works closely with the Ministry of Economic Development and Trade (MEDT) and the State Committee on Investments and State Property Management. The DCC is structured into 6 clusters, including a cluster on “*Natural Resources*” with a working group on Agriculture and Land and another working group on water and climate change and another cluster on “*Infrastructure*” with a working group on energy matters and a working group on transport. UNDP is an active member in these working groups. This process has contributed to the development of a coherent and well coordination EEP responding to national strategies and priorities.

d) Gender considerations have not been consistently reported through projects progress reports.

Despite a good EEP strategy to mainstream gender into environment and energy activities, gender considerations have not been consistently reported through projects progress reports. There are examples of projects that contributed to reducing gender inequality at local level, but reporting on gender approaches have not been consistent throughout the portfolio. One example is the HCFC phase-out project that strived to remedy existing gender imbalances by improving the capacities of institutions, governments and companies to integrate gender mainstreaming principles in their day-to-day operations and by building and strengthening the capacities of women themselves. However, some 2014 project annual reports did not even mention gender at all such as the “*Technology Transfer*” and “*Sustainable Transport Management*” projects.

Effectiveness

e) The EEP has been effective in meeting its expected outcomes and outputs.

The programme intervened at different levels to develop capacities and contributed to a change aimed at improving environmental protection and sustainable natural resources management, as well as increasing access to alternative renewable energy. Projects under this programme contributed to a change of attitudes and behaviors of stakeholders/beneficiaries by raising their knowledge and skills. Training, study tours, seminars as well as production and dissemination of information were part of most projects. These same projects also contributed to improving the performance and functional capabilities of organizations through the support for developing their mandates, tools, guidelines, manuals and management information systems. Finally, these projects also contributed to strengthening the enabling environment related to the management of the environment and the development of alternative renewable energy, such as improving the policy and legislation frameworks.

Some key achievements include – in the biodiversity sector - the improvement of the governance of protected areas, notably via the development of a new Forestry Code, the revision of the *Law on Protected Area* and the development of capacities in planning and management of protected areas, as well as working with communities to achieve environmentally sustainable livelihoods; - in the chemical sector - the support to the government to phase out HCFC, and comply with the obligations of Tajikistan under the Montreal

Protocol; - in the water sector - the support to reform the sector, addressing governance and WASH policy issues; - in the renewable energy sector - the support at both policy and local levels in promoting renewable energy, including the development of the *Law on Renewable Energy Sources* followed by the secondary legislation to regulate tariff and ownership issues; and finally - in the sustainable transport sector – the support to improve access and quality of public transport services in Dushanbe, including the development of “*New Fuel Quality Standards for for Petrol and Diesel*” for Tajikistan, which were adopted in January 2014.

f) The EEP benefited from two “*impact drivers*”: good partnerships with the government and UNDP comparative advantages.

Good partnerships with the government of Tajikistan contributed to the effectiveness of this programme. It provided good guidance to develop the strategy of the EEP and good coordination with government agencies through government-led thematic working groups to develop common procedures and implementation tools in addition to other effective coordination and collaboration techniques. This review found that UNDP has a strong political capital in Tajikistan, which has been conducive to the development and implementation of an effective EEP.

In addition to these partnerships, UNDP has comparative advantages that include a long-term track record in the country, as well as relationships at national and local levels; neutrality and reputation as an honest broker among different stakeholders; technical expertise in many areas, including an ability to draw on technical networks world-wide; ability to contribute to solutions requiring a regional or international dimension; and capacity to mobilize physical inputs that enable service delivery and alleviate suffering. More specific to the environment and energy sectors, UNDP has comparative advantages in managing and building capacities in international treaty negotiations; in implementing small-scale systems such as SHPs; and an ability to improve behaviors, particularly in rural and peri-urban areas.

Efficiency

g) The implementation of the EEP portfolio of projects has been adequately efficient but with much involvement of UNDP staff in implementing these projects.

UNDP’s management structures and working methods are appropriate and efficient. It includes the use of adaptive management to secure project deliverables while maintaining adherence to the overall design of projects and the use of a project management system to record financial resources allocated to projects and monitor progress made by these projects. At the project level, the use of project resources was adequate and no particular operational problems were identified during this evaluation, exception made of some procurement of services, particularly the contracting of staff and international experts that often takes more time than expected. Each project management structure is organized in a similar fashion. A Project Manager (PM) is in charge of implementing the project on a day-to-day basis and a Project Steering Committee (PSC) – or Project Board (PB) - oversees the project. Overall, most interviewees complimented UNDP for its professionalism in its working methods and/or its credibility and/or its low-key capacity building approach to structuring the management of its projects.

Considering the limited capacity of authorities to execute projects, the EEP projects have been mostly implemented in accordance with the UNDP Direct Implementation Modality (DIM) guidelines. The EEP document completed in 2011, mentioned that UNDP was to introduce the National Implementation Modality (NIM) approach. However, insufficient project management capacities within government agencies have prevented UNDP so far to execute more projects under the NIM guidelines. As a result, much of the responsibility of implementing projects lies within UNDP and not enough with the respective government partners and lots of UNDP resources are absorbed in implementing projects, preventing UNDP to work more on policy and strategic issues. Nevertheless, it is still a UNDP objective to maximize the use of the NIM approach to implement projects. UNDP wants to make sure that the government gains experience in managing and overseeing projects following international project management standards and that the government is more responsible for the implementation of these projects. It is also well known that this project implementation modality is more conducive to develop stronger national ownership of projects achievements.

h) A new implementation approach is emerging from the experience gained with the implementation of the EEP portfolio.

Most projects have been managed from the EEP office that is in fact a large Project Management Unit (PMU). Each project is under the responsibility of a project leader who would be in charge of one or more projects depending the size and complexity of projects. Despite that this set-up provides an efficient way to move project resources, it does not contribute much to the development of a better national ownership of these projects and their respective achievements.

However, a promising approach was found with projects in the water sector. Instead of having a project manager (PM) based in the EEP office, the PM is based at the Ministry of Energy and Water Resources. This management arrangement created a de-facto water sector platform at the ministry where UNDP and other donors can directly discuss and coordinate their actions in the water sector with the ministry and its relevant agencies. Over time, this set-up became a provider of technical expertise to the ministry on water issues as well as a conduit to bring much needed financial resources to reform the water sector. The result is a much more coordinated approach of donor support to reform the water sector and support the implementation of national priorities; hence strengthening the national ownership of the entire process.

i) The mobilization of financial resources for the EEP has been excellent.

At the planning stage, indicative budget figures for the EEP varied a lot from USD 34.43M in the UNDAF 2010-2015 to USD 5M in the CPD, USD 9.5M in the CPAP and finally USD 10.7M in the EEP document. Nevertheless, from an anticipated budget of USD 10.7M planned in the EEP document, the portfolio grew to 35.2M, which is more in line with the original figure in the UNDAF 2010-2015. These financial resources funded 17 projects (10 are now completed and 7 are still on-going) and a further USD 27.9M have been identified for 9 projects, which are currently in the pipeline to be developed.

These figures show clearly the evidence that UNDP was able to mobilize the necessary financial resources to implement its Energy and Environment Programme. Multiple sources provided these financial resources. They include a solid portfolio of GEF funded projects, UNDP (TRAC resources), JICA, EC, Oxfam, BCPR, SIWI, SDC and Russia Trust Fund. Despite that no resource mobilization strategy has been developed, this un-written strategy is appropriate and has been effective in achieving the outputs of the EEP. Considering the changes in financing development projects, including the emerging Green Climate Fund (GCF), it is hoped that UNDP will be able to carry over its success to mobilize financial resources for its EEP. However, it will also necessitate to adjust its resource mobilization strategy.

Sustainability

j) The prospect for the long-term sustainability of EEP achievements is good but may be hampered by the limited government investment capacity in these areas.

The EEP has been a direct response to national priorities and highly relevant in the context of government strategies for national development in Tajikistan. The EEP definitely contributed to moving the environment, energy and water sector agendas forward; it certainly contributed to strengthening Tajikistan's capacity in these areas. The EEP emphasized the strengthening of institutions and governance in the environment, energy and water sectors and these achievements have been appreciated by the government and other partners. The programme contributed to strengthening the policy, legal and institutional frameworks. It provided a better enabling environment in these sectors, which, it is hoped, will provide better contexts for addressing issues in these sectors at the beneficiary level such as better access to electricity, better water management schemes and a more sustainable environment.

However, the macro-economic environment in Tajikistan is such that the restricted government financial resources may prevent the implementation/application of these revised frameworks. It is an impediment to ensure the long-term sustainability of the EEP achievements and it needs to be taken into consideration when developing EEP projects through mitigation measures such as ensuring that the issues to be addressed are of national importance and contribute as much as possible to raising livelihoods and economic conditions of communities. Such an approach will also contribute to a greater national ownership and over time to a better sustainability of these achievements.

1.3. Recommendations

Based on the findings of this outcome evaluation, the following recommendations are suggested.

Recommendation 1: It is recommended to expand the adoption of the NIM approach for the EEP portfolio.

Issue to Address

Most projects have been managed from the UNDP-EEP office where each project is under the responsibility of a project leader who would be in charge of one or more projects depending the size and complexity of projects. This set-up does not contribute much to the development of a better national ownership of these projects and their respective achievements. In the meantime, a promising approach was found with projects in the water sector. Instead of having a project manager (PM) based in the EEP office, the PM is based at the Ministry of Energy and Water Resources. This management arrangement created a de-facto water sector platform at the ministry where UNDP and other donors can directly discuss and coordinate their actions in the water sector with the ministry and its relevant agencies. The result is the ability to provide technical expertise to the ministry and offer a conduit to bring much needed financial resources to reform the sector. Replicating this approach/set-up is highly recommended, which should strengthen the national ownership of the EEP.

Recommendation 2: It is recommended to better document the progress made by the EEP and use this information to promote the programme and its achievements.

Issue to Address

The EEP 2011-2015 had a set of SMART programme-level indicators with their corresponding targets. As much as these indicators could be useful in measuring the progress made by the programme, they have not really been used. No progress reports are put together at the programme level. Instead, each project under the EEP is being monitored through their own set of indicators, however, this project-based progress monitoring information is not really collated together at the programme level. All this information could be more than just be a measurement of projects progress. Collated at the programme level, this information could be used to generate success stories. As a development agency competing for resources, UNDP needs to be able to tell compelling stories about what its programmes are doing and what they are accomplishing. Good indicators provide critical material for such stories (or messages) to be told.

Recommendation 3: It is recommended to develop an information system to store information on EEP portfolio of projects with easy public access to facilitate the use of this valuable information.

Issue to Address

Accessing information on projects that are part of the EEP portfolio was not an easy task. This issue was already flagged by the review conducted by the GEF Evaluation Office when they conducted their Country Portfolio Evaluation in Tajikistan (2015). Additionally, the lack of access is also preventing a good archive system of EEP projects, including a good “paper trail” that would include project documents, inception reports, progress reports, medium-term and final evaluation reports and end of project evaluation reports.

It is recommended to develop an information system to store information on EEP projects that would be readily available to the public (web access), would provide an archive system and a “paper trail” on key programme and projects documents.

Recommendation 4: It is recommended to include gender considerations in programme and project strategies (expected results, indicators and targets) in order to become part of the implementation of the project as well as part of reporting project progress.

Issue to Address

Gender considerations have not been consistently reported in projects progress reports. There are examples of projects that contributed to reducing gender inequality at local level, but it has not been consistently

reported throughout the portfolio, including some project annual reports that did not even mention gender related progress. In order to ensure the mainstreaming of gender considerations in a programme or project, it is important that gender-based expected results, indicators and targets be identified during the formulation of the programme or project. Once it is part of the programme or project strategy and of the monitoring framework, mainstreaming gender considerations would become part of the reporting on project progress.

Recommendation 5: It is recommended to develop a strong consultation-collaboration process with national partners for the development of the next EEP corresponding to the period of the UNDAF 2016-2020.

Issue to Address

The EEP 2011-2015 has enjoyed a good partnership with the government of Tajikistan, which contributed to the effectiveness of the programme. It provided good guidance and good coordination with government agencies through government-led thematic working groups to develop common procedures and implementation tools in addition to other effective coordination and collaboration techniques. UNDP disposes of clear comparative advantages that include a long-term track record in the country, as well as relationships at national and local levels; neutrality and reputation as an honest broker among different stakeholders; technical expertise in many areas, including an ability to draw on technical networks worldwide; ability to contribute to solutions requiring a regional or international dimension; and capacity to mobilize physical inputs that enable service delivery and alleviate suffering. It also has comparative advantages in managing and building capacities in international environment treaty negotiations; in implementing small-scale systems such as SHPs; and an ability to improve behaviors, particularly in rural and peri-urban areas.

Within the context of UNDP's strong political capital in Tajikistan, it is recommended to develop the next EEP in strong consultation-collaboration with national partners, to ensure that the next EEP addresses national priorities and help the government leverage new investments in the environment, water and energy sectors. The development of the next EEP should consider how to more actively and proactively engage stakeholders and build partnerships. It should seek out feedback and participation – including the use of web and email tools such as social networking sites, UNDP Environmental Program website and regular email communications among stakeholders. The new programme should also explore new types of partnerships as appropriate in Tajikistan. No government or governmental agency can address all aspects of environmental challenges alone. Partnerships are required among agencies, and between government and different types of civil society institutions in order to meet these challenges for the good of society. UNDP is well positioned to build and measure such appropriate partnerships in future programme/projects in Tajikistan, including civil society organizations and academia entities.

Recommendation 6: It is recommended to incorporate cutting edge concepts such as ecosystem services and a focus on the economic value, ecosystem resilience and climate change adaptation into future environment projects development.

Issue to Address

In most countries, economic arguments are the most effective in influencing policymaking. Considering the macro-economic environment in Tajikistan with restricted government financial resources, these arguments may be more acceptable when developing new projects, including the objectives of producing sustainable changes in the way the environment is conserved and managed. Environmental programs must be able to speak the language of economics and the value of a healthy environment and productive ecosystem services. These programmes must capture market values of ecosystem services and integrate the fundamental dimensions of ecology, economy and equity. UNDP, has an implementing agency of GEF funded projects worldwide, has a large body of knowledge in these areas that could be used when developing the next EEP for Tajikistan.

Recommendation 7: It is recommended to develop a resource mobilization strategy for the EEP 2016-2020

Issue to Address

The overall budget of the EEP for the period 2011-2015 clearly shows the evidence that UNDP was able to mobilize the necessary financial resources to implement its Energy and Environment Programme. Multiple sources provided these financial resources, including “new” donors. However, considering the changes in financing development projects, including the emerging Green Climate Fund (GCF), it is recommended to develop a resource mobilization strategy for the EEP 2016-2020. Once the EEP will be finalized in close collaboration with national stakeholders, part of this strategy should include the promotion of this EEP 2016-2020 - using UNDP comparative advantages - to donors present in Tajikistan, but also through UNDP regional office and global.

Promoting the programme should also help in expanding the base of funding by leveraging other funds from agencies that require co-funding such as the GEF. GEF requires significant co-funding of its projects and communicating with other potential donors is an ideal combination to mobilize the needed financial resources to fund the next EEP. UNDP has world-class infrastructure and track record in helping client governments obtain grant funding from the Global Environment Facility. More success should be possible in this area.

Recommendation 8: It is recommended to develop an EEP for the period 2016-2020

Issue to Address

One focus of the new UNDAF 2016-2020 is resilience and environmental sustainability. Under this area, the expected outcome is “*People in Tajikistan are more resilient to natural and man-made disasters resulting from improved policy and operational frameworks for environmental protection and sustainable management of natural resources*”, and nine indicators were identified to measure the achievements under this area. An indicative financial resource need under this area is USD 78.04M, including USD 34.43M to be provided by UNDP under this area. No new CPAP has been done yet for the period 2016-2020.

Based on this outcome evaluation, it is recommended for UNDP to develop an EEP for the period 2016-2020, taking into consideration the findings from this evaluation and building on the achievements of the EEP 2011-2015.

Most information contained in this report could be used to develop the new EEP such as:

- Section 3 of this report and section 1 of the new UNDAF provide the required contextual information needed to develop the new programme;
- Section 4 of this report provides the required information on the UN, UNDP and EEP strategies, including the analysis of the EEP portfolio;
- Section 2 of the new UNDAF provides contextual information to use when developing the new EEP strategy (goal, key outputs and key activities to be used to develop projects).

This EEP should be innovative, focus on past achievements and as much as possible try to upscale/replicate past achievements. The process to develop this new EEP should also be conducted with a strong consultation-collaboration with stakeholders at all levels: national, district and local. The final programme should be vetted by the government and as much as possible share the ownership of this new programme.

The recommended approach to develop this new EEP would include the following steps:

- Disseminate the final outcome evaluation report to stakeholders;
- Prepare a brief EEP strategy with brief context, goal, outputs, main activities, key indicators, management arrangement (including the promotion of the current good practice in the water sector) and financing;
- Organize a stakeholder workshop to review the findings from the outcome evaluation and obtain feedback on the strategy for the new EEP;
- Finalize the EEP document and circulate it to stakeholders for last comments;
- Prepare a resource mobilization plan to promote this new EEP and identify potential donors.

2. INTRODUCTION

1. This outcome evaluation has been initiated by UNDP Tajikistan. This evaluation provides an in-depth assessment of programme progress and achievements towards its expected goal and outcomes over the period 2011-2015, as well as recommendations for the next cycle aligned with the UN planning frameworks such as UNDAF and CPD.

2.1. Objectives

2. This outcome evaluation assessed progress towards or attainment of expected outcomes as set in the Energy and Environment Programme 2011-2015; it also made recommendations on the realignment of programme design and response arrangements, both to be adopted in the short term and in the long term with the corporate planning frameworks and documents such as United Nations Development Assistance Framework (UNDAF), Country Programme Document (CPD) and Country Programme Action Plan (CPAP). The evaluation reviewed the intended “*chain of results*” and assessed the contribution of the programme toward the expected development results at the national level in Tajikistan. The findings and recommendations of this outcome evaluation will be used to identify UNDP involvement in the Environment and Energy thematic area in Tajikistan for the next five years and to ensure the achievement of expected development outcome(s) under this area.

2.2. Scope

3. As per the TORs (*see Annex I*), the evaluation is based on criteria of relevance, effectiveness, efficiency and sustainability and includes findings, lessons learned, and recommendations. The key areas covered by this evaluation included:

- Whether the outcome as stated in the CPAP has been achieved or what is the progress made towards its achievement. The outcome should be assessed within the context of the overall national development priorities in the areas of environment and sustainable development as well as in the context of UNDP mandate in the field of Energy and Environment.
- Identify contribution of key UNDP outputs to achievement of the outcome.
- The contribution of the outcome towards attainment of targets set in the Millennium Development Goals and CPD/CPAP and national strategic goals according to NDS/PRS and sectoral national programmes and action plans.
- An analysis of the underlying factors within and beyond UNDP’s control that affect the outcome (including analysis of strengths, weaknesses, opportunities and threats affecting the achievement of the outcome).
- Whether UNDP’s outputs and other interventions can be credibly linked to the achievement of the outcome, including the key outputs from programmes, projects and soft (i.e. policy advice and dialogue, advocacy and brokerage/coordination services) and hard assistance that contributed to the outcome.
- Whether UNDP’s partnership strategy has been appropriate and effective including the range and quality of partnerships and collaboration developed with government, civil society, donors, the private sector and whether these have contributed to improved programme delivery. The degree of stakeholder and partner involvement in the various processes related to the outcome should be analyzed.
- Whether gender and human rights dimensions are being adequately addressed in UNDP programming and have contributed to the achievement of the outcome.
- An assessment will also be made of the validity of the assumption of UNDP’s comparative advantage in the area of capacity development of the government and civil society.

2.3. Methodology

4. The methodology used to conduct this outcome evaluation complies with international criteria and professional norms and standards; including the norms and standards adopted by the UN Evaluation Group (UNEG).

2.3.1. Overall Approach

5. The evaluation has been conducted in accordance with the guidance, rules and procedures established by UNDP, including the UNDP Evaluation Policy and the UNEG Standards and Norms for Evaluation in the UN System. The evaluation was undertaken in-line with principles such as: *independence, impartiality, transparency, disclosure, ethical, partnership, competencies/capacities, credibility and utility*. The process promoted accountability for the achievement of programmes outcomes and promoted learning, feedback and knowledge sharing on results and lessons learned among the programme’s partners and beyond.

6. The Evaluator developed evaluation tools in accordance with UNDP policies and guidelines to ensure an effective programme evaluation. The evaluation was conducted and findings were structured around four major evaluation criteria; which are also internationally accepted evaluation criteria set out by the Development Assistance Committee of the Organization for Economic Co-operation and Development. There are:

- *Relevance* relates to an overall assessment of whether the programme is in keeping with donors and partner policies, with national and local needs and priorities as well as with its design.
- *Effectiveness* is a measure of the extent to which formally agreed expected programme results (outcomes) have been achieved, or can be expected to be achieved.
- *Efficiency* is a measure of the productivity of the programme intervention process, i.e. to what degree the outcomes achieved derive from efficient use of financial, human and material resources. In principle, it means comparing outcomes and outputs against inputs.
- *Sustainability* is an indication of whether the outcomes (end of programme results) are likely to be sustained after the programme ends.

7. In addition to the UNDP guidance for outcome evaluations, the Evaluator applied to this mandate his knowledge of evaluation methodologies and approaches and his expertise in environmental management and environmental governance. He also applied several methodological principles such as (i) *Validity of information*: multiple measures and sources were sought out to ensure that the results are accurate and valid; (ii) *Integrity*: Any issues with respect to conflict of interest, lack of professional conduct or misrepresentation were immediately referred to the client; and (iii) *Respect and anonymity*: All participants had the right to provide information in confidence.

8. Finally, the Evaluator signed and applied the “*Code of Conduct*” for Evaluation Consultant (see Annex 2). The Evaluator conducts evaluation activities, which are independent, impartial and rigorous. This outcome evaluation clearly contributed to learning and accountability and the Evaluator has personal and professional integrity and was guided by propriety in the conduct of his business.

9. The evaluation was conducted following a set of steps presented in the table below:

Table 1: Steps Used to Conduct the Evaluation

<p><u>I. Review Documents and Prepare Mission</u></p> <ul style="list-style-type: none"> ▪ Start-up teleconference/finalize assignment work plan ▪ Collect and review programme documents ▪ Elaborate and submit <u>Inception Report</u> ▪ Prepare mission: agenda and logistic 	<p><u>III. Analyze Information</u></p> <ul style="list-style-type: none"> ▪ In-depth analysis and interpretation of data collected ▪ Follow-up interviews (where necessary) ▪ Draft and submit <u>draft Outcome Evaluation Report</u>
<p><u>II. Mission / Collect Information</u></p> <ul style="list-style-type: none"> ▪ Mission to Tajikistan for the International Evaluator ▪ Interview key Stakeholders and conduct field visits ▪ Further collect programme related documents ▪ Debriefing / Presentation of key findings 	<p><u>IV. Finalize Outcome Evaluation Report</u></p> <ul style="list-style-type: none"> ▪ Circulate draft report to UNDP and relevant stakeholders ▪ Integrate comments and submit <u>final Outcome Evaluation Report</u>

2.3.2. Evaluation Instruments

10. The evaluation provides evidence-based information that is credible, reliable and useful. Findings were triangulated through the concept of “*multiple lines of evidence*” using several evaluation tools and gathering information from different types of stakeholders and different levels of management. The following evaluation instruments were used to conduct this evaluation:

Evaluation Matrix: An evaluation matrix was developed based on the evaluation scope presented in the TOR, the programme expected results and the review of key documents (*see Annex 3*). This matrix is structured along the four evaluation criteria and includes all evaluation questions; including the scope presented in the guidance. The matrix provided overall directions for the evaluation and was used as a basis for interviewing people and reviewing documents.

Documentation Review: The Evaluator conducted a documentation review in Canada and in Tajikistan (*see Annex 4*). In addition to being a main source of information, documents were also used to prepare the mission of the Evaluator in Tajikistan. A list of documents was identified during the start-up phase and further searches were done through the web and contacts. The list of documents to be reviewed was completed during the mission.

Interview Guide: Based on the evaluation matrix, an interview guide was developed (*see Annex 5*) to solicit information from stakeholders. As part of the participatory approach, the Evaluator ensured that all parties viewed this tool as balanced, unbiased, and structured.

Mission Agenda: An agenda for the mission of the International Evaluator to Tajikistan was developed during the preparatory phase (*see Annex 6*). The list of Stakeholders to be interviewed was reviewed, ensuring it represented all Stakeholders of the programme. Then, interviews were planned in advance of the mission with the objective to have a well-organized and planned mission to ensure a broad scan of Stakeholders' views during the limited time allocated to the mission.

Interviews: Stakeholders were interviewed (*see Annex 7*). The semi-structured interviews were conducted using the interview guide adapted for each interview. All interviews were conducted in person with some follow up using emails when needed. Confidentiality was guaranteed to the interviewees and the findings were incorporated in the final report.

2.4. Limitations and Constraints

11. The approach for this outcome evaluation was based on a planned level of effort of 20 days. It comprised a one-week mission to Tajikistan to interview key stakeholders, collect evaluative evidence; including site visits where the programme supported activities. Within the context of these resources, the independent Evaluator was able to conduct a detailed assessment of actual results against expected results and successfully ascertain whether the programme met its main objective - as laid down in the EEP programme document - and whether the programme initiatives are, or are likely to be, sustainable in the long term. The report also contains lessons learned and best practices, which could be further taken into consideration during the development and implementation of the next EEP programme in Tajikistan, in the region and elsewhere in the world. Finally, the Evaluator also made recommendations for any necessary corrections and adjustments to the overall programme as well as recommendations to set the next phase of the EEP programme 2016-2020 in Tajikistan.

3. THE ENVIRONMENT AND ENERGY CHALLENGES IN TAJIKISTAN

12. Environment and energy are two sectors in Tajikistan with distinct and specific challenges. A summary of the challenges for both sectors in Tajikistan is presented in this chapter.

3.1. Environmental Sector

13. As stated in the National Development Strategy (NDS) for the Period to 2015, “*despite an advanced legislative framework for environmental protection, compliance with these legal norms is unsatisfactory due to inadequate implementation mechanisms and insufficient inter-agency coordination. As a result, the goal of promoting environmentally sound activities in various sectors of the economy is not being met. There is no analysis of the impact of the privatization process on the environment*”.

14. Furthermore, it described environmental monitoring as weak and ineffectual. Statistical reporting on environmental conditions is incomplete. Inadequate funding for environmental protection measures is also aggravated by poor environmental awareness among those using natural resources.

Land degradation

15. The NDS to 2015 and the Poverty Reduction Strategy (PRS) for 2010-2012 states that erosion, salinization and high ground water levels are widespread natural phenomena occurring as a result of terrain features and climatic conditions, but that they are also aggravated by poor land-use management practices, which leads to decrease in quality of the natural and economic environment. It is estimated that 82.3% of all types of land and 97.9% of agricultural land is subject to erosion, and more than 15% of irrigated land is affected by salinization and swamping.

16. A decrease in agricultural land fertility seriously threatens national food security. The farmlands have been reduced by 4 percent in the country over the last ten years. Desertification has become one of the critical issues of the country. Development of new lands from steep mountain slopes, cutting forests, and raising livestock without respecting national regulations have led to a decline in the mountain terrain, which aggravated different natural and man-made environmental impacts.

17. Natural disasters are one of the main causes of environmental degradation. Steep mountain slopes and unstable soils contribute to something in the neighborhood of 50,000 landslides per year (*NDS to 2015*). Deforestation, cultivation and over-grazing of slopes and open-pit mining aggravate the natural instability, particularly in mountainous areas. There is widespread logging because other energy sources are not available.

18. As two-thirds of the rural population of Tajikistan relies on agriculture, land degradation caused by improper irrigation practices, desertification, deforestation and erosion hinders efforts to reduce poverty. It is estimated that 97% of Tajik farmland has been harmed by the Soviet heritage irrigation practices and salinization. Land degradation, combined with slow and ineffective land and market reforms, adversely influences farmers' income generation and slows down the process of poverty reduction. A recent study on economics of land degradation in Tajikistan estimates the economic cost of land degradation associated with foregone production on degraded and unused agricultural lands to be in the order of USD 442M – around 7.8% of Tajikistan's GDP². However, the actual cost is likely to be much higher than this as it does not take into account the off-site costs of land degradation, such as damage to infrastructure.

Pollution

19. Some 4,000 sources of environmental pollution have been registered in the country (responsible for water and air pollution and the generation of all types of waste) (*NDS to 2015*). Water pollution is caused by industrial, municipal and agricultural waste. Large industrial enterprises and vehicles account for most of the air pollution. Air pollution in industrial centers and urban areas is a serious environmental problem. According to the Ministry of Transport and Communications, the number of vehicles increased by approximately 125 percent over the last five years in Dushanbe alone, more than 80 percent of which are very old vehicles (*PRS 2010-2012*). At present, the relevant agencies insufficiently control the level of engine exhaust.

20. The main sources of pollution of water resources are the communal, industrial and agricultural wastewaters. The latter being the largest source of wastewaters. The percentage of pesticides, nitrate and phosphate in the drainage water currently exceeds the threshold established by regulations (up to 25 percent of nitrogen, 5 percent of phosphate and 4 percent of pesticides) (*PRS 2010-2012*).

Waste

21. Waste management is poorly organized, and hazardous and radioactive waste accounts for a significant proportion of the waste that is generated. Tailing ponds are particularly hazardous, and there are 22 of them in the country. The country's system of waste recycling is poorly developed; waste collection and disposal areas do not meet the sanitation standards; and low-waste technology for waste recycling and utilization is limited. Generally speaking, the environmental management system and recycling efforts are ineffectual, and there is a lack of economically effective activity in the environmental sphere.

2 UNDP/UNEP Poverty and Environment Initiative. The economics of Land Degradation for the Agricultural Sector in Tajikistan. A scoping study Dushanbe 2012

http://www.unpei.org/sites/default/files/dmdocuments/TJ_Economy%20of%20land%20degradation_ENG.pdf

Biodiversity

22. Little has been done with regard to the preservation of ecosystems and specially protected natural areas. Sparsely populated mountainous areas of Pamir have become subject to man-made impact. As a result of this impact on the mountainous ecosystem, the overall situation of the mountainous plants has changed, including that of the rare species of medicinal herbs. Soil degradation has worsened; and useful species of plants have disappeared and been replaced by weed. All of these factors have led to the progressive reduction of biodiversity and, consequently, to desertification. In the past, private entities would collect medicinal herbs to prepare and resell unprocessed drugs abroad. Granting permission and registration of activity related to the collection of medicinal herbs would make it possible to regulate it. It could become an additional source of income for the people living in mountainous areas and contribute to the protection and management of biodiversity and mountainous ecosystems.

Water

23. Water resources in Tajikistan and neighboring countries are mainly formed from glacial meltwater, frost and seasonal snow cover in the Pamir mountains. These sources feed the agricultural water supplies and power the turbines of hydropower stations. As a result of mudflows and floods, water resources can cause considerable damage to rural and mountainous areas and a deficit of water resources. The reduction in glacier runoff enhances the risk of droughts and the resulting degradation of aquatic ecosystems can cause damage to both the economy and the population.

24. Glaciers and mountain ecosystems are abundant in Tajikistan and not only serve as water reservoirs and stream flow regulators, but also as the source of water for the Aral Sea river basins. According to the Catalogue of Glaciers of the Soviet Union, in the period between 1960-1970, there were 8,492 glaciers in Tajikistan with a total area of 8,476 km². A review of satellite images in 1983 done by the Tajik Branch of State Centre of USSR 'Nature' identified about 9,000 glaciers but with a total area of only 7,979 km².

25. Since 1983, no large scale inventory of glaciers within the territory of Tajikistan has been carried out. According to preliminary estimates the current glaciers cover 7,000 km² or 4.8% of the land area of Tajikistan as compared to 6% in the middle of 20th century. Due to warming, the area and volume of glaciers continues to shrink. The glacier “*Fedchenko*” is the largest glacier in the world outside the polar regions. It starts at an altitude of 6,300, is 72 km long and its snout is located at an altitude of 2,910m. The ice depth of the midsection reaches 1,000m and the volume of the main trunk is 125 km³, 165 km³ including the side glaciers. This is equivalent to the total volume of all glaciers in the European Alps. The Hydrometeorology service of Tajikistan, jointly with other state structures, is mandated with the monitoring of glacier movement. It is estimated that over 100 glaciers experience fast movements which can block the rivers thus giving rise to potential flooding situations.

26. There are over 1,000 lakes with water reserves of up to 46 km³ with the salt lakes in highland deserts of the Pamir making up half of this reserve. The largest highland lakes include: Karakul, Zorkul and Sarez. The total area of these 3 lakes is over 680 km², whilst the total area of all lakes in Tajikistan is 700 km². More than 95% of all lakes in the country have an area of less than 1 km² and have small volumes of water. Many of them are vulnerable to tectonic and climate impact. Millions of people depend on the condition of snow reserves, glaciers and amount of precipitation in the mountains of Tajikistan – also called the “water towers” of Central Asia. The rivers of the country supply approximately half of the flow to the Aral Sea basin. Average annual long-term natural run-off originating in Tajikistan is estimated at 53 km³, which is 4 km³ less than 50 years ago.

27. Starting in 2013/2014, Tajikistan is in a period of transition from an administrative to a hydrographical (or watershed) management of water resources. The country has a few large river basins: the Sirdarya (northern Tajikistan), the Zerafshan (central Tajikistan), the Kafernigan, Vakhsh and Pyanj rivers (southwestern Tajikistan and Pamirs), and basin of closed lakes in the eastern part of Pamir.

Climate Change

28. According to the Third National Communication under the UNFCCC (2014) and the last inventory of GHG emissions (2004-2010) confirmed by international sources, Tajikistan is proud of having the lowest level of GHG emissions in the region, both in absolute and relative per capita terms (0.34 tCO₂ per capita –

UNFCCC Country Brief 2014). The current level of emissions as compared to 1990 were reduced by one third, mainly due to the collapse of the Soviet Union and structural changes resulting from the transition to a market economy and independence (TNC-2014). Hydropower is used to meet the main energy needs of the country and represent 98% of the electricity generated in Tajikistan. Due to geopolitical circumstances the supply of fossil fuels is limited, whilst a shortage of energy resources coupled with poverty prevents the development of industrial production, transport development and heat supply. Developing the huge hydropower potential is a priority for the country.

29. In the meantime, according to a survey conducted by UNFCCC, temperatures in Tajikistan will rise from 1.8 °C to 2.9 °C by 2050 (*PRS 2010-2012*). Should these forecasts be realized, climate change will negatively impact water resources, the agricultural sector, transportation infrastructure, and public health. More than half of the country's territory consists of mountains, at altitudes of 3,000 m. This makes it significantly vulnerable to natural disasters, mainly soil drying in the summer and landslides in the spring. According to the European Commission Aid Department, as a result of natural disasters over the last decade, 2,500 people have died and 5.5 million people (approximately 10 percent of the population) have been injured in Central Asia. UNDP estimates that natural disasters cause USD 600 million of damage to Tajikistan annually, representing 4.8 percent of the GDP³ and mainly affecting the poor segments of the population who are living in areas highly exposed to hazards and lack the financial and capacity means to enhance crisis prevention and recovery. Efforts to improve climate adaptation are paramount, not so much to improve longer-term trends, but to reduce short-term vulnerability of the population and the economy (e.g. agriculture) to extreme events that would have lasting negative impacts.

3.2. Energy Sector⁴

30. The current situation in the energy sector in Tajikistan is complex. On one hand, it remains the lead producer of eco-friendly hydro-energy, whilst on the other, reducing the energy deficit requires diversification of energy sources through the construction of new coal fired power plants. This is an environmentally hazardous way of producing electricity, but at the same time a necessary measure. According to the Third National Communication under the UNFCCC (2014) Tajikistan is the world's leader in terms of its hydro energy potential (3.6 million kWh/1 km²/year). Almost all current energy needs of the country are met through hydro power.

Energy Resources

31. The country has oil (more than 100 million tons), gas (more than 80 blnm³) and coal (4 billion tons, including 320 million tons of industrial reserves) deposits. However, the volume of mining and processing is insignificant. Therefore, Tajikistan has to import oil. Domestic gas production output is 7-8 million m³, but 30 times more than this is imported.

32. There are 42.2 million tons of known and predicted coal reserves in Tajikistan made up of 0.2 million tons of lignite and 42 million tons of anthracite. The energy content of the coal varies between 6,500 and 9,100 kKcal/kg. The main coal reserves are at the Fon Yaghnob mine located in central Tajikistan. Total production in 2013 exceeded 515,000 tons, including 415,000 tons of anthracite and 100,000 tons of lignite. For comparison, total production of coal in 1991 was 310,000 tons. Extracted coal is used for industrial purposes and the needs of the population. Tajikistan is making an effort to reduce dependency on oil imports through increased coal mining.

33. Traditionally, natural gas used in Tajikistan was supplied by Uzbekistan. In the early 1990s gas consumption exceeded 4-5 billion m³. Between 2004 and 2012 the volume of gas imported dropped from 620-640 million m³ to 130 million m³ and in 2013 the contract for supplying gas from Uzbekistan was not renewed and thus the supply ceased. As a result, a number of industrial plants and communities were left without energy. The aluminum plant, which is the largest gas consumer, switched to coal gasification. As an alternative source of fuel, the supply of liquid gas from Kazakhstan was increased, exceeding 200,000 tons in 2013. China is planning the construction of a gas pipeline from Turkmenistan which will result in

3 GoT and UNDP (2012), National Human Development Report 2012. Tajikistan: Poverty in the Context of Climate Change - <http://hdr.undp.org/es/informes/nacional/europacei/tajikistan/Tajikistan%202013.pdf>

4 This section is mostly a re-arrangement of paragraphs from the *Third National Communication under the UNFCCC (2014)*, which contains a good review of the energy sector.

increased supply of gas to Tajikistan. Gas-fields are being actively explored in the southern districts of the country by Chinese, Russian, and Western companies. It is estimated that the majority of potential large fields are located at a depth of more than 6km and therefore require large investment. The predicted reserves are promising and perhaps after 5-10 years of exploration, Tajikistan might be able to overcome its energy shortages of gas.

34. As for oil products, the Limited Liability Company “Gazpromneft of Tajikistan” is the leading supplier of petrol and diesel imported from Russia. Domestic production of oil is below 100,000 tons and there are currently no oil refining plants in the country. In cooperation with China, the construction of a refinery with a capacity of 1mln tons per year started in 2014.

35. After the collapse of the USSR, Tajikistan faced a challenging situation in supplying the economy and the population with fuel and energy resources. The current make-up of fuel consumption has changed considerably since 1991. In 2010, the consumption of gas fuel was reduced by 8-10 times (the import of natural gas completely stopped), and oil by 5-8 times. Recently, one power unit (5mW) was added to a Thermal Power Plant in Dushanbe and the construction of a new coal-based thermal power plant with a capacity of 50mW is planned in Khujand.

Hydropower

36. Water is the main and most promising source of energy in Tajikistan, with hydropower being Tajikistan's main source of electrical energy. Hydropower potential is estimated at 527 billion kWh per year, including a cost-effective (technical) potential of more than 317bln kWh per year. Currently less than 4-5% of this potential is being realized. Hydropower is renewable; it does not create GHG emissions and is highly profitable.

37. The total capacity of power stations in Tajikistan is 5,200 mW made up of 94% hydro and 6% thermal power. However, this capacity was reduced to 1,100 mW in 2012 due to the deterioration of equipment. The area of water reservoirs is 665km² with a volume of 15.3 km³, including 7.6 km³ of usable storage. The generation of electricity is about 17-18 billion kWh per year. Due to the high cost and lack of fuel oil (masut), diesel fuel and natural gas, thermal power stations are only partially operational. In fact, 99.5% of energy was generated from hydropower in 2013.

Energy Supply

38. In Soviet times and early years of independence, no energy deficits were faced in Tajikistan because there was a unified energy system for Central Asia and Kazakhstan enabling mutually beneficial exchanges of electricity (up to 2bln kWh). In 2009, Uzbekistan left this unified system and this affected the situation in Tajikistan. The exchange of electricity with Kyrgyzstan continues, but in considerably smaller volumes.

39. The energy system in Tajikistan consists of 6 large Hydro Power Plants (HPP) 3 thermal power plants, and many small, micro and mini-hydro power plants. The work on the construction and renovation of vital infrastructure plants such as the HPP Roghun, the TPP in Dushanbe, the small HPPs on the Vakhsh and Zerafshan rivers, and the high voltage power transmission line between Kyrgyzstan, Tajikistan and Afghanistan are ongoing. In 2011 a unified energy system of the country linking the southern and northern energy systems was built.

40. To improve energy security and reduce the dependence of communities on imported energy, including electrical power, more than 300 small and mini-HPPs with the capacity varying from 5 to 2,500 kW have been built of which 175-200 units are currently operational. They are located in the DRS, Soughd oblast, and in the GBAO and their total capacity is 16-20 mW. Through the State Programme for the construction of small and mini-HPPs, it is expected that by 2020 the total capacity of these mini-HPPs will reach 90 mW generating 40mln kWh per year. The main causes of the slow development of hydropower are the current legislative and legal requirement, as well as the complexity of obtaining permission documents and a number of other technical and human resource related problems.

41. Despite sufficient per capita production indicators, energy supply to the rural population is limited and the energy deficit during autumn and winter reaches 2.5bln kWh. Therefore, power supply limits are introduced every year. Except for the larger cities, electricity is supplied to the population for 2-8 hours per

day. These circumstances compel the rural population to use forest wood, cotton stems and other biomass for heating and preparing food. The rural population makes up 75% of the total population, but uses less than 10% of the total volume of electricity. Annually, due to electricity cuts in rural areas, agricultural losses reach 30% and many small entities stop working.

42. During summers Tajikistan can generate sufficient electricity to meet the local demand and also to export to neighboring countries; during the summer months, it can produce an amount of electricity varying from 3.5 to 7.5 billion kWh with an average of 6bln kWh. Taking into account the average price of 3 cents per kWh for electricity, Tajikistan could make a profit of 100-200 million USD per year from selling surplus energy to external consumers.

Energy Demand

43. In the meantime, demographic growth and socio-economic development of the country has resulted in an increased demand for energy; it is estimated that the consumption of electricity by the population has increased by 7-8 times in the last 20 years. According to the *Living Standards Improvement Strategy of Tajikistan 2013-2015*, “an increased domestic demand for electricity is observed due to the development of the national economy and high demographic growth rate; however, the volume of generated and consumed power per capita is dropping...”. A lack of energy or its deficit has a negative impact on both the economy and people's well-being with service provision in communities and housing, education and health sectors all being affected. Problems caused by an ongoing and systematic lack of electricity for households also creates social tensions. To ensure a more efficient use of electricity the Government of Tajikistan took the decision to ban the use of traditional filament bulbs and switch to energy-saving lamps. Companies producing energy-saving lamps have been established and recycling sites set up. Given the increasing demand for energy at the household level, standards on energy-efficiency for household and communal goods were developed.

44. The industrial sector, mainly the aluminum company 'TALCO', is the biggest end-user of electrical energy (40% of the total). The general population consumes 30% two thirds of which is consumed by the urban population and one third by the rural population. Electrical energy consumption by irrigation machinery increases from April to September. Pumping stations consume up to 20% of Tajikistan's electricity, while the remaining sectors consume up to 10%. In 2011, the average per capita energy consumption was 1,000 kWh per year for urban residents, and 250 kWh per year for rural residents.

45. Energy tariffs in Tajikistan are not very high. However, given the low level of income, these tariffs still represent a substantial item of expenditure in the household budget. Any increase in tariffs for the general population can increase social tensions and the vulnerability of poorer population groups, as well as making it more difficult to pay for electricity. Annually the government provides budget subsidies for electricity to 130,000 low income families.

46. To date, photovoltaic and wind energy systems are used only on a pilot basis. With the support of private entrepreneurs and donors, solar panels and solar water heaters have been installed in some urban and rural hospitals, schools, and private houses.

47. In the medium term until 2020, there is the possibility of uncertainty of supply in the fuel and energy sector due to increased energy consumption by industrial and domestic consumers on one hand and the underdevelopment of sources of power supply on the other. This problem is being addressed through the introduction of energy saving technologies, construction of new power plants including those based on available fossil fuels, and the development of Renewable Energy Sources. The World Bank is supporting Tajikistan in identifying other options of power supply.

48. Overall, electricity shortages and restrictions on consumption (particularly during the winter months) are the result of the limited hydropower resources in the Nurek reservoir, low rates and losses due to the aging of equipment. The shortages are also tied to the limited use of other energy resources, the energy-intensiveness of manufacturing processes, excessive household energy consumption, high production costs associated with the delivery of fuel for heat-generating plants and continuing problems with exporting surplus electricity during the summer months. The emergence of an electricity shortage in Tajikistan in the post-Soviet period is tied to the country's strained financial resources and the capital-intensiveness of measures involving the modernization and construction of large HPPs. The high costs associated with the

development and extraction of natural gas, coal and oil deposits, the production of alternative energy sources and the construction of electric power lines, including those for exporting electricity, also have a serious impact.

Transport

49. Over the last 10 years, 1,600 km of roads, 15 km of tunnels and more than 100 bridges including 6 bridges over the river Pyanj have been built and/or reconstructed. The volume of export-import transport and transit through Tajikistan is increasing and so is the road safety. Currently the country has over 500km of railways and 14 thousand km of public roads including 13 thousand km of surfaced roads. The length of all roads is 26,835 km.

50. In 2005 there were 250,000 vehicles in the country, including 210,000 vehicles that were more than 10 years old. By 2013, the number of vehicles had reached 400,000, though vehicle ownership is still very low at 45-55 vehicles per 1,000 people, the lowest rate in Central Asia. As a result of economic pressures, a large proportion of vehicles - around 60% - have been converted to liquid gas fuel, which has led to a reduced level of pollutants and GHG emissions. Nevertheless, in 2012, carbon dioxide emissions from transport made up 70% of total emissions which is 3 times higher than 15 years ago.

51. With an average of 50,000 vehicles imported per year – mostly second-hand vehicles from Baltic and Eastern European countries - vehicles constitute the largest share (25%) of goods imported to the country. According to some experts, the number of vehicles will rapidly increase and might double in 5-year-time and, as a result, emissions of GHG and harmful substances will also increase. However, automobile transport and infrastructure plays a leading role in economic development and livelihood activities. More than 90% of freight and passenger transport within the country takes place using vehicle transport because the railways are not well developed due to the mountainous terrain.

52. City public transport is underdeveloped. An increase in private city transport (microbuses) has on one hand partially reduced the problem of passenger traffic in large cities, while on the other hand, coupled with the increase of private vehicles, has caused traffic jams and thus poses additional safety risks for passengers and pedestrians.

3.3. Environment and Energy National Priorities

53. To tackle these environmental and energy challenges, the government of Tajikistan identified a set of priorities through its planning process; mainly its Poverty Reduction Strategy (PRS) and its National Development Strategy (NDS). The PRS for the period 2010-2012 included three main priorities to achieve environmental sustainability:

- Strengthen the institutional capacity on environment in order to promote environmental sustainability;
- Address the issues of natural disasters through prevention and the effective natural resources management;
- Maintain and manage biodiversity and the ecosystem.

54. On the basis of these three priorities, an action plan was developed in the PRS covering seven areas: (i) waste management to address household wastes but also tailing ponds; (ii) air quality to improve protection laws and regulations and air quality monitoring; (iii) water resources management to address its regulatory framework, water distribution system and water pollution; (iv) land management to address legislation gaps, land monitoring, rehabilitation of degraded pastures; (v) protection of mountainous ecosystems to address mountain area conservation, sustainable use of mountain biodiversity and rehabilitation of degraded mountainous ecosystems; (vi) climate change to develop norms for adaptation to climate change; and (vii) prevention of natural disasters.

55. On the energy side, the PRS established three key tasks to address the most critical energy challenges:

- Constructing, rehabilitating and renovating the country's energy facilities, including the implementation of a programme to build small HPPs to improve the electricity supply in the remote regions of the country
- Completing investment projects and promoting new investment ones in the energy sector;

- Constructing electricity transmission lines in order to supply the districts of Zarafshon Valley with electricity of domestic production.

56. Regarding the water sector, the PRS goals are (i) to give access to drinking water, in compliance with government standards, to 96 percent of the urban population and 51 percent of rural residents; and (ii) to give access to basic sanitation and hygiene services to 47 percent of the urban residents and 37 percent of the rural population.

57. Under the *Living Standards Improvement Strategy (LSIS) of Tajikistan 2013-2015*, an action matrix includes detailed objectives and actions. Some of these objectives and actions related to energy and environment are presented below:

1. To extend the duration of daily electricity supply to population from 20 hours to 24 hours
 - Effective use of water and energy sector, effective policy on energy-efficiency, provide country's energy security
2. To implement principles of environmental stability, sustainable development and retain the process of extinction of natural resources
 - Hold institutional reform and improve legislation grounds
 - Promote functioning and new investment projects on environmental protection
3. Adaptation to climate change
 - Operations are implemented according to the plan
4. To improve forest management of the Republic of Tajikistan
 - Activities for rehabilitation and reforestation of existing forests are in place
 - Include the area of established forest into the category of forest-covered area
 - Increase the number of bee-families in forest management units
5. To develop environmental tourism infrastructure in Natural Park of Sari Khosor; in Natural historical park of "Shirkent"; in state nature reserve of "Romit"; in National Parks administration in GBAP; and organize zoological farm for breeding rare animals, nursery garden for the vegetable kingdom in SPNA
 - Develop complex programs of environmental tourism development, develop environmental routes, collect information and enter it into the Committee's website
 - Develop complex programs for the development of bee-families
 - Develop complex programs for the development of SPNA nature package, study the environmental situations of SPNA, organize activities for rehabilitation of different biological resources
6. To implement the short-term objectives of the goal-oriented State Transport Development Program of the Republic of Tajikistan until 2025
 - Contribute to the development of small and medium enterprises, frontier trade and access of region's population to markets of neighboring countries
 - Expand the network of motor roads and organize parking places for transports

58. The National Development Strategy (NDS) to 2015 states as one (out of 3) general priority a "*more efficient use of available resources, including water, electricity, land, minerals, fixed production capital and infrastructure; raising the overall level of labor productivity; fostering an environment conducive to the development of small and medium-sized business*", which includes the "*expansion of the country's energy potential, which should include covering the existing electricity shortage and increasing electricity exports*". A long-term development programme for the energy sector to 2025 was planned to be developed and aligned with NDS and PRS priorities.

59. Regarding the access to water supply and sanitation, the NDS priorities are to reform the system as a whole through the improvement of sectoral policy and the creation of new ownership entities; to make the sector more attractive from an investment standpoint; and to make effective use of the sector's existing potential.

60. Finally, in order to promote environmental sustainability, the NDS priorities are to strengthen the institutional potential with a view to promoting environmental sustainability, including the improvement of environmental legislation and monitoring; to resolve problems associated with natural disasters through their

prevention and the effective management of natural resources; and to promote conservation and proper management of biodiversity and ecosystems.

4. UNDP RESPONSE

61. Environment and Sustainable Development was one area of focus of the UNDP country programme for the period of 2010-2015 with the aim of contributing to the related objectives set out in the National Development Strategy (NDS) of the Republic of Tajikistan. In close partnership and coordination with the Committee for Environmental Protection (CEP), UNDP strives to contribute to national goals related to environmental sustainability and sustainable natural resource management, as well as related UN's Millennium Development Goals.

62. The response from UNDP to these environment and energy challenges and priorities was identified in key planning frameworks, including the United Nations Development Assistance Framework for Tajikistan (UNDAF) 2010-2015, the Country Programme Document for Tajikistan (CPD) 2010-2015, the Country Programme Action Plan (CPAP) 2010-2015 and the Energy and Environment Programme Document for the period 2011-2015.

4.1. UN Planning Instruments

United Nations Development Assistance Framework (UNDAF) 2010-2015

63. The UNDAF 2010-2015 has four pillars: (i) Poverty Reduction and Governance; (ii) Food and Nutrition Security; (iii) Clean Water, Sustainable Environment and Energy; and (iv) Quality Basic Services. The total anticipated resource commitment to be mobilized for this UNDAF was USD 281M, of which 9% were anticipated to finance activities under the *Clean Water, Sustainable Environment and Energy* pillar representing an allocation of about USD 25.3M.

64. Under the *Clean Water, Sustainable Environment and Energy* pillar, the UNDAF outcome was to promote a more sustainable management of the environment, energy and natural resources. Under this outcome, four agency outcomes were identified:

- *National and transnational agreements and policies addressing environmental and natural resources are better designed and implemented:* The UN Country Team (UNCT) focused on developing the capacity of government authorities to (i) negotiate, ratify and implement major international conventions, and (ii) design trans-national policy and legal frameworks, on the sustainable management of natural resources (including world heritage), water and biodiversity; and to ensure that local governments and community organizations have strengthened their ownership, capacities, and resources to sustainably manage their water and sanitation networks.
- *Increased access to energy based on Alternative and Renewable Energy Technology (ARETs):* It was anticipated that there will be an increased presence of Alternative and Renewable Technologies (ARETs) in the energy sector, including the development of private sector partnerships and the establishment of a market chain to address energy efficiency and conservation issues.
- *Sustainable natural resource management is more widely understood and practiced:* The UNCT was to contribute to the capacity of public authorities and communities (particularly farmers) to have greater knowledge, skills and resources to practice sustainable environmental management, including universities and media.
- *Disaster risk management capacities are enhanced to integrate improved environmental and water management:* The UNCT has been supporting the government in strategically addressing disaster risk management issues through strengthening national capacities to implement specific disaster mitigation measures.

65. In preparation for the development of the new UNDAF cycle for Tajikistan, which will cover the period from 2016 until 2020, the United Nations Country Team (UNCT) in Tajikistan conducted an UNDAF evaluation in order to provide advice for strengthening programming and achieving results at the country level, and for improving the UN coordination at the country level, while specifically informing planning and decision-making for the next UNDAF programme cycle.

66. Under the third pillar “*Clean Water, Sustainable Environment and Energy*”, this evaluation identified three pressing issues that the government argued must be addressed if the country is to lay the foundations for sustainable and equitable growth, and peaceful co-existence with its neighbors: (i) national and trans-national agreements and policies covering environmental and natural resources must be better designed and implemented; (ii) Tajikistan’s future development and poverty reduction depends on the country’s ability to effectively use its energy resources as contained in LSIS. Its current energy supply is unreliable, hindering economic growth; and (iii) environmental degradation and dangers are threatening the country’s development potential. Tajikistan is a highly disaster-prone country, vulnerable to natural hazards, such as earthquakes, landslides, floods, avalanches, and extreme climate conditions. Deforestation and over-grazing have deteriorated soil quality and increased the risk of landslides and flooding. It was also recognized that environmental issues are closely connected with government activities and interests targeted at poverty reduction and overall economic development.

67. It also found that participatory development management resulted in a sense of ownership over the achieved results. Comprehensive capacity building packages offered to the beneficiary institutions – the essential part of all development projects – resulted in sustainability of generated results. This evaluation also found that all country programmes should consider gradual transition/hand over to the Government; that is the transition from Direct Implementation Modality (DIM) to National Implementation Modality (NIM) for UNDP.

68. The new UNDAF 2016-2020 has four focus areas including one focusing on resilience and environmental sustainability. Under this area, the expected outcome (no. 6) identified is “*People in Tajikistan are more resilient to natural and man-made disasters resulting from improved policy and operational frameworks for environmental protection and sustainable management of natural resources*”. The total indicative financial resource requirements for this UNDAF are USD 402.46M of which USD 78.04M were identified for this fourth priority area *resilience and environmental sustainability* (outcome no. 6), including USD 34.43M to be provided by UNDP under this area.

69. Under this outcome no. 6, nine indicators were identified to monitor the implementation of this UNDAF. There are presented in the table below:

Table 2: UNDAF 2016-2020 – Indicators to Monitor Resilience and Environmental Sustainability

Expected Outcome	Indicators / Targets
<p>Outcome 6: People in Tajikistan are more resilient to natural and man-made disasters and benefit from improved policy and operational frameworks for environmental protection and sustainable management of natural resources.</p>	<ul style="list-style-type: none"> ● Indicator 6.1: Number of new green jobs created, environmentally sustainable livelihoods promoted through management of natural resources, ecosystems services, chemicals and waste, disaggregated by sex (<i>Target: At least 5,000 green jobs to be created by 2020</i>) ● Indicator 6.2: Political Stability and Absence of Violence (<i>Target: by 2020 from 0 to -0.50</i>) ● Indicator 6.3: Percentage of land covered by forest (<i>Target: 3.1%</i>) ● Indicator 6.4: Enhanced institutional framework for disaster risk reduction in Tajikistan (<i>Target: Fully operational and well-coordinated institutional framework for Disaster risk reduction in Tajikistan</i>) ● Indicator 6.5: Emergency Preparedness Capacity Index (<i>Target: Improved index over baseline</i>) ● Indicator 6.6: Number of disaster impact alleviation plans and policies (at all levels) (<i>Target: improved index over baseline</i>) ● Indicator 6.7: Number of community assets created and rebuilt aimed to mitigate the effects of natural disasters and enhance resilience of the communities reducing their vulnerability and exposure to risks (<i>Target: An increase from the baseline of 20%</i>) ● Indicator 6.8: proportion of rural communities with increased capacity to manage shocks and risks (<i>Target: An increase from the baseline of 20%</i>) ● Indicator 6.9: Monetary value of livelihood assets lost due to natural and man-made disasters (<i>Target: reduced</i>)

Country Programme Document (CPD) 2010-2015

70. Aligned with the UNDAF 2010-2015, the NDS to 2015 and the PRS 2010-2012, the UNDP

Tajikistan’s Country Programme Document (CPD) 2010-2015 laid down five intervention areas: (1) Poverty Reduction and Achievement of MDGs, (2) Reducing burden of HIV/AIDS, Malaria and Tuberculosis, (3) Good Governance, (4) Crisis Prevention and Recovery, and (5) Environment and Sustainable Development. The total indicative resources for this programme was about USD 151M of which USD 20M was identified for crisis prevention and recovery and USD 5M for environment and sustainable development.

71. Under the area *Crisis Prevention and Recovery*, 2 outcomes were identified: (i) Decreased risk of natural and man-made hazards to rural and urban livelihoods; infrastructure and recovery mechanisms in place; and (ii) Government is able to plan, coordinate and implement comprehensive mine action. Under the area *Environment and Sustainable Development*, the outcome was the sustainable natural resources management, improved environmental protection, and increased access to alternative renewable energy.

72. The priorities in the new CDP 2016-2020, are aligned with those of the new UNDAF 2016-2030 and the NDS as well as the UNDP Strategic Plan 2014-2017. It focuses on four priorities using an issues-based approach, with better targeting the most vulnerable and excluded groups:

- Improved governance, rule of law and access to justice;
- Sustainable and equitable economic growth;
- Social equity and protection of vulnerable groups from violence and discrimination; and
- Resilience and environmental sustainability.

73. Under the fourth priority, the CPD will promote integrated and gender-responsive approaches to development and building the resilience of communities to climate variability and climate-related hazards. The programme will ensure that disaster risk reduction and adaptation strategies address the differential vulnerabilities of men and women. UNDP will maintain its strategic policy dialogue with the Government to promote: renewable energy and energy efficiency; the reform agenda for integrated water resource management; increased climate resilience, and disaster risk reduction. It will support the creation of local-level green jobs and promote access to energy (using South-South and triangular cooperation for transfer of knowledge and technologies), water and the sound management of chemicals and waste. The total indicative financial resource requirement for this CPD priority is USD 34.43M of which USD 3.13M will be provided by the regular UNDP budget and USD 31.3M to be provided by other donors.

Country Programme Action Plan (CPAP) 2010-2015

74. The CPAP 2010-2015 is a further extension of the CPD. It was formulated following a review of Tajikistan’s progress to attain MDGs, which stated that Tajikistan’s ability to achieve most MDG targets was increasingly unrealistic and that there was a risk that past achievements may be jeopardized, unless effective anti-crisis measures were realized. This CPAP, developed for the period 2010-2015, aims to achieve the objectives set out in the NDS to 2015 and aligned with the MDGs implementation in Tajikistan as well as with the themes defined in the Joint Country Programme Strategy (JCPS) signed between partners in November 2009, which were to support for (i) broad-based economic growth; (ii) good governance; and (iii) human development. The total indicative resources of this programme is about USD 166.3M of which USD 9.5M was identified for environment and sustainable development.

75. The CPAP has the same five (5) intervention areas and expected outcomes as the ones identified in the CPD and presented above. Under the environment and sustainable development area (area 5), the expected outcome was further developed into two outputs, and targets were identified for each output to form the Action Plan for UNDP for the period 2010-2015. These expected results and targets for this area is presented in the table below:

Table 3: CPAP Expected Results in Crisis Prevention and Environment

Expected Outcomes	Expected Outputs	Targets at End of Project
Environment and Sustainable Development (area no. 5)		
Outcome 6: Sustainable natural resources management, improved environmental	Output 6.1: Government is provided with capacity building support to negotiate, ratify and implement major international conventions, transnational policy and legal frameworks on sustainable natural resources	<ul style="list-style-type: none"> • <i>Target #1:</i> To support Tajikistan’s government in ensuring compliance with all environmental conventions • <i>Target #2:</i> To increase the number of

Expected Outcomes	Expected Outputs	Targets at End of Project
protection, and increased access to alternative renewable energy	management (including climate change mitigation, combating desertification, sustainable water management and biodiversity conservation) and local communities are supported to participate in sustainable livelihoods	environmentally sustainable livelihoods and expand awareness through pilot projects and environmental education <ul style="list-style-type: none"> ● <i>Target #3:</i> To ensure integration of environmental sustainability with poverty reduction initiatives
	Output 6.2: Alternative renewable technologies including biogas, hydro, and solar power are demonstrated, understood, and widely used. Favorable policy and legal framework are established and contribute to private sector development	<ul style="list-style-type: none"> ● <i>Target #1:</i> To pilot at least 30 renewable energy projects in energy-deficient areas to significantly reduce the life-cycle cost of electricity supply in remote rural areas

Energy and Environment Programme (EEP) for the period 2011-2015

76. In order to address Tajikistan's national priorities in the energy and environmental areas and following the guidance from the UN planning frameworks – *UNDAF 2010-2015* and *CPAP 2010-2015* – UNDP formulated a five-year programme for the period 2011 to 2015. The goal of this programme was to support Tajikistan's transition to low emission and climate resilient development as a prerequisite for sustainable human development; the programme had 2 objectives: (i) market transformation towards low emission economies – including climate change mitigation projects; and (ii) capacity development for climate resilient communities and economies – including natural resources and climate change adaptation projects. At the formulation stage, this programme had an indicative budget of USD 10.7M, including a deficit of USD 4M at the outset of the programme.

77. The EEP 2011-2015 was structured in two outputs with corresponding targets to be achieved by 2015 and indicative activities to be implemented. There are presented in the table below:

Table 4: EEP 2011-2015 Expected Results

Expected Outputs	Indicative Activities	Targets for 2015
Output 1: Low emission development strategies developed and appropriate mitigation actions implemented.	<ul style="list-style-type: none"> ● Renewable Energies and Energy Efficiencies Developed; ● Sustainable Low-Emission Transport Developed; ● A Clean Development Mechanism (CDM) Established. 	<ul style="list-style-type: none"> ● Legislative, institutional and regulatory frameworks and mechanisms are conducive to the development of renewable energies and energy efficiencies in Tajikistan; ● To pilot at least 30 renewable energy and energy efficiency projects in energy-deficient areas to significantly reduce the life-cycle cost of electricity supply in remote rural areas; ● At least 50 stakeholders and representatives of local authorities have enhanced capacity on managing local renewable energy resources; ● Capacity of at least 2 to 5 private companies to participate in a supply chain for renewable energy sector developed; ● An operational and funded NTF to finance the development of RES and energy efficiency schemes; ● Annual emissions from the Transport Sector limited to less than 450,000 tons per year in 2020; ● An operational CDM approved by the Government and supported by relevant legislation.
Output 2: Capacity for climate resilient ecosystems and economies developed.	<ul style="list-style-type: none"> ● Management of Ecosystems Strengthened and the Capacity for Sustainable Land Management (SLM) Increased; ● Capacity for an Integrated Water Resources Management (IWRM) Approach Strengthened; ● Capacity for Climate Risk Management (CRM) 	<ul style="list-style-type: none"> ● Tajikistan is compliant with all environmental conventions; ● Effectiveness of PA system increased as more appropriate and sustainable management practices and approaches are adopted and confirmed by an increase of the METT score; ● Environmentally sustainable livelihoods ensured through at least 30 pilot projects; ● At least 10 districts address linkages between poverty

Expected Outputs	Indicative Activities	Targets for 2015
	Developed; <ul style="list-style-type: none"> • Management of Chemicals Strengthened; • An Environmental Learning (EL) Programme Developed and Implemented. 	and environment in their DDP's; <ul style="list-style-type: none"> • SLM principles are mainstreamed into national policies and legislation; • At least 30 stakeholders and representatives of local authorities have enhanced capacity to integrate the environment into water management planning; • Investment strategies, plans and/or financial policies promulgated; • About 200 extra households provided with improved WSS services; • At least 10% decrease in vulnerability as measured by the VRA; • 5 learning networks disseminating knowledge on biodiversity, SLM, CRM and IWRM; • Diverse and high quality EE/EL and SI programmes and activities planned or underway to address NRM issues and poverty reduction.

4.2. EEP Portfolio Overview

78. Over the last five years, the EEP has provided a mix of policy advice, project development and implementation services, knowledge management and advocacy services through projects, benefitting from UNDP global initiatives and also from synergies with other programmes of UNDP Tajikistan such as the Communities Programme (CP) and the Disaster Risk Management Programme (DRMP). It includes a portfolio of over 17 projects in such areas as water and sanitation policies, biodiversity and climate change, environmental information management, renewable energy and chemicals management, with an overall budget of over USD 35.2M. It also includes a pipeline of 9 projects in the process of being developed with an indicative budget of over USD 27.9M. Based on the list of these 26 projects (*see Annex 8*), an analysis of selected parameters was performed. The results of this assessment are outlined in the table below.

Table 5: Brief Overview of EEP Portfolio of Projects

EEP Projects	N ⁵	%TV		N	%TV
Status of projects			Geographic breakdown		
<ul style="list-style-type: none"> • Completed • Ongoing • Not started yet 	10 7 9	34% 22% 44%	<ul style="list-style-type: none"> • Dushanbe • One Oblast • Multiple Oblasts • National • Regional • Unspecified 	1 2 8 5 3 7	11% 3% 25% 7% 26% 28%
Starting date			Type of Projects		
<ul style="list-style-type: none"> • 2005 • 2006 • 2007 • 2008 • 2009 • 2010 • 2011 • 2012 • 2013 • 2014 • Not yet started 	1 0 0 2 3 1 1 2 2 5 9	3% 12% 16% 1% 13% 1% 3% 7% 44%	<ul style="list-style-type: none"> • Biodiversity • Sustainable Land Management • Chemicals / Waste • Water Resources • Environmental Education • Environmental Management • Renewable Energy • Sustainable Transport 	3 1 3 11 1 1 5 1	11% 10% 15% 26% 1% 2% 24% 11%
Size of projects					
<ul style="list-style-type: none"> • USD 500,000 or less • Between USD 500,001 and USD 1,000,000 • Between USD 1,000,001 and USD 5,000,000 • USD 5,000,001 or more 	4 7 10 5	1% 9% 36% 54%			

79. Overall, the data provided in the table above indicates that about 2/3 of the projects are either

⁵ N = Number of Projects; %TV = Percentage of Total Value Allocated (USD)

completed or on-going and about 1/3 of projects have not started yet. The review of the starting dates indicates that EEP projects are regularly added to the portfolio, though it was noted that a higher than usual number of projects (5) started in 2014.

80. Regarding project size, the mean project budget is USD 2.4M; however, the distribution of project size varies widely: on one hand, projects under USD 1M represent 42% of the total number of projects (11 out of 26) but they account for only 10% of the total budget (USD 63.2M). On the other hand, larger projects (over USD 1M) represent 58% of the total number of projects (15 out of 26) but they account for 90% of the total budget (54% of the total budget for projects over USD 5M).

81. The distribution of projects per location includes 1 project intervening in Dushanbe, 2 in one Oblast each, 7 in multiple Oblasts and 5 with a national coverage. In addition, 4 projects are regional projects that comprise Tajikistan and which represent 38% of the total EEP portfolio budget. It was also noted that the locations for most of the projects in the pipeline (*see Annex 8*) is not yet known as these projects are in different stages of being formulated.

82. Finally, the review of project types indicates that a larger share of projects and dollars are invested in the water and renewable energy areas. The table above indicates that 11 projects (42%) are in the water resources area with a budget allocation of 26% of the total portfolio budget (including projects in the current pipeline); and that despite that only 5 projects (19%) are in the renewable energy area, 24% of the total portfolio budget is allocated to this area.

4.3. UNDP Partnership Strategy

83. Tajikistan's development environment is complex; it renders effective partnerships with development partners as critical success factors to ensure achievement of results and avoid duplication and overlaps. According to the CPAP 2010-2015, the goal of UNDP has been to maximize the potential of partnerships concentrating on the areas where it has clear value added and competitive advantages. UNDP's partnership strategy in the energy and environment sectors has been effective and appropriate, ensuring inclusion and consultation of relevant actors in interventions within the 2 sectors.

84. UNDP partnership strategy in Tajikistan has been guided by the Joint Country Partnership Strategy (JCPS) that was developed in 2009. It followed the June 2007 Tajikistan Development Forum in Dushanbe where development partners – including UNDP - decided to develop a JCPS aimed at enhancing aid efficiency and effectiveness. As part of this strategy, development partners and the government of Tajikistan identified themes and sectors to be supported through aid programmes and to be aligned with national strategies and programmes. Through this process, UNDP committed to develop and implement activities in line with the “priorities for improved alignment”, as articulated in the JCPS.

85. Through this process, a coordination mechanism was created – the Donor Coordination Council (DCC) – and works closely with the Ministry of Economic Development and Trade (MEDT) and the State Committee on Investments and State Property Management. The DCC is structured into 6 clusters, including a cluster on “*Natural Resources*” with a working group on Agriculture and Land and another working group on water and climate change and another cluster on “*Infrastructure*” with a working group on energy matters and a working group on transport. Working groups serve as platforms for members to exchange information on current and future projects, discuss and articulate a common position on issues, and engage with the government on policy dialogue. Each working group defines its objectives, scope of activities, membership, and frequency of meetings.

86. Donor Coordination Council (DCC) is a functional body – usually meeting once a month - contributing to the achievement of development goals in Tajikistan. All major donors (about 30 organizations) are represented, and the DCC is led by a rotating Chairperson elected by DCC members. UNDP is an active member of the DCC, which works in close cooperation with the government in institutionalized approach towards achieving donor coordination. It functions in agreement with the national strategies and programmes such as the NDS.

87. As such, UNDP committed to further increase its role in facilitating donor and partner coordination;

actively participating in coordination DCC and governmental working groups, and develop common procedures and implementation tools in addition to other effective coordination and collaboration techniques. Project implementing partners were to be selected based upon a competition-based scheme; joint programming and project implementation were to be pursued to achieve greater efficiency and ensure alignment with the UNDAF and work of other UN agencies, government strategic plans, as well as JCPS priorities.

88. As per the CPAP document, UNDP in Tajikistan has been building sustainable network partnerships with local, national and international partners. It includes the Committee of Environmental Protection (CEP), the Ministries of Agriculture, Energy and Industry, Transport and Communications and Water Resources and Land Reclamation; the National Energy Company “Barqi Tojik”, National Biodiversity and Biosafety Centre (NBBC), as well as INGOs and donors such as Global Environment Facility (GEF), the UK Department for International Development (DFID), German Agro Action, Swiss Agency Development and Cooperation (SDC), Canadian International Development Agency (CIDA), and the Asian Development Bank (ADB). At the local level, the key partners are oblast, district and Jamoat authorities, as well as civil society bodies such as Jamoat Resource Centers (JRC) and Water User Associations (WUA). Their involvement and contribution is essential to each project components. The Jamoat Resource Centers also play a crucial role in terms of cost-sharing, community mobilization and awareness building.

5. CONTRIBUTION TO RESULTS

89. This section presents the findings of the analysis conducted for this outcome evaluation. Considering the complex development context in which UNDP - like many other entities - is engaged in the energy and environment areas, it is often quite difficult to attribute the observed results to the initiative of a single organization. The “contribution analysis” provided below does not firmly establish causality but rather seeks to achieve a plausible association between the achievements of the EEP and the national development progress made in Tajikistan.

5.1. Relevance

90. This section discusses the relevance of the EEP against the national priorities of Tajikistan and against the overall UNDP and UN mandate in the country as well as other donors’ strategies in Tajikistan. This section also discusses the relevance of the EEP within the context of mainstreaming gender considerations.

5.1.1. Towards National Priorities and UN Planning Framework

91. The detailed review of national challenges and priorities presented in Section 3 above and of the UNDP response in Section 4 indicate that the EEP has been very relevant for addressing energy and environment issues in Tajikistan and responding to national priorities and strategies in these sectors. The EEP is well aligned with the implementation of the NDS to 2015 and also the LSIS 2013-2015. When considering the NDS to 2015 general priority, the EEP programme has been implementing projects to increase the efficient use of water and energy and also protect the environment while restoring the productive functions of the land. Vis-à-vis the LSIS, the EEP has been implementing projects to strengthen the management of the environment through better legislation, better monitoring and increased population awareness. The programme also supported the development of additional small Hydro Power Plants (sHPPs) to provide additional electricity to rural communities. It also supported the improvement of the public transportation services in Dushanbe, which should contribute to a reduction of GHG emissions.

92. The review of the UNDP response indicates a very coherent response through the UNDAF, CDP, CPAP and EEP document. There are clear links between the outcome #6 of the UNDAF 2016-2020 “*People in Tajikistan are more resilient to natural and man-made disasters and benefit from improved policy and operational frameworks for environmental protection and sustainable management of natural resources*”; the expected outcomes #4, 5 and 6 of the CPAP: (4) *Decreased risk of natural and man-made hazards to rural and urban livelihoods; infrastructure and recovery mechanisms in place*; (5) *Government is able to plan, coordinate and implement comprehensive mine action*; and (6) *Sustainable natural resources management, improved environmental protection, and increased access to alternative renewable energy*; and the expected outputs of the EEP: (1) *Low emission development strategies developed and appropriate*

mitigation actions implemented; and (2) Capacity for climate resilient ecosystems and economies developed.

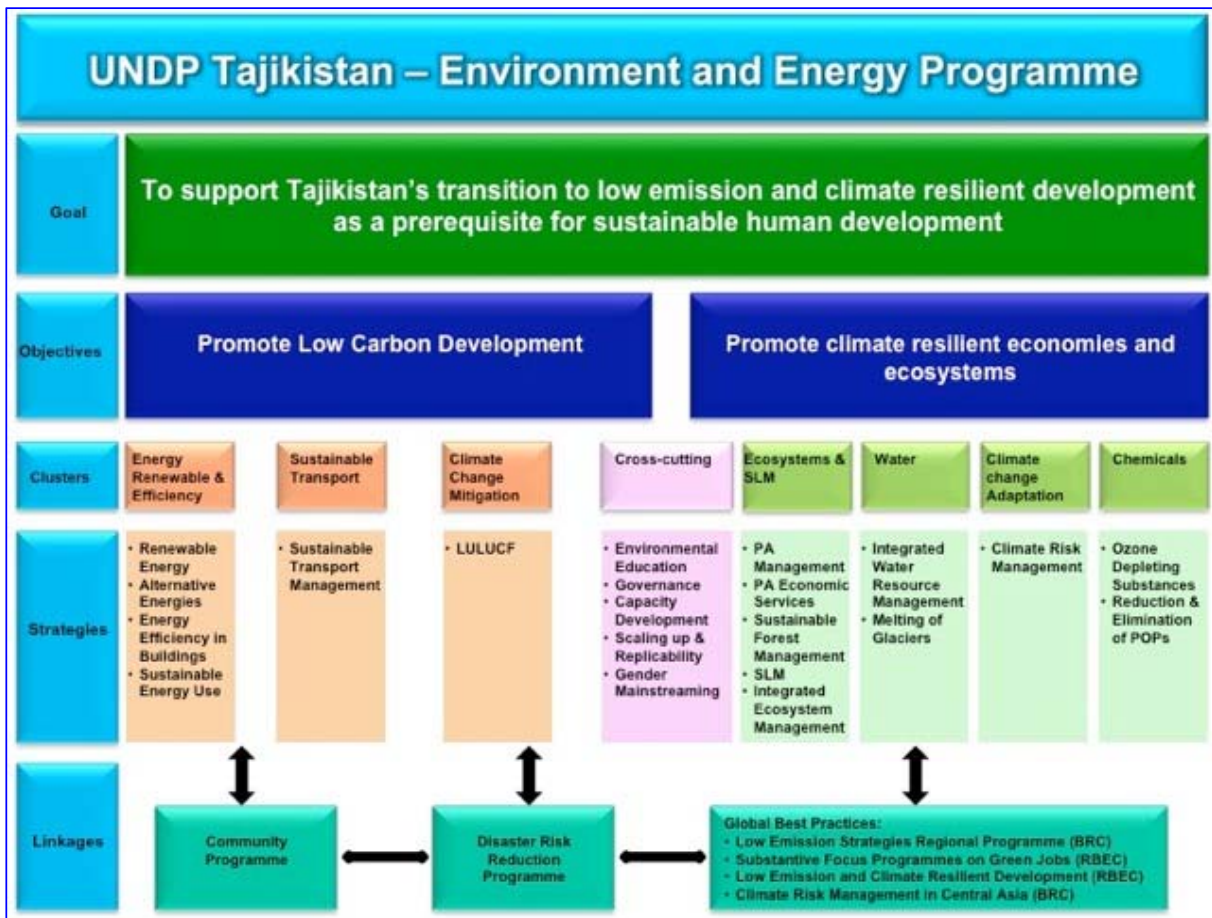
93. It was also noted that the UN and UNDP response (UNDAF and CPD/CPAP) to national priorities and strategies have been developed and formulated on the basis of strong analyses of the Tajik context and consultations. It included an evaluation of the UNDAF 2010-2015 to provide advice for strengthening programming and achieving results at the country level, and for improving the UN coordination at the country level, while specifically informing planning and decision-making for the next UNDAF programme cycle. This evaluation identified three pressing issues that the government argued must be addressed if the country is to lay the foundations for sustainable and equitable growth, and peaceful co-existence with its neighbors:

- i. national and trans-national agreements and policies covering environmental and natural resources must be better designed and implemented;
- ii. Tajikistan's future development and poverty reduction depends on the country's ability to effectively use its energy resources as contained in LSIS. Its current energy supply is unreliable, hindering economic growth; and
- iii. environmental degradation and dangers are threatening the country's development potential. Tajikistan is a highly disaster-prone country, vulnerable to natural hazards, such as earthquakes, landslides, floods, avalanches, and extreme climate conditions. Deforestation and over-grazing have deteriorated soil quality and increased the risk of landslides and flooding.

94. It was also recognized that environmental issues are closely connected with government activities and interests targeted at poverty reduction and overall economic development. These pressing issues have been taken into account when formulating the new UNDAF 2016-2020.

95. As analyzed in section 4.1, the EEP goal was to support Tajikistan's transition to low emission and climate resilient development as a prerequisite for sustainable human development; the programme had 2 objectives: (i) market transformation towards low emission economies – including climate change mitigation projects; and (ii) capacity development for climate resilient communities and economies – including natural resources and climate change adaptation projects. Under these 2 objectives, 8 clusters were identified (*see Diagram below*) under which, projects have been implemented.

96. Overtime, it was noted that the EEP portfolio of projects has been shifting towards water and energy issues, which are also becoming larger issues in Tajikistan. The review of the current portfolio (*see Section 4.2*) indicates that both sectors include 11 projects and 5 projects (out of 26) with respectively 26% and 24% of the total value of the portfolio. These 2 sectors also include 5 projects (3 + 2) out of 9 projects that are currently under development.



97. In addition to the portfolio of projects under the EEP, it is also important to consider other UNDP implemented projects in Tajikistan, which are also relevant when addressing national issues and strategies related to energy and environment. It includes:

- **Small Grant Programme (SGP):** It started in Tajikistan in September 2009. The main priorities of the SGP at the national level is to maintain reliable partnerships with public departments, in particular with the Committee for Environmental Protection, and with the Ministry of Agriculture, Ministry of Land Reclamation and Water Resources and Land Management Committee and its subordinate organizations. It is a "bottom-up" programme from the community level to the national level. Through small projects supported by the SGP, it allows the promotion of a political dialogue, knowledge management and broad dissemination of best practices and experiences in protection and use of the environment. It has developed the capacity of local NGO to better manage protected areas, implemented national priorities in the environment and contributed to the achievement of GEF strategic goals in Tajikistan.
- **Community Programme (CP):** It is a multi-year initiative that builds on the previous achievements of UNDP and supports the operationalization of MDGs and the implementation of Tajikistan's PRS. It operates at the local level through through its five Area Offices located in Sughd (Khujand and Aini) and Khatlon (Shartuuz and Kulyab) regions, as well as in Rasht city. This programme 2014-2017 has a portfolio of 7 projects with a total value of USD 23.2M. Two projects are particularly related to the EEP:
 - **Livelihood Improvement in Tajik-Afghan Cross-border Areas (LITACA):** This project is funded by the Government of Japan through Japan International Cooperation Agency (JICA) –funding totaling USD 10.7M - and is implemented by UNDP Tajikistan in cooperation with UNDP Afghanistan. The project aims to promote stability and security in the districts of Khatlon Region of Tajikistan and Kunduz and Takhor Provinces of Afghanistan through improving livelihoods and resilience of bordering rural communities. LITACA works closely with national

and local authorities, community partners and civil society organizations in Tajikistan and Afghanistan in the border areas to better respond to development challenges, improve infrastructure and services, create business opportunities and facilitate cross-border cooperation. The project supports the rehabilitation of more than 75 rural infrastructure facilities to improve direct access of more than 176,400 vulnerable people, including women living in rural communities, to schools, hospitals, irrigation, drinking water and energy supply.

- **Tajikistan Poverty and Environment Initiative (PEI) Phase II:** The Project budget is US\$1.1 million with a duration of January 2014 - December 2017. It is part of a global UNEP-UNDP programme. It aims to reduce poverty, preserve ecosystems and promote security that help poor people to improve their livelihoods. It promotes pro-poor economic growth, with environmental sustainability embedded at the heart of economic policies, planning systems and institutions.
- **Disaster Risk Management Programme (DRMP):** It was originally established in 2003. The programme addresses the serious and chronic problems faced by Tajikistan and its regional neighbors with regard to natural disaster management – comprising of disaster preparedness, response, recovery and most importantly mitigation and prevention. The programme continues to strengthen the capacity of the Committee of Emergency Situations and Civil Defense at the national level, while building regional mechanisms for DRM and mainstreaming DRM into state policy at the national and sub-national level.

5.1.2. Towards Other Donors

98. Finally, the UNDP-EEP is also relevant vis-à-vis other donors supported programmes and projects in the energy and environment sectors. The key programmes/projects in these sectors are:

- **Tajikistan Pilot Program for Climate Resilience (PPCR):** It was approved in November 2008 and implemented by the World Bank. It was the first program developed and operational under the Strategic Climate Fund (SCF), which is one of two funds within the design of the Climate Investment Funds (CIF). It aims to pilot and demonstrate ways in which climate risk and resilience may be integrated into core development planning and implementation. In this way, the PPCR provides incentives for scaled-up actions and initiates transformational change. The pilot programs and projects implemented under the PPCR are country-led, build on National Adaptation Programs of Action (NAPA) and other relevant country studies and strategies. They are strategically aligned with other donor funded activities to provide financing for projects that will produce experience and knowledge useful to designing scaled-up adaptation measures.
- **Rural Development:** Under the Multi-Annual Indicative Programme 2014-2020 in Tajikistan funded by the EU, 110M euros are allocated to this sector (44%). Under this sector, the objective is to contribute to the reduction of poverty in rural communities by improving people's livelihoods and food security, respecting the natural resource base. As part of a set of expected results, the second result is (2) Improved farm smallholders' resilience to extreme natural hazards and livelihoods; and (3) Climate change mitigation through the establishment of integrated water and other natural resource management and governance system within selected river (sub) basin.
- **Programme for Finland's Water Sector Support to Kyrgyzstan and Tajikistan (FinWaterWEI II):** The programme started in 2014 and will run until 2017 with a total budget of 8M euros. The overall objective of FinWaterWEI II is to enhance water security in Kyrgyzstan, Tajikistan and the related region through equitable and integrated management of water resources. The Programme aims at reducing water-related risks by supporting the countries in managing their national and international water resources in a balanced, equitable and integrated manner. It promotes a rights-based approach to water use and water management. In the context of the water sector, the human rights-based approach to development can be defined not only as people's right to clean water and sanitation but also as the capacity of the state institutions to provide the necessary services to its citizens.
- Other programmes/projects includes those funded by Asian Development Bank (ADB), JICA, GIZ, USAID and IFAD (*Livestock and Pasture Development Project – phase I & II (LPDP)*).

5.1.3. Towards Gender Mainstreaming

99. Regarding gender mainstreaming, UNDP in Tajikistan promotes gender equity and women's empowerment as a notably high priority in its programming, implementation and monitoring. It is done in a context whereby gender inequality is pervasive in Tajikistan; despite a legal framework that protects women's rights. Violence against women and girls is widespread. Tajikistan has a Gender Inequality Index value of 0.383, ranking it 75 out of 149 countries in the 2013 index.

100. The EEP document states that UNDP “will pursue a proactive engagement in mainstreaming gender into environment and energy activities. Furthermore, the approach was to be grounded in the UNDP Gender Equality Strategy that was based on the premise that the development objective of equality between men and women, or gender equality, is absolutely indivisible from the UNDP human development goal of real improvements in people's lives, and in the choices and opportunities open to them. UNDP understands gender equality to be an irreducible condition for inclusive, democratic, violence-free and sustainable development”. It was also stated in the same document that the programme will also take into consideration and be aligned with the “State Program on Gender 2007-2016” established by the Government of Tajikistan in 2007. The objective of this programme has been to promote and build the capacity of female cadres in decision-making through increasing the participation of women in decision-making processes via quotas in civil service management positions.

101. The overall intention of gender mainstreaming with regard to environment and energy was to ensure the inclusion of gender equality considerations in planning systems at all levels, and to expand both the access of women to finance mechanisms and the direction of that finance to areas that will benefit women. It was recognized that on the issue of climate change, women play an absolutely central role in many activities that are affected by it. They must therefore be explicitly involved in all adaptation and mitigation modalities, and enjoy expanded access to environmental and energy services tailored to their needs. Women make crucial contributions to supporting their families and communities in adopting survival strategies and adapting to and/or mitigating the effects of climate change. Their knowledge and experiences should be collected and used to shape national policies and plans. Within this context, gender mainstreaming was to be included in the following functions:

- Disaggregate existing and new data sets by gender;
- Integrate gender considerations into policy and programme development, including the increase of women's participation on the environment and energy sectors, the collect and use of disaggregated data, gender budgeting, definition of gender-sensitive elements of policies and programmes, advocate for gender-sensitivity in policy making processes;
- Integrate gender considerations into project cycles including conceptualization, problem identification, project formulation, project appraisal, project implementation, monitoring and evaluation and impact assessment;
- Identify performance indicators incorporating gender and environment and energy sensitivity, including the measurement of impacts of projects on men and women, indicators linked to the MDGs;
- Integrate gender considerations into training and community-level project activities;
- Develop an advisor group on gender and environment and energy.

102. Despite this good strategy to mainstream gender into environment and energy activities, the recently conducted “Country Portfolio Evaluation (1999-2014)” by the GEF (November 2015) states that “gender has not been consistently considered in the Tajikistan (EEP) portfolio of projects”. However, the Evaluator found that most projects have been contributing to reducing gender inequality at local level or at least consider gender as part of the implementation approach. One example is a statement in the annual report 2014 of the HCFC Phase Out project. It states that “gender remains a cross cutting issue throughout all project activities and is systematically incorporated into each aspect and at every step of the planning, implementation, monitoring and evaluation of the project. Following UNDP's Gender Mainstreaming Strategy, the HCFC phase-out project has strived to remedy existing gender imbalances by improving the capacities of institutions, governments and companies to integrate gender mainstreaming principles in their day-to-day operations and by building and strengthening the capacities of women themselves”. However, what has not been consistent throughout the portfolio is reporting on gender considerations in projects progress reports. Some 2014 project annual reports did not mention gender at all such as the “Technology

Transfer” and “*Sustainable Transport Management*” projects.

5.2. Effectiveness

103. As said in the introduction for section 5 above, it is often difficult to attribute the observed results to the initiative of a single programme or organization. This section below presents to what extent the goal and expected outcomes of the EEP have been achieved. The analysis does not firmly establish causality but rather seeks to achieve a plausible association between the achievements of the EEP and the national development progress made in Tajikistan.

5.2.1. Achievements and Progress Towards Outcomes

104. As described in section 4.1, one focal area of the CPAP 2010-2015 has been on environment and sustainable development. The expected outcome in this area was to improve environmental protection and sustainable natural resources management, as well as increase access to alternative renewable energy. In collaboration with the Government, the EEP was to support the development of capacities to negotiate, ratify and implement major international conventions, to develop transnational policy and legal frameworks on sustainable natural resources management, and to pilot alternative renewable technologies including biogas, hydro, and solar power.

105. The goal of the EEP was to support Tajikistan’s transition to low emission and climate resilient development as a prerequisite for sustainable human development; the programme had 2 objectives: (i) market transformation towards low emission economies – including climate change mitigation projects; and (ii) capacity development for climate resilient communities and economies – including natural resources and climate change adaptation projects. The programme had three outputs with a set of indicative activities and targets for 2015. The portfolio of the EEP includes a set of 26 projects (*see Annex 8*) that are either completed (10), on-going (7) or in the pipeline (9) at the end of 2015. The table below is an attempt to summarize the key achievements of the EEP over the last five (5) years.

Table 6: Overview of EEP Achievements

Expected Outputs	Targets	Achievements
<p>Output 1: Low emission development strategies developed and appropriate mitigation actions implemented.</p> <ul style="list-style-type: none"> ● Renewable Energies and Energy Efficiencies Developed; ● Sustainable Low-Emission Transport Developed; ● A Clean Development Mechanism (CDM) Established. 	<ul style="list-style-type: none"> ● Legislative, institutional and regulatory frameworks and mechanisms are conducive to the development of renewable energies and energy efficiencies in Tajikistan; ● To pilot at least 30 renewable energy and energy efficiency projects in energy-deficient areas to significantly reduce the life-cycle cost of electricity supply in remote rural areas; ● At least 50 stakeholders and representatives of local authorities have enhanced capacity on managing local renewable energy resources; ● Capacity of at least 2 to 5 private companies to participate in a supply chain for renewable energy sector developed; ● An operational and funded NTF to finance the development of RES and energy efficiency schemes; ● Annual emissions from the Transport Sector limited to less than 450,000 tonnes per year in 2020; ● An operational CDM approved by the Government and supported by relevant legislation. 	<ul style="list-style-type: none"> ● Supported the development of the <i>Law of Renewable Energy Sources</i> followed by the secondary legislation to regulate tariff and ownership issues and provide standards in construction (adopted Date?) ● Support the establishment of an interagency working group to accelerate the process of analyzing the procedures on licensing and construction of SHP facilities and to review laws and other legal decrees and documentation related to the promotion of RES and EE; ● Facilitated the establishment of the National Trust Fund for Renewable Energy and Energy Efficiency and supported drafting of the charter of the National Trust Fund for Renewable Energy and Energy Efficiency; ● Developed the <i>Energy Efficiency Master Plan for Tajikistan</i> ● Training of 30 representatives of 9 ministries and state agencies, including the representatives of district and sub-district administrations in developing and coordinating SHP projects as well as on the application of the laws, policies and regulations for the promotion of renewable energy sources, and small hydropower in particular; ● Supported establishment of facilities to train technicians on SHP at the Tajik Technical University through provided training modules and IT equipment. 100 students have undertaken courses at the Tajik technical university and Tajik energy institute in Kurgant'yube. 20 technicians have undertaken vocational trainings organized at the Tajik technical university. ● Provided two local manufacturers with equipment to enhance their productive capacities and trainings, including on the SHP design, implementation and CAD software from the company LLC "Komperg" from Croatia. These 2 local manufacturers, Energoremont and Korgohi Mashinasozi are now capable of providing turn-key solutions for construction of SHPs and O&M services. Portable turbines have been locally produced and installed in the constructed SHP in Sorvo and in Romit Jamoat; ● Constructed 1 small hydropower plant with 15 kW of installed capacity (87 MW per year) is constructed and commissioned in Dashti Yazgulam settlement of Vanj district ● Developed project designs for 4 small hydropower plants and 6 SHP projects are in pipeline. The total cumulative capacity of the foreseen plants is 400 kW. ● Developed a guidebook on SHP project development; ● Through the transfer of technology to develop 7 SHPs, it was estimated the generation of a range of GHG impacts to be accrued over the lifetime of the project as follows: direct emission reductions: 14.40 tCO₂; indirect emission reductions – bottom-up: 43.20 tCO₂; and indirect emission reductions – top-down: 157.84 tCO₂; ● Supported development of "<i>New Fuel Quality Standards for for Petrol and Diesel</i>" for Tajikistan (adopted in January 2014); ● 15 km of dedicated bus lanes operational on Ayni, Sherozi, Somoni and Sino streets in Dushanbe; ● Drafted a Parking Policy (and related regulatory changes) (under discussion/consultation); ● Drafted Public Transportation Fare Policy (and related regulatory changes) (under discussion/consultation); ● A Single Dispatcher Control Center introduced in Dushanbe city with hardware delivered, information panels installed and GPS in all vehicles for lines T-1 and B-3;

Expected Outputs	Targets	Achievements
		<ul style="list-style-type: none"> ● Drafted proposed legal and regulatory changes on reserved use of public transport lanes and stops, on inspection, control, penalties and enforcement for public transportation services (under review/Consultation); ●
<p>Output 2: Capacity for climate resilient ecosystems and economies developed.</p> <ul style="list-style-type: none"> ● Management of Ecosystems Strengthened and the Capacity for Sustainable Land Management (SLM) Increased; ● Capacity for an Integrated Water Resources Management (IWRM) Approach Strengthened; ● Capacity for Climate Risk Management (CRM) Developed; ● Management of Chemicals Strengthened; ● An Environmental Learning (EL) Programme Developed and Implemented. 	<ul style="list-style-type: none"> ● Tajikistan is compliant with all environmental conventions; ● Effectiveness of PA system increased as more appropriate and sustainable management practices and approaches are adopted and confirmed by an increase of the METT score; ● Environmentally sustainable livelihoods ensured through at least 30 pilot projects; ● At least 10 districts address linkages between poverty and environment in their DDP's; ● SLM principles are mainstreamed into national policies and legislation; ● At least 30 stakeholders and representatives of local authorities have enhanced capacity to integrate the environment into water management planning; ● Investment strategies, plans and/or financial policies promulgated; ● About 200 extra households provided with improved WSS services; ● At least 10% decrease in vulnerability as measured by the VRA; ● 5 learning networks disseminating knowledge on biodiversity, SLM, CRM and IWRM; ● Diverse and high quality EE/EL and SI programmes and activities 	<ul style="list-style-type: none"> ● Supported the revision of the <i>1993 Forestry Code</i> (adopted 2/08/2011) and the related regulations: bylaw on none timber forest product; rules on fire regulation in the forest sector; rules on forest cutting and wood making; rules for visitors; rules for haymaking; rules for grazing in the forest lands; rules to fight against pests and disease in the forests; and rules for collection and conservation of medicinal herbs and food plants within the forestry sites; ● Supported development of the <i>Law on Pasture</i> (enacted in March 2013) ● New <i>Law on Specially Protected Natural Areas</i> (adopted on 26/12/2011), replacing the 2002 Law on Protected Areas ● Established a Working Group in April 2008 comprising six specialists from the Protected Areas Agency, Forestry and Hunting Agency and the Forest Institute, to develop subsidiary legislation for management of PAs and forests (i.e. normative legal acts, such as regulations, directions and instructions). ● 10 botany and zoology students from Tajik State University were involved in scientific surveys and research; a few of them went on to undertake doctorates ● Training delivered to 96 employees of PAs and forestry units and 337 members of local communities through various seminars and trainings training sessions by scientists, focusing on the importance of biodiversity conservation and its monitoring ● A book was produced and distributed to government agencies, universities and schools in 2008 to raise awareness about Tajikistan's PAs ● Study tours: 3-week tour to USA in July 2006 to visit communities living near protected areas; in July 2007 4 members of the Ministry of Agriculture & Nature Protection went to USA to review longer term conservation planning of PAs and improved management of endangered species ● Developing capacities in planning and management of protected areas ● Established 4 Jamoat Resource Centers (JRCs) in which three demonstration PAs were located. These centers served as main public institutions for delivering environmentally sustainable livelihoods within local communities, as well as a welcome interface between communities and the respective PA and its staff. It resulted in over 200 additional "green jobs" ● A regional Micro-Loan Foundation (MLF) was established to cover the 4 targeted Jamoats, with one staff member allocated to each JRC. The MLF has been very successful with over 1,500 clients by the end of the project in January 2012 ● New <i>Law on Environmental Education</i> (approved in October 2010) ● Drafted a new State Programme on Environmental Education and Learning ● Drafted Laws on "<i>Public Participation in Environmental Protection</i>", "<i>Strategic Environmental Assessment</i>" and amendments to the Law on "<i>Ecological Expertise</i>" ● Numerous training sessions on environmental protection, management and conservation

Expected Outputs	Targets	Achievements
	<p>planned or underway to address NRM issues and poverty reduction.</p>	<ul style="list-style-type: none"> ● Supported the development of the <i>water sector reform strategy</i> ● Supported the Government in the development of viable coordination and policy dialogue mechanisms (Platform on National Policy Dialogue on IWRM, TajWSS Network, Inter-Ministerial Working Group on drinking water supply and sanitation); ● Support the government on policy discussions and development of recommendations for: defining functions and roles for water management authorities, clear distribution of functions and roles between existing and new water management authorities (Ministry of Energy and Water Resources, Agency for Land Reclamation and Irrigation, State Unitary Enterprise “Khojagii Manziliyu Kommunalii”); ● Support pilot demonstration projects at the district level in Kulyab district (Jamoats of Kulyab district) linking policy and practice and promoting bottom-up approach to policy development; ● Support to a balanced approach in implementation of tariff policy for drinking water supply and sanitation subsector. ● Developed policy recommendations on the specific water issues: (a) conducting research and promoting effective organizational models of water systems management; (b) review and development of sanitation policy; (c) improvement of tariff policies for drinking WS&S subsector. ● Drafted a new HCFC legislation including a National HCFC phase out strategy and Action Plan for the period of 2015-2020 (under government review); ● Supported establishment of an Inter-Ministerial Task Force on HCFC phase-out led by the Committee of Environmental Protection (CEP); ● Supported collection of data on consumption of HCFCs for 2013 and national report submitted to Ozone Secretariat; ● Supported CEP to develop a national IPIC system at the National Ozone Centre ● Supported the Customs Service in the development of a manual for customs officers on saving the ozone layer, the different smuggling schemes and screening methods to prevent the illegal trade of ODS; ● Established two training centers at the Engineering – Pedagogical College of Dushanbe and National Refrigeration Association; ● Developed a new five-day refresher course curriculum for refrigeration and air-conditioning technicians; ● Procured special equipment for recycling and extraction of ODS to Custom Service; ● Procured HCFC re-use equipment and tools to the training centers; ●

Source: EEP Project Progress Reports

106. The review of achievements under the EEP indicates that overall the programme was effective in meeting its expected outcomes and outputs as well as its targets. The programme intervened at different levels to develop capacities and contributed to a change aimed at improving environmental protection and sustainable natural resources management, as well as increasing access to alternative renewable energy. Projects under this programme contributed to a change of attitudes and behaviors of stakeholders/beneficiaries by raising their knowledge and skills. Training, study tours, seminars as well as production and dissemination of information were part of most projects. These same projects also contributed to improving the performance and functional capabilities of organizations through the support for developing their mandates, tools, guidelines, manuals and management information systems. Finally, these projects also contributed to strengthening the enabling environment related to the management of the environment and the development of alternative renewable energy.

107. In the biodiversity sector, the programme has been supporting activities to improve the governance of protected areas, notably via the development of a new Forestry Code, the revision of the Law on Protected Area and the development of capacities in planning and management of protected areas, as well as working with communities to achieve environmentally sustainable livelihoods. In addition, the programme also played a catalytic role in the development of the State Programme for Environmental Education and Learning, which resulted in the introduction of environmental classes in secondary education. Currently, the EEP has been supporting the government to strengthen the monitoring of the environment and the management of environmental information, including improving the reporting process to the Rio Conventions. Through a project related to the EEP to sustain agricultural biodiversity, it also supported the promotion of locally produced agrobiodiversity products, which resulted in the establishment of a market for mulberry products, which are now being exported to Latvia, Lithuania and Russia. Finally, the programme supported the Government of Tajikistan to prepare its Second and Third National Communications to the United Nations Framework Convention on Climate Change (UNFCCC).

108. In the chemical sector, the EEP supported the government to phase out HCFC, and comply with the obligations of Tajikistan under the Montreal Protocol. The HCFC project supported the drafting of a new HCFC legislation including a National HCFC phase out strategy and Action Plan for the period of 2015-2020 that is currently under review by the government. The project also supported the establishment of an Inter-Ministerial Task Force on HCFC phase-out that is led by the Committee of Environmental Protection (CEP). It also supported the establishment of 2 training centers at the Engineering College in Dushanbe and within the National Refrigeration Association as well as the development of a manual for customs officers on why saving the ozone layer, the different ODS smuggling schemes and screening methods to prevent the illegal trade of ODS.

109. In the water sector, the EEP has been supporting the reform of the sector, addressing governance and WASH policy issues. It supported the government to introduce structural improvements in the policy dialogue platforms on Integrated Water Resources Management (IWRM) and Drinking Water Supply and Sanitation. The programme has been facilitating policy dialogue in the water sector, focusing on: (a) clear distribution of roles for policy, regulation and management in the sector; (b) development and implementation of a comprehensive national capacity building programme in collaboration with other development partners; and (c) piloting the implementation of IWRM-based water sector reform at the regional/basin and sub-basin levels.

110. In the renewable energy sector, the EEP intervened at both policy and local levels in promoting renewable energy. At the policy level, the *Law on Renewable Energy Sources* followed by the secondary legislation to regulate tariff and ownership issues and provide standards in construction were developed and adopted with the support of the programme. In order to address the technical barriers in small hydropower technologies, the programme provided support in developing capacities of local manufacturers of hydropower equipment, enabling them to locally produce small capacity turbines. Then, based on these new local capacities, the programme supported the replication of small-scale hydropower plants through the Integrated Rural Development Model, which was first piloted in Burunov with the provision of electricity from small-scale

renewables schemes (up to 500kW) to social facilities (schools, kindergartens) and small businesses⁶.

111. In the sustainable transport sector, the EEP – through one project to improve access and quality of public transport services in Dushanbe – supported the development of of “*New Fuel Quality Standards for for Petrol and Diesel*” for Tajikistan, which were adopted in January 2014. It also supported the development of 15 km of dedicated bus lanes on Ayni, Sherozi, Somoni and Sino streets in Dushanbe and the installation of a Single Dispatcher Control Center at the Municipal Transportation Center with GPS in all buses for lines T-1 and B-3. The project has also been supporting the government to strengthen its legislation and regulations on transportation, including the need for a *Parking Policy* and its related regulatory changes; and a *Public Transportation Fare Policy* and its related regulatory changes. The current objective/discussion is to develop a transportation code, which will include all transportation matters in one piece of legislation. A draft transportation code was submitted to the government for its review in early 2015 and it is now on the Parliament legislative agenda.

112. Finally, integrating environmental sustainability has been spearheaded and scaled up through other local governance initiatives that are not part of the EEP. It included the integration of environmental issues into district development planning and monitoring frameworks of mid-term and long-term strategies; activities implemented through the DFID-funded project “*Support to Effective National Aid Coordination and Monitoring*” (SENACAM - Phase II) and the “*Communities Programme*” (CP). Currently, recommendations on integrating environmental standards into microfinance are being developed, and will be showcased through the promotion of green business approaches among entrepreneurs with DFID and GIZ-funded “*Rural Growth Programme*”. Finally, poverty and environment linkages will be implemented within the framework of the JICA-funded programme “*Livelihoods Improvement in Tajik-Afghan Cross-border Area*” and the PEI Phase II.

113. This good effectiveness was also indicated in the review of UNDAF 2010-2015 achievements conducted for the preparation of the next UNDAF cycle 2016-2020. Under the *Clean Water, Sustainable Environment and Energy* pillar, it was stated that the UN Country Team (UNCT) provided a comprehensive support and that the key results achieved were as follows⁷:

- In environmental protection, the UNCT contributed to improving the governance of protected areas, notably by supporting the preparation of the new Forestry Code, the revision of the Law on Protected Areas and building the capacities in planning and management of protected areas. At the local level, the UNCT worked with communities to promote environmentally sustainable livelihoods, resulting in over additional 200 green jobs. The UNCT also assisted with the preparation of the draft laws on “*Public Participation in Environmental Protection*”, “*Strategic Environmental Assessment*” and amendments to the Law of the Republic of Tajikistan on “*Ecological Expertise*”.
- In disaster risk management, support was given to develop the capacities in disaster risk management through the establishment of a Monitoring and Early Warning System. In addition, the Crisis Management Centre and the National Disaster Risk Reduction (DRR) Platform were established and are now functioning, and the National Recovery Guidance was developed. With the UNCT support, 2 DRR Funds were established and are part of a Micro-Loan Organization thus enabling sustainability of local level disaster risk reduction projects, with over 16,000 beneficiaries to-date.
- The UNCT supported the development of the Law on “*Renewable Energy Sources*” and the *Energy Efficiency Master Plan*, and promoted the construction of small hydropower plants and solar systems across the country.
- The land release process was accelerated with a territory of more than 13,5 km² contaminated with land mines cleared, and the development of *National Mine Action Standards*. The National Mine Action Centre, responsible for coordination and management of all mine action related activities,

⁶ An excellent case study on the experience in Burunov was compiled in November 2013 by Mr. Slavica Robic titled “*Socio-Economic and Environmental Benefits of Small Hydro Power in Tajikistan: Evidence from Burunov Community*”.

⁷ It is important to note that these key results are not all achievements from the EEP portfolio of projects and furthermore not from UNDP only but from other UN agencies as well.

was established by UNDP and later on was successfully nationalized by the Government of Tajikistan.

114. In the meantime, the evaluation of the UNDAF 2010-2015 also stated that the M&E framework and the reporting of progress made by the UNDAF has been incomplete, including only a partial capture and communication of achieved results. Nevertheless, this evaluation also states that the UNCT made very important contributions to national development priorities; “*indeed, the UNDAF achieved a number of important results in all its expected outcomes (UNDAF Outcomes and Agency Outcomes), at the highest level of the results chain of the Results Matrix*”.

115. This good effectiveness to support environmental management in Tajikistan was also confirmed by the recently conducted GEF Country Portfolio Evaluation. It also found that overall, the GEF support to Tajikistan to biodiversity conservation – including the improvement of the management of protected areas and biosafety legislation - has been more effective than in other focal areas. In the meantime, as a shift has been observed where reviewing the EEP portfolio of projects toward addressing/focusing more on water and energy issues (*see Section 4.2*), this effectiveness should also shift overtime.

116. As discussed in section 5.1.3, the reporting of gender considerations through projects progress reports has not been consistent throughout the EEP portfolio. Contrary to the recent “*Country Portfolio Evaluation (1999-2014)*” conducted by the GEF in November 2015, which states that “*gender has not been consistently considered in the Tajikistan (EEP) portfolio of projects*”, the Evaluator found that most projects contribute to reducing gender inequality at local level or at least consider gender through their implementation. What is lacking is better reporting on gender considerations through projects progress reports. One good example is the HCFC project, which recognized gender as a cross-cutting issue that is systematically incorporated into all project steps such as work planning, implementation, monitoring and evaluation, including the objective to remedy existing gender imbalances by improving the capacities of institutions, governments and companies to integrate gender mainstreaming principles in their day-to-day operations and by building and strengthening the capacities of women themselves. This gender-based implementation approach is also well reported in the progress reports of this project. In the meantime, it was noted that in most 2014 annual progress reports, gender was not even mentioned once.

5.2.2. Theory of Change

117. Following the review of the environment and energy challenges in Tajikistan in section 3 and the UNDP response to these challenges in section 4, the Evaluator reviewed the EEP strategy and its achievements using the “*Theory of Change*” approach⁸. As discussed in section 5.1, the EEP has been very relevant for Tajikistan. The EEP is particularly well aligned with the implementation of the *NDS to 2015*, the *LSIS 2013-2015*, and the *UNDAF*.

118. Furthermore, the review of the EEP outcome model indicates that it represented a relevant and appropriate vision on which the EEP was based. The theory of change diagram presented on the following page attempts to present this overall outcome model implemented over the last five (5) years. It shows that the “*chain of results*” was logical and coherent to achieve the expected outcome stated in the CPAP that was “*Sustainable natural resources management, improved environmental protection, and increased access to alternative renewable energy*”.

119. In order to achieve this CPAP outcome, the EEP identified two outputs and a set of indicative activities. In

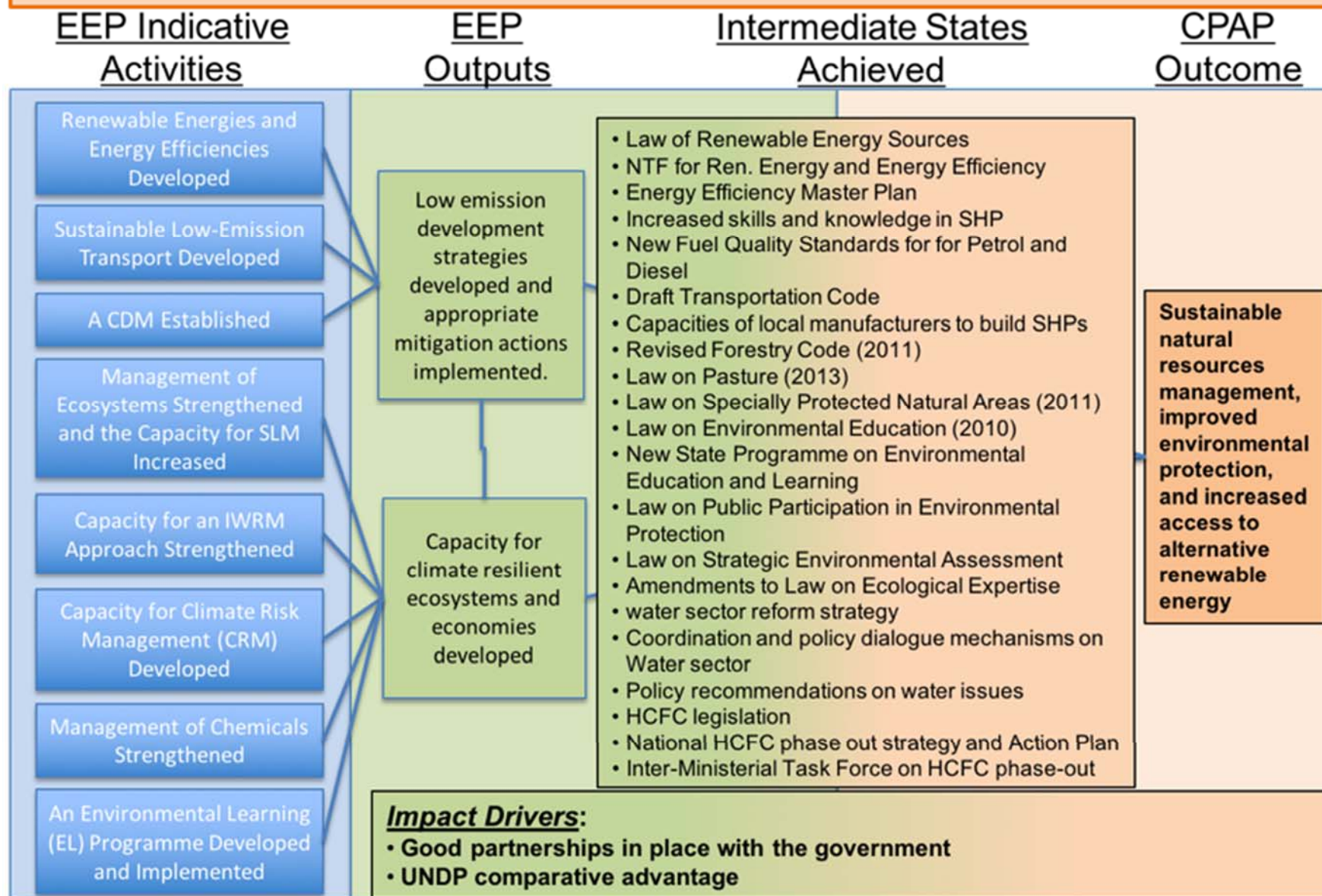
⁸ The “*Theory of Change*” is an approach that focuses on explaining the process of change by outlining causal linkages in an initiative: its shorter-term, intermediate, and longer-term outcomes. When used at the emergence of a project or programme concept, the “*Theory of Change*” defines long-term goals and then maps backward to identify the necessary preconditions to reach these goals. The identified changes are mapped – as the “*outcomes pathway*” – showing each outcome in logical relationship to all the others, as well as chronological flow. The innovation of this approach lies (1) in making the distinction between desired and actual outcomes, and (2) in requiring stakeholders to model their desired outcomes before they decide on forms of intervention to achieve those outcomes.

section 5.2.1 above, key achievements are listed in table 6 and a summary of these achievements is reproduced on the theory of change diagram below as “*Intermediate States Achieved*”. These “*Intermediate States*” are in fact the changes that were/are needed in order to achieve the CPAP outcome. Assessing the programme at the end of its cycle, this diagram summarizes the strategy and achievements of the programme and confirms its overall logic and its good progress made toward its objectives. The set of activities implemented through EEP projects led to the achievement of EEP outputs (2), which in turn led to the contribution toward the CPAP outcome.

120. Another important element in this approach/diagram is the recognition of “*Impact Drivers*” that are drivers for change in the area of environment and energy in Tajikistan. The Evaluator found two main “*Impact Drivers*” that contributed to the good effectiveness of the EEP 2010-2015:

- The first driver are good partnerships in place with the government of Tajikistan. As discussed in section 4.3, UNDP is an active member among the donor community in Tajikistan, playing key roles in coordinating donor support including being an active member of the DCC. UNDP has been part of the JCPS initiative developed in 2009, which has been used as a guidance to develop UNDP strategy in Tajikistan. As part of this coordination, it also includes the coordination with government agencies with the participation to government-led thematic working groups to develop common procedures and implementation tools in addition to other effective coordination and collaboration techniques. This good partnership was also confirmed by meetings with government officials held during this outcome evaluation. Due to its strong commitment to the development of Tajikistan over the years, UNDP has a strong political capital in Tajikistan.
- The second driver is the UNDP comparative advantage. As part of the UN Country Team (UNCT), UNDP comparative advantages include a long-term track record in the country, as well as relationships at national and local levels; neutrality and reputation as an honest broker among different stakeholders; technical expertise in many areas, including an ability to draw on technical networks world-wide; ability to contribute to solutions requiring a regional or international dimension; and capacity to mobilize physical inputs that enable service delivery and alleviate suffering. More specific to the environment and energy sectors, UNDP has comparative advantages in managing and building capacities in international treaty negotiations; in implementing small-scale systems such as SHPs; and an ability to improve behaviors, particularly in rural and peri-urban areas.

Tajik Energy and Environment Programme (EEP)



5.3. Efficiency

121. This section discusses the efficiency of the EEP, which is a measure of the productivity of the programme intervention process. It reviews to what degree achievements are derived from an efficient use of financial, human and material resources. It reviews the overall management approach and the use of adaptive management when implementing projects, as well as the modality used and the participation of stakeholders.

5.3.1. Management Approach

122. UNDP's management structures and working methods are appropriate and likely to be efficient. It includes the use of adaptive management to secure project deliverables while maintaining adherence to the overall design of projects. It is particularly adapted to Tajikistan where a limited number of professionals with environment and energy expertise and experience are available.

123. At the project level, efficiency was adequately addressed with regards to the allocation of resources. All Project managers interviewed agreed that there were no operational problems, exception made of some procurement of goods and services, particularly the contracting of staff and international experts that is usually a long process with several steps that sometimes takes more time than expected. Each project management structure is organized in a similar fashion. A Project Steering Committee (PSC) – or Project Board (PB) - oversees the project and the project manager. Typically, a PSC is comprised of one representative each from: the lead Ministry, UNDP, the Donor and key stakeholders. Decisions are taken on a consensus basis and as much as possible, the lead government agency is involved in recruitment and procurement and is included on the selection panel and the procurement evaluation committees.

124. Recognizing the development context of Tajikistan and the limited capacity of authorities to execute projects, the projects implemented under the Environment and Energy Programme were mostly executed in accordance with the UNDP Direct Implementation Modality (DIM) guidelines in close collaboration with the Government. The EEP document completed in 2011, mentioned that UNDP was to introduce the NIM⁹ approach along with the development of project implementation capacities at national and/or sub-national level for the government to take over responsibility over implementation of certain programme components. However, insufficient project management capacities within government agencies have prevented UNDP to execute more projects under the NIM guidelines.

125. Through interviews conducted during this evaluation, the Evaluator found that much of the responsibility of implementing projects lies with UNDP and not enough with the respective government partners. The review found that UNDP is deeply involved in implementing these EEP projects, absorbing lots of UNDP resources and to some extent preventing UNDP to work more on policy and strategic issues. Nevertheless, it is still a UNDP objective to maximize the use of the NIM approach to implement projects. UNDP wants to make sure that the government gains experience in managing and overseeing projects following international project management standards and that the government is more responsible for the implementation of these projects. It is also well known that this project implementation modality is more conducive to develop strong national ownership of projects achievements.

126. In general, project concepts, formulation of projects, preliminary negotiations, agreements, design and project approvals seem to have not been longer than other similar experiences in other UNDP country offices. However, the Country Portfolio Evaluation (CPE) conducted by the GEF in 2015 found that *“The GEF project cycle in the Tajikistan portfolio is perceived as too long, especially at the formulation stage”*. This review found

9 UNDP defines NIM (National Implementation Modality) as the management of UNDP programme activities in a specific programme country carried out by an eligible national entity of that country. It is expected to contribute most effectively to: (i) greater national self-reliance by effective use and strengthening of the management capabilities, and technical expertise of national institutions and individuals, through learning by doing; (ii) enhanced sustainability of development programmes and projects by increasing national ownership of, and commitment to development activities; and (iii) reduced workload and integration with national programmes through greater use of appropriate national systems and procedures. (Source: UNDP Financial Resources)

that on average, it takes about 26.72 months or 2.23 years for Full Size Projects (FSPs) in Tajikistan to move from inclusion in the project pipeline to implementation; about 17.95 months or about 1.5 years for Medium Size Projects (MSPs) and about 9.21 months for enabling activities to move from inclusion in the project pipeline to implementation. Stakeholders reported in interviews conducted by the GEF Evaluation Office that they consider these timeframes to be too long. According to them with these delays, there is a higher risk of losing staff, both within Government departments and GEF agencies, which would affect negatively implementation of projects. Moreover, long delays at the formulation and approval stages may lead to a need to revisit the project design during the inception phase. Nevertheless, despite that it takes over four months longer than the official threshold of 18 months established in GEF5, this same GEF review also concluded that in comparison with most portfolios analyzed by the GEF Evaluation Office in the last 10 years, Tajikistan scores rather well.

127. As discussed above, during this period 2010-2015, UNDP implemented projects mostly with a Direct Implementation Modality (DIM) approach. Most projects have been managed from the EEP office that is in fact a large Project Management Unit (PMU) implementing the portfolio of projects of the EEP. Each project is under the responsibility of a project leader who would be in charge of one or more projects depending the size and complexity of projects. Despite that this set-up provides an efficient way to move project resources, it does not contribute much to the development of a better national ownership of these projects and their respective achievements.

128. However, a promising approach was found with projects in the water sector. Instead of having a project manager (PM) based in the EEP office, the PM is based at the Ministry of Energy and Water Resources. Projects are still implemented using the DIM approach but this management arrangement created a de-facto water sector platform at the ministry where UNDP and other donors can directly discuss and coordinate their actions in the water sector with the ministry and its relevant agencies. Over time, this set-up seems to have evolved in a kind of “think-tank” providing technical expertise to the ministry on water issues as well as a conduit to bring much needed financial resources to reform the water sector. The results are a much more coordinated approach of donor support to reform the water sector and support the implementation of national priorities.

129. Overall, evidence of effectiveness and of national ownership is good. Nearly every stakeholder interviewed complimented UNDP for its professionalism in its working methods and/or its credibility and/or its low-key capacity building approach to structuring the management of its projects. UNDP’s implementation modality is suited for Tajikistan’s development situation; however, in the short and medium terms, UNDP needs to focus more on developing national project management capacities to transfer the implementation of projects to national stakeholders.

5.3.2. Resource Mobilization

130. As reviewed in section 4.1, UNDP was to mobilize USD 34.43M under the UNDAF 2010-2015 fourth priority area “resilience and environmental sustainability”, to achieve the outcome #6, which was the “People in Tajikistan are more resilient to natural and man-made disasters and benefit from improved policy and operational frameworks for environmental protection and sustainable management of natural resources”. However, the CPD for the same period drastically reduced the indicative resources for its fifth intervention area “Environment and Sustainable Development” with an expected amount of financial resources to be mobilized of USD 5M. Furthermore, the CPAP 2010-2015 raised UNDP indicative resources in this same sector and for the same period to USD 9.5M. Finally, the EEP document for the period 2011-2015 formulated in 2011, identified an indicative budget to be mobilized of USD 10.7M with a deficit of USD 4M at the outset of the programme; i.e. in early 2011.



131. This analysis reveals much discrepancies among the various planning documents. It indicates that

following the UNDAF, a more realistic budget of between USD 5 and 10 M was considered more appropriate when the CPD, CPAP and EEP Document were formulated. Nevertheless, the review of the EEP portfolio of projects (see Section 4.2) indicates a budget of over USD 35.2M, which is more in line with the original figure in the UNDAF 2010-2015. This financial resources funded 17 projects (10 are now completed and 7 are still on-going). A further USD 27.9M has been identified for 9 projects, which are currently in the pipeline to be developed.

132. Considering the above, the mobilization of financial resources to fund the EEP programme is appropriate and sufficient. It was noted the remarkable growth of the EEP portfolio of projects since the formulation of the EEP document; i.e. from USD 10.7M to 35.2M. These figures show clearly the evidence that UNDP was able to mobilize the necessary financial resources to implement its Energy and Environment Programme. Multiple sources provided these financial resources. They include a solid portfolio of GEF funded projects, UNDP (TRAC resources), JICA, EC, Oxfam, BCPR, SIWI, SDC and Russia Trust Fund. Despite that no resource mobilization strategy has been developed, this un-written strategy is appropriate and has been effective in achieving the outputs of the EEP. Considering the changes in financing development projects, including the emerging Green Climate Fund (GCF), it is hoped that UNDP will be able to carry over its success to mobilize financial resources for its EEP. However, it will also necessitate to adjust its resource mobilization strategy.

133. The review also focused on the timeline of each project (starting and ending dates). The table below presents the implementation years for each EEP projects. It shows an on-going flow of projects under implementation. As of 2016, the number of on-going projects is down to 4 projects; however, 9 projects are in the pipeline at different stages of development and it is expected that some of them will soon start being implemented.

Table 7: EEP Projects Timelines

2010	2011	2012	2013	2014	2015	2016	2017	Pipeline
Gissar								
EL & SI								
Ren Energy								
				DIY				
			Post-Rio Agenda					
IWRM								
TajWSS-I								
		Conflict Management						
		HRBA-Water						
	SHP							
CACILM								
STM								
			HCFC					
				EM & IM				
				Drinking Water				
				IWRM				
				TajWSS-II				
								Snow Leopard

2010	2011	2012	2013	2014	2015	2016	2017	Pipeline
								Snow Leopard
								POPs
								Waste
								Sustainable Energy
								Green Energy
								IWRM
								Groundwater
								Snow-Glaciers

Source: Annex 8 of this report

5.3.3. Monitoring and Evaluation

134. Monitoring and evaluation (M&E) of the EEP mostly occurs at the project level. All EEP projects have logical frameworks with indicators and targets at the end of projects. Monitoring reports are produced quarterly for UNDP and depending on the donor funding the project, other progress reports are produced to comply with the reporting requirements. Overall, these quarterly reports are compiled into Annual Progress Reports (APRs). However, no progress reports are collated together to measure how well the overall EEP is progressing as a programme.

135. A brief review of indicators used by the EEP projects indicates that most indicators are easily measurable; particularly in the energy area where some indicators are quantitative such as *No. of new small hydropower projects under implementation* or *Cumulative electricity generation from newly installed SHPs*. All indicators have baselines and targets at the end of the project and means of verification. The review also noted that most indicators focus on measuring the changed practices as a result of the programme's work. It is a good practice and these indicators are generally more measurable, attributable and realistic (all three aspects of SMART indicators). As a result, it makes the measurement of outcome achievements more direct and more compelling and more easily understood, particularly by stakeholders.

5.4. Sustainability

136. This section discusses the potential for the long-term sustainability of achievements of the EEP. It is an indication of whether outcomes (end of programme results) and positive impacts (long-term results) are likely to continue after the projects end. This discussion considers three dimensions (risks) to sustainability: financial, socio-economic, and institutional capacity and governance.

5.4.1. Socio-economic Risk to Sustainability

137. Following the 2008-2009 global economic crisis, Tajikistan's economy recovered quickly with an average growth of over 7% during the period 2010-2013; helped by remittances inflows that rebounded sharply, supporting private consumption and, to a much lesser extent, investment. However, since 2014, growth has slowed down. According to the UNDAF 2016-2020, the country is faced with the problem of low investment averaging about 15% of GDP annually (2009-2013). The main obstacles cited by both local and foreign entrepreneurs are inadequate infrastructure, in particular, insufficient and unreliable energy supply; the weak rule of law, especially as regards property rights, and tax policy and administration. As a result, Tajikistan's economy remains highly vulnerable to external factors beyond its control.

138. At the macro-economic level, the conditions in Tajikistan are not too favorable for increasing national capacity to maintain, manage and ensure development results into the future; particularly in the environmental

area. This overall economic situation is an impediment to sustain EEP achievements over the long-term and prevents government agencies to “take over” these achievements. It also renders the co-financing of the EEP by the government more difficult; hence limiting the development of a strong national ownership and furthermore, the ability of the government to up-scale some of these achievements such as scaling-up the construction and installation of SHPPs.

139. As a result, national priorities are concentrated on issues of critical national importance that would impact positively first the economy and the living standards. This is reflected in the NDS to 2030, which identified four strategic goals for the next 15 years: (i) Ensuring energy security; (ii) Development of the country’s communication potential; (iii) Ensuring food security; and (iv) Expanding effective employment. This reality is to be taken into account when programming in Tajikistan. It can already be observed in the shift of the EEP portfolio of projects, which is focusing more and more on energy and water issues that are closer to the four goals cited above.

140. From a socio-economic perspective, as cited in the CPAP 2010-2015, approximately two-thirds of the rural population rely on agriculture for at least 50% of their income, agricultural and natural resource management are important contributors to rural livelihoods. UNDP has been focusing on “*transforming livelihoods*” through its country programme to reduce poverty, primarily for the rural population, through the direct provision of economic development support, through decreasing the risk of natural and man-made hazards, and through capacity development of local communities to manage natural resources sustainably and participate to sustainable livelihood.

141. A good example – under the EEP - is the Gissar project that promoted sustainable natural resource use practices in and around protected areas (PAs). After selecting communities causing the most damage to PAs, the project supported the piloting of alternative livelihood activities to demonstrate alternatives for more sustainable livelihoods such as community-based joint forest management; livestock and pasture management; community-based tourism; and development of sustainable energy options. As a result, this project created over 200 “green” jobs.

142. The EEP is part of the UN intervention approach in Tajikistan and the recently formulated UNDAF 2016-2020 will continue to focus on improving community livelihoods and their resilience, particularly rural communities. One target of this planning framework is to create an additional 5,000 “green” jobs by 2020. The review indicates that from a socio-economic point of view, the EEP achievements are sustainable over the long-term.

5.4.2. Financial Risk to Sustainability

143. As discussed in section 5.4.1 above, the macro-economic environment in Tajikistan is not too favorable. However, the review also recognized the ability of UNDP-Tajikistan to raise donor resources to fund EEP projects (*see Section 5.3.2*). It is certainly a good measure to mitigate the financial sustainability of the EEP in the short and medium term. For the most part, the financial sustainability of UNDP’s environment and energy programme will depend upon the ongoing contributions of its main partners in the donor community and hopefully upon increases of government co-financing over the long-term to address critical national priorities; given that UNDP enjoys a strong political capital within the government of Tajikistan.

144. In the meantime, from a financial perspective and due to a not too favorable macro-economic environment, some achievements may face some risk when it comes to their sustainability over the long-term. This is the case of the installation of SHPPs. As much as this initiative is successful, including the development of national capacities to build parts of these units, a SHPP will require resources to operate and to be maintained. There is a risk that these resources may not be fully available when needed. The same can be said for the strengthening of environmental monitoring in Tajikistan. The project is currently underway and is supporting the CEP to strengthen this function nationally. However, the reality is that the national budget allocated to environmental monitoring is very low, covering the cost of a few staff and no operational budget to

undertake environmental monitoring activities. Currently, the CEP is requesting an extra 17 staff from the government. The project is proceeding well in a strong partnership with CEP and the National Biodiversity and Biosafety Center (NBBC). However, there is a risk that achievements under this project may not be financially sustainable.

145. More generally, as it was discussed in section 5.2 and in the section 5.4.3 below, the EEP emphasized the strengthening of institutions and governance in the environment, energy and water sectors. It is true that the EEP has been successful and appreciated by the government and other partners. It contributed to strengthening the policy, legal and institutional frameworks. It provided a better enabling environment in these sectors, which, it is hoped, will provide better contexts for addressing issues in these sectors at the beneficiary level such as better access to electricity, better water management schemes and a more sustainable environment. However, the macro-economic environment in Tajikistan is such that the restricted government financial resources may prevent the implementation/application of these revised frameworks. It is an impediment to ensure the long-term sustainability of the EEP achievements and it needs to be taken into consideration when developing EEP projects through mitigation measures such as ensuring that the issues to be addressed are of national importance and contribute as much as possible to raising livelihoods and economic conditions of communities. Such an approach will also contribute to a greater national ownership and over time to a better sustainability of these achievements.

5.4.3. Institutional Capacity and Governance Risk to Sustainability

146. UNDP's EEP has emphasized strengthening institutions and governance – including policy and regulatory frameworks - that will support the continuation of benefits and ensuring the sustainability of projects achievements. The following are examples of this from the portfolio of projects under the EEP:

- Supported the development of the Law of Renewable Energy Sources followed by the secondary legislation to regulate tariff and ownership issues and provide standards in construction;
- Developed the Energy Efficiency Master Plan for Tajikistan;
- Facilitated the establishment of the National Trust Fund for Renewable Energy and Energy Efficiency;
- Supported development of New Fuel Quality Standards for for Petrol and Diesel;
- Supported the revision of the 1993 Forestry Code and the related regulations;
- Supported the development of the Law on Pasture (enacted in March 2013);
- Supported the New Law on Specially Protected Natural Areas;
- Support to the development of a law on drinking water and water supply and dam safety;
- Support to the development of the water sector reform strategy;
- Developed policy recommendations on the specific water issues;
- Developed a methodology for inventory of irrigation systems;
- Drafted a new HCFC legislation including a National HCFC phase out strategy and Action Plan for the period of 2015-2020.

147. Institutional capacity, in the form of systems, structures, staff, and expertise, is critical to sustain the benefits from UNDP's contributions. Every one of the projects under the EEP contains elements that seek to strengthen institutional capacity. For example, the HCFC project supported the establishment of an Inter-Ministerial Task Force on HCFC phase-out; the Gissar project supported the establishment of 4 Jamoat Resource Centers (JRCs). These centers serve as main public institutions for delivering environmentally sustainable livelihoods within local communities, as well as a welcome interface between communities and the local protected areas and their respective staff. The Technology Transfer for SHP project supported the establishment of facilities to train technicians on SHP at the Tajik Technical University. Under the IWRP project, six Water User Associations (WUAs) were created and capacity of members developed through training on water use plans, business planning, office management, water accounting, rehabilitation of selected infrastructure, and resolution of water-related conflicts. Furthermore, this project supported the reform of the Isfara River Basin Authorities in both Kyrgyzstan and Tajikistan with the support to a Joint Commission and a Basin Council to oversee the management of the Isfara basin. From an institutional point of view, the IWRP project supported the

development of a charter for the water-users federation, regulations for water committees, a charter for the IWRM foundation, an agreement for the water-users federation in the Isfara river sub-basin. These documents were approved by the Ministry of Land Reclamation and Water Resources of Tajikistan; reinforcing the institutional capacity to manage water related affairs and develop a sustainable governance framework.

148. These are good example of projects developing institutional capacity and contributing to the long-term sustainability of programme achievements. However, it is also recognized that institutional capacity cannot be fully developed in the timeframe of these projects; it takes a longer time to produce the necessary changes required to address most national priorities. Future work and support will likely be needed to operationalize some of these achievements; particularly those focusing on the development of better policy and legislation frameworks.

6. LESSONS LEARNED

149. A summary of lessons learned is presented below. These are based on the review of documents, interviews with key informants and analysis of the information collected for this outcome evaluation:

- All over the world governments are swayed largely by economic arguments. It is critical for any EEP programmes and priorities to be able to “speak the language of economics”. It is particularly true for environmental programmes. The EEP program in Tajikistan must highlight the economic value of healthy ecosystems and their services and the heavy economic costs of degraded ecosystems and polluted air and water in order to marshal the necessary resources from government to address the problems.
- Government stakeholders value working with UNDP and there is still very much of a need for UNDP in Tajikistan. Input from stakeholders gathered during this outcome evaluation such as “*working with UNDP improves work practices; it gives us access to more external resources; we learn to work according to international standards; it is responsive to national needs*” confirms the added value of working with UNDP.
- The active participation of UNDP in the Donor Coordination Council with the participation of the Government of Tajikistan allowed the design and implementation of programmes and projects responding better to national priorities and taking better into consideration the comparative advantages of development partners – including UNDP - for a more effective coordination of development aid.
- Successful projects are those that demonstrate high ownership, both in depth and breadth, in their formulation and implementation, and have immediate and tangible benefits to the communities (beneficiaries). UNDP continued support to Tajikistan has enhanced ownership, harmonization, alignment and managing for results through mutual accountability.
- When full ownership is not evident at the planning stage, UNDP should be cautious before proceeding (even though the project may be addressing a key “governance deficit”); and where ownership appears lacking during project implementation, UNDP should take this up with the relevant agency without delay. In extreme cases, UNDP should be ready to put the project on hold or cancel it.
- In order to ensure the mainstreaming of gender considerations in a programme or project, it is important that gender-based expected results, indicators and targets be identified during the formulation of the programme or project. Once it is part of the programme or project strategy and of the monitoring framework, mainstreaming gender considerations becomes part of the implementation of the project as well as part of reporting project progress.
- In most cases, achieving success in an EEP project involves changing human behavior (i.e. convincing farmers to manage land resources in a sustainable way, or convincing communities to sort their solid waste before it goes to the dump, or convincing investors to invest in small-scale hydro, etc.). Too often, the policy response to this challenge of changing human behavior relies too much on “command

and control” kinds of solutions rather than providing different types of incentives to stakeholders to help them “do the right thing”.

- Local ownership will only happen if there are excellent relations and a sense of mutual confidence between UNDP and the relevant agencies at the design and implementation stages. This requires a great deal of effort on both sides at both operational and more senior level.
- UNDP does not give adequate consideration to project exists and possible follow-on projects at an earlier stage. Most projects seem to come to a premature end and that the investment made in these projects could have a higher return if it was possible to extend those projects.
- In the current socio-economic environment, biodiversity conservation in Tajikistan requires the support of international donors. The Government of Tajikistan is certainly making progress towards improving its ability to support biodiversity conservation. However, there will be a continuing need for external inputs for several years if not decades where UNDP is slowly emerging among the primary donors in the field of biodiversity particularly in terms of its ability to successfully capture and program GEF funds.
- UNDP strategy in the environment, energy and water sectors is not well known. It is encapsulated in its 5-year cycle CPAPs but most stakeholders have a limited/partial knowledge about it and there seem to be only few opportunities to promote this strategy.
- Most activities implemented under the EEP require a multi-agency/stakeholder approach, including government entities at different levels: national, regional and local. They require perspectives and involvement of multiple sectors. This is a challenge given the traditional boundaries between ministries and between government and civil society.
- UNDP integrated programming requires innovation. Innovative approaches are necessary to demonstrate that UNDP can deliver integrated programming.

Annex 1: Terms of Reference

Terms of Reference (TOR) For Outcome Evaluation for UNDP Tajikistan Energy and Environment Programme (Final version 14 August 2015)

Introduction:

The UNDP country programme for the period of 2010-2015 aims to achieve the objectives set out in the National Development Strategy of the Republic of Tajikistan for the period up to 2015, in accordance with the UN [Millennium Development Goals](#). The promotion of national development policies and programmes are undertaken through a combination of policy support for the MDGs and capacity development support for service delivery, strategic planning, and resource mobilization. Building on its comparative advantages, programme strengths and lessons learned from previous interventions, UNDP focuses its interventions on the areas of (1) Poverty Reduction and Achievement of MDGs, (2) Reducing burden of HIV/AIDS, Malaria and Tuberculosis, (3) Good Governance, (4) Crisis Prevention and Recovery, and (5) Environment and Sustainable Development. Particular attention is given to the scaling up of proven successful initiatives, utilizing best practices and lessons learned to inform policy reform, and promoting gender equality as a cross-cutting issue.

In close partnership and coordination with the Committee for Environmental Protection, UNDP strives to contribute to national goals with regard to achieving environmental sustainability and sustainable natural resource management, as well as related UN's Millennium Development Goals. The UNDP project portfolio on energy and environmental issues has been growing for the past few years, with many of the projects being in their final stages of implementation.

UNDP's involvement in this area is framed around the following outcome: “**Environment and Sustainable Development - Improved environmental protection, sustainable natural resources management, and increased access to alternative renewable energy.**”

Within 2011-2015 programmatic period, UNDP's support has been shaped up to contribute to Tajikistan's transition to low emission and climate resilient development as a prerequisite for sustainable human development. UNDP's Energy and Environment Programme (E&E Programme) is a five-year initiative that is built to contribute to the implementation of Tajikistan's National Development Strategy 2010-2015 and is comprised of projects implemented both at the national and at the local levels utilizing the area-based development principles.

Situation update on environmental issues in Tajikistan

- (i) *State of natural resources.* The main issues include (a) land degradation and soil erosion, and (b) loss of biodiversity and ecosystems. These are being primarily affected by inadequate environmental management and lack of education and awareness of the impacts of environmental degradation. As two-thirds of the rural population of Tajikistan relies on agriculture, land degradation caused by improper irrigation practices, desertification, deforestation and erosion hinders efforts to reduce poverty. It is estimated that 97% of Tajik farmland has been harmed by the Soviet heritage irrigation practices and salinization. Land degradation, combined with slow and ineffective land and market reforms, adversely influences farmers' income generation and slows down the process of poverty reduction. A recent study on economics of land degradation in Tajikistan estimates the economic cost of land degradation associated with foregone production on degraded and unused agricultural lands to be in the order of US\$

442 mln. – around 7,8% of Tajikistan’s GDP¹⁰. However the actual cost is likely to be much higher than this as it does not take into account the off-site costs of land degradation, such as damage to infrastructure.

- (ii) *Lack of knowledge and limited access to technology.* The energy, water and waste sectors are representative of the negative feedback that is affecting the country. The abundance of resources (and hence potential supply) is in stark contrast with reality. Energy and water losses are high, making so that lack of energy during winter period and water shortages are constantly afflicting the population. These problems reinforce each other, as limited access to electricity often means reduced access to water, sanitation, irrigation, health, and other social services, whose provision requires adequate electric power supply.
- (iii) *Impacts of climate change.* The high vulnerability to natural disasters is making the link between the environment and poverty explicit. With more than half of the country’s territory covered by high mountains above 3,000 meters, Tajikistan is particularly vulnerable to natural disasters, such as earthquakes, landslides, floods, avalanches and extreme climate conditions. Efforts to improve climate adaptation are paramount, not so much to improve longer-term trends, but to reduce short-term vulnerability of the population and the economy (e.g. agriculture) to extreme events that would have lasting negative impacts. In fact, a large portion of economically disadvantaged communities in Tajikistan derive their livelihoods from activities, such as agriculture, which are highly sensitive to climate change impacts. In this respect, it is estimated that damages caused by natural disasters amount to about 4.8% of GDP¹¹. The poorest part of the population is the most impacted by natural disasters, as it lives in areas highly exposed to hazards and lacks the financial and capacity means to enhance crisis prevention and recovery.

Brief description of the outcome (baseline of the outcome and current situation of the outcome)

1. Under the area of *Environment and Sustainable Development*, the Outcome 6 of UNDP’s Country Programme Action Plan (CPAP) for Tajikistan covering the period of 2010-2015 is to improve environmental protection and sustainable natural resources management, as well as increase access to renewable energy. This outcome is achieved through two expected outputs:

- (a) Government is provided with capacity building support to negotiate, ratify and implement major international conventions, transnational policy and legal frameworks on sustainable natural resources management (including climate change, water management and biodiversity);
- (b) Alternative renewable technologies including biogas, hydro, and solar power are demonstrated, understood and widely used including the establishment of favorable policy and legal framework and contributing to private sector development.

In addition, under this area of environment and sustainable development, the Country Programme Action Plan sets four targets for the period 2010-2015:

- Tajikistan is compliant with (reporting requirements) under all (ratified) environmental conventions;
- Environmentally sustainable livelihoods ensured through at least 30 pilot projects;
- At least 10 districts address linkages between poverty and environment in their District Development Plans (DDPs);
- At least 30 renewable energy projects implemented in prioritized areas to promote a sustainable renewable energy sector.

Outcome progress by the end of 2015 and UNDP contribution

¹⁰ UNDP/UNEP Poverty and Environment Initiative. The economics of Land Degradation for the Agricultural Sector in Tajikistan. A scoping study. Dushanbe 2012.

http://www.unpei.org/sites/default/files/dmdocuments/TJ_Economy%20of%20land%20degradation_ENG.pdf

¹¹ GoT and UNDP (2012), National Human Development Report 2012. Tajikistan: Poverty in the Context of Climate Change - <http://hdr.undp.org/es/informes/nacional/europacei/tajikistan/Tajikistan%202013.pdf>

Moreover, the E&E Programme provides a mix of policy advice, project development and implementation services, knowledge management and advocacy services through projects, benefitting from UNDP global initiatives and also from synergies with other programmes of UNDP Tajikistan such as the Communities Programme and the Disaster Risk Management Programme. More information about UNDP portfolio of Energy and Environment projects is available on web-site: www.theglobalfund.org and www.undp.tj

The resource mobilization and development of the solid portfolio of over 18 projects in such areas as water and sanitation policies, biodiversity and climate change, environmental information management, renewable energy and chemicals management, with overall budget of over US\$ 20 mln has been the most significant achievement in this area of work.

UNDP's leadership and support in the water sector since the recent years has been growing, and is presently focused on support to the water sector reform, governance and WASH policy issues. With UNDP's advisory support, the Government introduced structural improvements in the policy dialogue platforms on Integrated Water Resources Management and Drinking Water Supply and Sanitation¹². To-date, UNDP facilitates the policy dialogue in water sector, focusing on: (a) clear distribution of roles for policy, regulation and management in the water sector; (b) development and implementation of a comprehensive national capacity building programme with support of development partners; and (c) pilot implementation of IWRM-based water sector reform at the regional/basin and sub-basin levels.

In biodiversity, major achievements include solid improvements in the governance of protected areas¹³, notably via development of the new Forestry Code, the revision of the Law on Protected Area and building the capacities in planning and management of protected areas, as well as working with communities to achieve environmentally sustainable livelihoods. UNDP has also played a catalytic role in the development of the State Programme for Environmental Education and Learning¹⁴, which resulted in the introduction of the environmental classes in the secondary education. The efforts to promote locally produced agrobiodiversity products resulted in the establishment of the market chain for mulberry products, which are now being exported to Latvia, Lithuania and Russia¹⁵. With UNDP's support, the Government of Tajikistan has prepared its Second and Third National Communications to the United Nations Framework Convention on Climate Change (UNFCCC)¹⁶.

The major achievements in promoting renewable energy in Tajikistan happened both at policy and local levels. At the policy level, the Law of Renewable Energy Sources was adopted, followed by secondary legislation to regulate tariff and ownership issues, and provide for standards in construction. To address the technical barriers in small hydropower, the process of technology transfer and market development has resulted in building capacities of local manufacturers of hydropower equipment, enabling them to produce small capacity turbines locally. Building on this, UNDP replicates the Integrated Rural Development (IRD) Model first piloted Burunov, with provision of electricity from small scale renewables primarily hydro power plants (up to 500kW) to social facilities (schools, kindergartens) and small businesses¹⁷.

Based on lessons learnt from CPAP Cycle 2005-2009, integrating environmental sustainability is also spearheaded and scaled up through its bigger local governance initiatives. E.g. the work on integrating environmental issues into district development planning and monitoring frameworks of mid-term and long-term strategies is implemented in partnership with DFID-funded "Support to Effective National Aid Coordination and

¹² Evaluation Report of Tajikistan Water Supply and Sanitation Project: Phase I, 2014. available www.tajwss.tj

¹³ [Final evaluation for PIMS 1786 "Demonstrating new approaches to protected areas and biodiversity management in the Gissar Mountains as a model for strengthening the national Tajikistan protected areas system"](#)

¹⁴ [Final evaluation for PIMS 3514 "Environmental Learning and Stakeholder Involvement as Tools for Global Environmental Benefits and Poverty Reduction"](#)

¹⁵ [Mid-term evaluation for PIMS 3647 "Sustaining agricultural biodiversity in the face of climate change in Tajikistan"](#)

¹⁶ Tajikistan's Second and Third National Communications to the UNFCCC. www.unfccc.int

¹⁷ RBEC's Transformational Success Stories publication on "Sustainable Energy Solutions", 2013.

Monitoring” (SENACAM - Phase II) project and Communities Programme. The recommendations on integrating environmental standards into microfinance are developed, and further on showcased through promotion of green business approaches among entrepreneurs (utilizing evidence-based policy development approach), within the framework of DFID and GIZ funded “Rural Growth Programme”. The interventions on scaling up pilot community-level projects showcasing P-E linkages will be implemented within the framework of JICA funded “Livelihoods Improvement in Tajik-Afghan Cross-border Area”, utilizing parallel funding from JICA project and advisory/advocacy services of PEI Phase II. All abovementioned projects are expected to start in 2014.

Objectives of the evaluation:

The outcome evaluation will not only assess progress towards or achievement of the outcome but will also make recommendations on the realignment of programme design and response arrangements to be adopted both for the immediate, short term and long term. The findings and recommendations of the outcome evaluation will be used to identify UNDP involvement in the thematic area in Tajikistan within the corporate planning frameworks and documents such as United Nations Development Assistance Framework (UNDAF), Country Programme Document (CPD) and Country Programme Action Plan (CPAP) which will ensure achievement of the expected development outcome(s).

Scope of the evaluation:

Based on criteria of relevance, effectiveness, efficiency and sustainability the scope of the evaluation is expected to include lessons learned, findings and recommendations in the following areas:

- Whether the **outcome** as stated in the CPAP has been achieved or what is the progress made towards its achievement. The outcome should be assessed within the context of the overall national development priorities in the areas of Environment and Sustainable Development as well as in the context of UNDP mandate in the field of Energy and Environment.
- Identify contribution of key UNDP outputs to achievement of the outcome.
- The contribution of the outcome towards attainment of targets set in the Millennium Development Goals and CPD/CPAP and national strategic goals according to NDS/PRS and sectoral national programmes and action plans.
- An analysis of the underlying factors within and beyond UNDP’s control that affect the outcome (including analysis of strengths, weaknesses, opportunities and threats affecting the achievement of the outcome).
- Whether UNDP’s outputs and other interventions can be credibly linked to the achievement of the outcome, including the key outputs from programmes, projects and soft (i.e policy advice and dialogue, advocacy and brokerage/coordination services) and hard assistance that contributed to the outcome.
- Whether UNDP’s partnership strategy has been appropriate and effective including the range and quality of partnerships and collaboration developed with government, civil society, donors, the private sector and whether these have contributed to improved programme delivery. The degree of stakeholder and partner involvement in the various processes related to the outcome should be analysed.
- Whether gender and human rights dimensions are being adequately addressed in UNDP programming and have contributed to the achievement of the outcome.
- An assessment should also be made of the validity of the assumption of UNDP’s comparative advantage in the area of capacity development of the government and civil society.

Products expected from the evaluation:

- 1) Inception report with finalised and agreed terms of reference, evaluation matrix, questionnaires and agreed methodology of evaluation (one week after beginning of assignment/contract)
- 2) A comprehensive evaluation report with findings, recommendations, lessons learned, rating on performance

of both the outcome and outputs.

3) Applying “Theory of Change” and utilizing the results of the evaluation recommendations, develop a framework document for Energy and Environment Programme (utilizing the format of standard UNDP Project Document), including the development of the resource mobilization strategy and pipeline of project concepts as its integral part.

It is expected that draft report will be submitted to UNDP CO in two working weeks after in-country mission, and the final report with all comments and recommendations incorporated submitted to UNDP CO for final endorsement not later than in two working weeks after receipt of UNDP formal feedback with comments to a draft.

The findings are expected to feed into further strategic planning processes and implementation of UNDP’s Energy and Environment Programme and the integration of environmental sustainability, climate change resilience dimensions into other UNDP supported programmes within the framework of the new and current corporate strategies, UNDAF and CPD. The report should include:

- An assessment of the progress towards outcomes and progress towards outputs;
- Rating on the relevance of the outcome.
- Lessons learned concerning best and worst practices in producing outputs, linking them to outcomes and using partnerships strategically;
- Recommendations for formulating future assistance in the outcome, determination of appropriate directions of work for UNDP Tajikistan.
- Strategies for continuing UNDP assistance towards the outcome with consideration of sustainability of assisted interventions;
- A monitorable action plan for follow-up on recommendations provided by the evaluation.

Methodology or evaluation approach:

The key elements of the methodology to be used by the evaluation team will consist of the following:

- Documentation review (desk study);
- Interviews with key partners and stakeholders;
- Field visits;
- Questionnaires;
- Participatory techniques and other approaches for the gathering and analysis of data;

Documents to be reviewed

Some of the background documents to be reviewed as part of the outcome evaluation are as follows¹⁸:

- Country Programme Document (CPD) 2010-2015;
- Country Programme Action Plan (CPAP) 2010-2015;
- United Nations Development Assistance Framework (2010-2015);
- Energy and Environment Programme Document;
- National legislation, strategies and programmes as deemed relevant to the scope of evaluation;
- Project documents (please refer to the list of projects provided in the Annex 1);
- Millennium Development Goals, Tajikistan Progress Report 2010;
- Mid-term and final evaluation reports of the project (please refer to the list of projects provided in the Annex 1).

¹⁸ Final list of references and sources for desk review will be agreed and stipulated in inception report.

Evaluation team:

The evaluation team will comprise **one International Evaluation Consultant**. The international evaluation consultant will have the responsibility for the overall co-ordination of the evaluation activity and for ensuring final coherence of the report, both in terms of content and presentation.

The international consultant should hold an advance university degree in environmental sciences, climate change, or social sciences, and have over ten years of professional experience in the evaluation work and be competent and experienced in some of the following areas:

- Project design, management and implementation;
- Expertise and experience in monitoring and evaluation;
- Experience with development management /organizational capacity building;
- Qualifications in environmental sciences, social sciences;
- Knowledge and competencies/experience in policy analysis;
- Experience in development aid and technical cooperation would be an advantage;
- Knowledge of UNDP procedures and programme implementation strategies will be considered as an additional asset;
- Good report writing skills;
- Advanced computer literacy;
- Excellent knowledge of English with proven writing skills; knowledge of Russian language would be an asset.

The international evaluation consultant will be allocated 20 working days (5 working days for desk work, 5 working days of in-country mission, and 10 working days for writing the report and programme document. The final workload distribution will be outlined in inception report) and the national consultant 15 working days for this assignment.

Action Plan for Outcome Evaluation

Deliverables, activities, and milestones follow this tentative schedule:

ACTIVITIES	TIME-FRAME
a. Desk review, reading of outcome-related documentation	September 2015
b. Submission of the Inception report with tentative mission agenda	September 2015
c. 5-day in country mission and presentation of findings at the end of the mission	End of September –Early October 2015
d. First draft of the Outcome Evaluation report	Mid-October 2015
e. Final Outcome Evaluation report in form and substance satisfactory to UNDP, submitted 2 weeks after the receipt of final comments from UNDP CO	November 2015
f. Framework Document for Energy and Environment Programme (with resource mobilization strategy and pipeline of project concept notes being an integral part of it), in form and substance satisfactory to UNDP	November 2015

Implementation arrangements:

The UNDP Tajikistan Country Office through its Energy and Environment Programme, and in close consultations with the Committee for Environmental Protection of the Republic of Tajikistan, will be responsible for coordinating, organising and managing the evaluation. UNDP staff will be also responsible for liaising with partners, backstopping and providing relevant documentation and technical feedback to the evaluation team.

Outcome Evaluation Timeframe

The evaluation will be implemented in September-November 2015. It is preliminary planned that international consultant will have to spend at least 15 working days for desk review of provided documentation, and preparation of inception report, draft and final report. 5-day in-country mission is planned in second half of September or in early October to meet stakeholders and arrange interviews and field visits. The final version of all deliverables should be provided to UNDP CO by 30th of November 2015 latest.

Annex 1. Main outputs and initiatives expected to have contributed to the outcome

The list of projects is attached in Excel table.

Annex 2: Evaluation Consultant Code of Conduct and Agreement Form

Evaluators / Consultants:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Outcome Evaluation Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: *Jean-Joseph Bellamy, International Evaluator*

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed in Ottawa on November 5, 2015



Signature: _____

Annex 3: Evaluation Matrix

The evaluation matrix below served as a general guide for the evaluation. It provided directions for the evaluation; particularly for the collection of relevant data. It was used as a basis for interviewing people and reviewing project documents. It also provided a basis for structuring the evaluation report as a whole.

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
Evaluation criteria: Relevance - How did the UNDP Environment and Energy programme relate to the main objectives of the UN system in Tajikistan and to the national priorities of Tajikistan at the local, regional and national levels?				
<i>Was the Programme relevant to UNDAF and CPAP objectives?</i>	<ul style="list-style-type: none"> ▪ How did the programme support the related strategic priorities of the UNDAF and CPAP? ▪ Were EE programme criteria for programme identification adequate in view of actual needs? 	<ul style="list-style-type: none"> ▪ Level of coherence between programme objectives and those of the UNDAF and CPAP 	<ul style="list-style-type: none"> ▪ Programme and project documents ▪ UN policies and strategies ▪ UN web site 	<ul style="list-style-type: none"> ▪ Documents analyses ▪ Interviews with UN officials and other partners
<i>Was the Programme relevant to Tajikistan's development objectives?</i>	<ul style="list-style-type: none"> ▪ Did the programme follow the government's stated priorities? ▪ How did the programme support the development objectives of Tajikistan? ▪ Did the programme address the identified problems? ▪ How country-driven was the programme? ▪ Did the programme adequately take into account national realities, both in terms of institutional framework and programming, in its design and its implementation? ▪ To what extent were national partners involved in the design of the programme? 	<ul style="list-style-type: none"> ▪ Degree to which the programme support national environmental and development objectives ▪ Degree of coherence between the programme and national priorities, policies and strategies, related to environmental management and energy ▪ Appreciation from national stakeholders with respect to adequacy of programme design and implementation to national realities and existing capacities? ▪ Level of involvement of Government officials and other partners into the programme ▪ Coherence between needs expressed by national stakeholders and UNDP criteria 	<ul style="list-style-type: none"> ▪ Programme and projects documents ▪ National policies, strategies and programmes ▪ Key government officials and other partners 	<ul style="list-style-type: none"> ▪ Documents analyses ▪ Interviews with government officials and other partners
<i>Did the Programme address the needs of target beneficiaries?</i>	<ul style="list-style-type: none"> ▪ How did the programme support the needs of target beneficiaries? ▪ Was the implementation of the programme been inclusive of all relevant Stakeholders? ▪ Were local beneficiaries and stakeholders adequately involved in programme formulation and implementation? 	<ul style="list-style-type: none"> ▪ Strength of the link between programme expected results and the needs of target beneficiaries ▪ Degree of involvement and inclusiveness of beneficiaries and stakeholders in programme design and implementation 	<ul style="list-style-type: none"> ▪ Beneficiaries and stakeholders ▪ Needs assessment studies ▪ Programme and projects documents 	<ul style="list-style-type: none"> ▪ Documents analysis ▪ Interviews with beneficiaries and stakeholders
<i>Was the Programme internally coherent in its design?</i>	<ul style="list-style-type: none"> ▪ Was the 2011-2015 programme sourced through a demand-driven approach? ▪ Was there a strong link between programme expected results (Result and Resources Framework) and expected results from projects developed under this programme? ▪ Was the length of the programme conducive to achieve expected outcomes? 	<ul style="list-style-type: none"> ▪ Level of coherence between programme expected results and projects expected results and their logic ▪ Level of coherence between programme design and projects implementation approaches 	<ul style="list-style-type: none"> ▪ Program and project documents ▪ Key project stakeholders 	<ul style="list-style-type: none"> ▪ Document analysis ▪ Key Interviews

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
<i>How was the Programme relevant in light of other donors?</i>	<ul style="list-style-type: none"> ▪ With regards to Tajikistan, did the programme remain relevant in terms of areas of focus and targeting of key activities? ▪ How did UNDP help to fill gaps (or give additional stimulus) that are crucial but are not covered by other donors? 	<ul style="list-style-type: none"> ▪ Degree to which the programme was coherent and complementary to other donor programming in Tajikistan ▪ List of programs and funds in which future developments, ideas and partnerships of the programme are eligible? 	<ul style="list-style-type: none"> ▪ Other Donors' policies and programming documents ▪ Other Donor representatives ▪ Programme and projects documents 	<ul style="list-style-type: none"> ▪ Documents analyses ▪ Interviews with other Donors
Future directions for the E and E programme	<ul style="list-style-type: none"> ▪ What lessons have been learnt and what changes could have been made to the programme in order to strengthen the alignment between the programme and Partners' priorities and areas of focus? ▪ How could the programme better target and address priorities and development challenges of targeted beneficiaries? 		<ul style="list-style-type: none"> ▪ Data collected throughout evaluation 	<ul style="list-style-type: none"> ▪ Data analysis
Evaluation criteria: Effectiveness – To what extent have the goal and expected outcomes been achieved?				
<i>How was the Programme effective in achieving its goal and expected outcomes?</i>	<ul style="list-style-type: none"> ▪ Was the programme effective in achieving its goal that was to support Tajikistan's transition to low emission and climate resilient development as a prerequisite for sustainable human development? ▪ Was the programme effective in achieving its expected outcomes? <ul style="list-style-type: none"> ○ Low emission development strategies developed and appropriate mitigation actions implemented <ul style="list-style-type: none"> ▪ Renewable Energies and Energy Efficiencies Developed ▪ Sustainable Low-Emission Transport Developed ▪ A Clean Development Mechanism (CDM) Established ○ Capacity for climate resilient ecosystems and economies developed <ul style="list-style-type: none"> ▪ Management of Ecosystems Strengthened and the Capacity for Sustainable Land Management (SLM) Increased ▪ Capacity for an Integrated Water Resources Management (IWRM) Approach Strengthened ▪ Capacity for Climate Risk Management (CRM) Developed ▪ Management of Chemicals Strengthened ▪ An Environmental Learning (EL) Programme Developed and Implemented 	<ul style="list-style-type: none"> ▪ Changes to the quantity and strength of barriers to improve environmental protection, sustainable natural resources management, and increase access to alternative renewable energy such as change in: <ul style="list-style-type: none"> ○ Technical resource and human capacity constraints; ○ Ineffective policy and legal instruments; ○ Absence of awareness, education and advocacy; ▪ New methodologies, skills and knowledge ▪ Change in capacity for information management: knowledge acquisition and sharing; effective data gathering, methods and procedures for reporting. ▪ Change in capacity for awareness raising <ul style="list-style-type: none"> ○ Stakeholder involvement and government awareness ○ Change in local stakeholder behavior ▪ Change in capacity in policy making and planning to improve environmental management and energy conservation: <ul style="list-style-type: none"> ○ Policy reform ○ Legislation/regulation change ○ Development of national and local strategies and plans ▪ Change in capacity in implementation and enforcement <ul style="list-style-type: none"> ○ Design and implementation of risk assessments ○ Implementation of national and local strategies and action plans through adequate institutional frameworks and their maintenance ○ Monitoring, evaluation and promotion of pilots ▪ Change in capacity in mobilizing resources <ul style="list-style-type: none"> ○ Leverage of resources ○ Human resources ○ Appropriate practices ○ Mobilization of advisory services ▪ Changes in use and implementation of sustainable alternatives 	<ul style="list-style-type: none"> ▪ Programme and projects documents ▪ Key stakeholders including UNDP, Representatives of Gov. and other Partners ▪ Research findings 	<ul style="list-style-type: none"> ▪ Documents analysis ▪ Meetings with main Programme Partners ▪ Interviews with Programme beneficiaries and other stakeholders

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
<i>How are the Programme impacts on the local environment?</i>	<ul style="list-style-type: none"> ▪ What are the impacts or likely impacts of the programme on: <ul style="list-style-type: none"> ○ Local environment; ○ Poverty; and, ○ Other socio-economic issues. 	<ul style="list-style-type: none"> ▪ Local livelihood ▪ Provide specific examples of impacts at those three levels, as relevant 	<ul style="list-style-type: none"> ▪ Programme and projects documents ▪ Key Stakeholders ▪ Research findings 	<ul style="list-style-type: none"> ▪ Data analysis ▪ Interviews with key stakeholders
<i>How was risk and risk mitigation being managed?</i>	<ul style="list-style-type: none"> ▪ How well were risks and assumptions being managed? ▪ What was the quality of risk mitigation strategies developed? Are they sufficient? ▪ Were there clear strategies for risk mitigation related with long-term sustainability of the programme? 	<ul style="list-style-type: none"> ▪ Completeness of risk identification and assumptions during programme planning ▪ Quality of existing information systems in place to identify emerging risks and other issues? ▪ Quality of risk mitigations strategies developed and followed 	<ul style="list-style-type: none"> ▪ Programme and projects documents and evaluations ▪ UNDP and Programme Partners 	<ul style="list-style-type: none"> ▪ Documents analysis ▪ Interviews
Future directions for similar Programmes	<ul style="list-style-type: none"> ▪ What lessons have been learnt for the programme to achieve its outcomes? ▪ What changes could have been made (if any) to the formulation of the programme in order to improve the achievement of programme's expected results? ▪ How could the programme have been more effective in achieving its results? 		<ul style="list-style-type: none"> ▪ Data collected throughout evaluation 	<ul style="list-style-type: none"> ▪ Data analysis
Evaluation criteria: <i>Efficiency - Was the programme implemented efficiently, in-line with international and national norms and standards?</i>				
<i>Was Programme support channeled in an efficient way?</i>	<ul style="list-style-type: none"> ▪ Was adaptive management used or needed to ensure efficient resource use? ▪ Did the programme <i>Result and Resources Framework</i> used as management tools during implementation? ▪ Were the accounting and financial systems in place adequate for programme management and producing accurate and timely financial information? ▪ How adequate was the M&E framework (indicators & targets)? ▪ How and were progress reports produced accurately, timely and responded to reporting requirements? ▪ Was programme implementation as cost effective as originally proposed (planned vs. actual) ▪ Were financial resources utilized efficiently? Could financial resources have been used more efficiently? ▪ How was RBM used during programme implementation? ▪ Was the programme decision-making effective? ▪ Did the government provide continuous strategic directions to the programme's formulation and implementation? ▪ Have these directions provided by the government guided the activities and outcomes of the programme? 	<ul style="list-style-type: none"> ▪ Availability and quality of financial and progress reports ▪ Timeliness and adequacy of reporting provided ▪ Level of discrepancy between planned and utilized financial expenditures ▪ Planned vs. actual funds leveraged ▪ Cost in view of results achieved compared to costs of similar programme from other organizations ▪ Adequacy of programme choices in view of existing context, infrastructure and cost ▪ Quality of RBM reporting (progress reporting, monitoring and evaluation) ▪ Occurrence of change in programme formulation/ implementation approach (i.e. restructuring) when needed to improve efficiency ▪ Existence, quality and use of M&E, feedback and dissemination mechanism to share findings, lessons learned and recommendation on effectiveness of programme design. ▪ Cost associated with delivery mechanism and management structure compare to alternatives ▪ Gender disaggregated data in programme documents 	<ul style="list-style-type: none"> ▪ Programme and projects documents and evaluations ▪ UNDP, Representatives of Gov. ▪ Beneficiaries and Programme partners 	<ul style="list-style-type: none"> ▪ Documents analysis ▪ Key Interviews

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
	<ul style="list-style-type: none"> Were there an institutionalized or informal feedback or dissemination mechanisms to ensure that findings, lessons learned and recommendations pertaining to programme formulation and implementation effectiveness were shared among stakeholders, UNDP staff and other relevant organizations for ongoing programme adjustment and improvement? Did the programme mainstream gender considerations into its implementation? 			
<i>How efficient were partnership arrangements for the Programme?</i>	<ul style="list-style-type: none"> Was the government engaged? What impact have political changes had on delivery timelines? How did the government demonstrate its ownership of the programme? Did the government provide counter-parts to the programme? To what extent partnerships/linkages between institutions/ organizations were encouraged and supported? Which partnerships/linkages were facilitated? Which one can be considered sustainable? What was the level of efficiency of cooperation and collaboration arrangements? (between local actors, UNDP and relevant government entities) Which methods were successful or not and why? 	<ul style="list-style-type: none"> Specific activities conducted to support the development of cooperative arrangements between partners, Examples of supported partnerships Evidence that particular partnerships/linkages will be sustained Types/quality of partnership cooperation methods utilized 	<ul style="list-style-type: none"> Programme and projects documents and evaluations Programme Partners Beneficiaries 	<ul style="list-style-type: none"> Documents analysis Interviews
<i>Did the Programme efficiently utilize local capacity in implementation?</i>	<ul style="list-style-type: none"> Was an appropriate balance struck between utilization of international expertise as well as local capacity? Did the Programme take into account local capacity in formulation and implementation of the Programme? Was there an effective collaboration with scientific institutions with competence in environmental protection, sustainable natural resources management, and alternative renewable energy? 	<ul style="list-style-type: none"> Proportion of total expertise utilized taken from Tajikistan Number/quality of analyses done to assess local capacity potential and absorptive capacity 	<ul style="list-style-type: none"> Programme and projects documents and evaluations UNDP and Programme partners Beneficiaries 	<ul style="list-style-type: none"> Documents analysis Interviews
Future directions for similar Programmes	<ul style="list-style-type: none"> What lessons can be learnt from the programme on efficiency? How could the programme have more efficiently addressed its key priorities (in terms of management structures and procedures, partnerships arrangements etc...)? What changes could have been made (if any) to the programme in order to improve its efficiency? 		<ul style="list-style-type: none"> Data collected throughout evaluation 	<ul style="list-style-type: none"> Data analysis
<i>Evaluation criteria: Sustainability - To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term programme results?</i>				
<i>Were sustainability issues adequately integrated in</i>	<ul style="list-style-type: none"> Were sustainability issues integrated into the formulation and implementation of the programme? Did the programme include an exit strategy? Does the programme employ government implementing and/or monitoring systems? 	<ul style="list-style-type: none"> Evidence/Quality of sustainability strategy Evidence/Quality of steps taken to address sustainability 	<ul style="list-style-type: none"> Programme document and evaluations UNDP and programme Partners Beneficiaries 	<ul style="list-style-type: none"> Documents analysis Interviews

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
<i>Programme design?</i>	<ul style="list-style-type: none"> Is the government involved in the sustainability strategy for programme outcomes? 			
<i>Did the programme adequately address financial and economic sustainability issues?</i>	<ul style="list-style-type: none"> Did the programme adequately address financial and economic sustainability issues? Are the recurrent costs after programme completion sustainable? 	<ul style="list-style-type: none"> Level and source of future financial support to be provided to relevant sectors and activities after programme end? Evidence of commitments from international partners, governments or other stakeholders to financially support relevant sectors of activities after programme end Level of recurrent costs after completion of programme and funding sources for those recurrent costs 	<ul style="list-style-type: none"> Programme and projects documents and evaluations UNDP and programme Partners Beneficiaries 	<ul style="list-style-type: none"> Documents analysis Interviews
<i>Organizations arrangements and continuation of activities</i>	<ul style="list-style-type: none"> Were results of efforts made during programme implementation period well assimilated by organizations and their internal systems and procedures? Is there evidence that programme partners will continue their activities beyond programme support? Has there been a buy-in process, or was there no need to sell the programme and buy support? What degree is there of local ownership of initiatives and results? Were appropriate 'champions' being identified and/or supported? 	<ul style="list-style-type: none"> Degree to which programme activities and results have been taken over by local counterparts or institutions/organizations Level of financial support to be provided to relevant sectors and activities by in-country actors after the end of the programme Number/quality of champions identified 	<ul style="list-style-type: none"> Programme and projects documents and evaluations UNDP and programme Partners Beneficiaries 	<ul style="list-style-type: none"> Documents analysis Interviews
<i>Enabling Environment</i>	<ul style="list-style-type: none"> Were laws, policies and frameworks addressed through the programme, in order to address sustainability of key initiatives and reforms? Were the necessary related capacities for lawmaking and enforcement built? What is the level of political commitment to build on the results of the programme? 	<ul style="list-style-type: none"> Efforts to support the development of relevant laws and policies State of enforcement and law making capacity Evidence of commitment by the political class through speeches, enactment of laws and resource allocation to priorities 	<ul style="list-style-type: none"> Programme and projects documents and evaluations UNDP and programme Partners Beneficiaries 	<ul style="list-style-type: none"> Documents analysis Interviews
<i>Institutional and individual capacity building</i>	<ul style="list-style-type: none"> Is the capacity in place at the regional, national and local levels adequate to ensure sustainability of results achieved to date? 	<ul style="list-style-type: none"> Elements in place in those different management functions, at appropriate levels (regional, national and local) in terms of adequate structures, strategies, systems, skills, incentives and interrelationships with other key actors 	<ul style="list-style-type: none"> Programme and projects documents and evaluations UNDP and Programme Partners Beneficiaries Capacity assessments available, if any 	<ul style="list-style-type: none"> Interviews Documentation review
<i>Social and political sustainability</i>	<ul style="list-style-type: none"> Did the programme contribute to key building blocks for social and political sustainability? Did the programme contribute to local Stakeholders' acceptance of new practices? 	<ul style="list-style-type: none"> Example of contributions to sustainable political and social change with regard to environmental protection, sustainable natural resources management, and alternative renewable energy 	<ul style="list-style-type: none"> Programme document and project evaluations UNDP and Programme Partners Beneficiaries 	<ul style="list-style-type: none"> Interviews Documentation review

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
<i>Replication</i>	<ul style="list-style-type: none"> ▪ Were programme activities and results replicated elsewhere and/or scaled up? ▪ What was the programme contribution to replication or scaling up of innovative practices or mechanisms to improve environmental protection, sustainable natural resources management, and increase access to alternative renewable energy? ▪ Does the programme have a catalytic role? 	<ul style="list-style-type: none"> ▪ Number/quality of replicated initiatives ▪ Number/quality of replicated innovative initiatives ▪ Volume of additional investment leveraged 	<ul style="list-style-type: none"> ▪ Other donor programming documents ▪ Beneficiaries ▪ UNDP and Programme Partners 	<ul style="list-style-type: none"> ▪ Documents analysis ▪ Interviews
<i>Challenges to sustainability of the Programme</i>	<ul style="list-style-type: none"> ▪ What are the main challenges that may hinder sustainability of efforts? ▪ Have any of these been addressed through programme management? ▪ What could be the possible measures to further contribute to the sustainability of efforts achieved with the programme? 	<ul style="list-style-type: none"> ▪ Challenges in view of building blocks of sustainability as presented above ▪ Recent changes which may present new challenges to the programme 	<ul style="list-style-type: none"> ▪ Programme and projects documents and evaluations ▪ Beneficiaries ▪ UNDP and Programme Partners 	<ul style="list-style-type: none"> ▪ Documents analysis ▪ Interviews
Future directions for the Programme	<ul style="list-style-type: none"> ▪ Which areas/arrangements under the programme show the strongest potential for lasting long-term results? ▪ What are the key challenges and obstacles to the sustainability of results from this programme that must be directly and quickly addressed? ▪ How can the experience and good programme practices influence the strategies for environmental management and energy conservation? ▪ Are national decision-making institutions (Parliament, Government etc.) in Tajikistan ready to improve their measures to improve environmental management and energy conservation? 		<ul style="list-style-type: none"> ▪ Data collected throughout evaluation 	<ul style="list-style-type: none"> ▪ Data analysis

Annex 4: List of Documents Reviewed

The list of documents consulted will be added here in the final report.

Annex 5: Interview Guide

Note: This was a guide for the International Evaluator; it is a simplified version of the evaluation matrix. Not all questions were asked to each interviewee; it was a quick reminder for the Evaluator about the type of information required to complete the evaluation exercise and a guide to prepare the semi-structured interviews.

I. RELEVANCE - *How did the UNDP Environment and Energy programme relate to the main objectives of the UN system in Tajikistan and to the national priorities of Tajikistan at the local, regional and national levels?*

- I.1. Was the Programme relevant to UNDAF and CPAP objectives?
- I.2. Was the Programme relevant to Tajikistan's development objectives?
- I.3. Did the Programme address the needs of target beneficiaries?
- I.4. Was the Programme internally coherent in its design?
- I.5. How was the Programme relevant in light of other donors?

Future directions for similar programmes

- I.6. What lessons have been learnt and what changes could have been made to the programme in order to strengthen the alignment between the programme and Partners' priorities and areas of focus?
- I.7. How could the programme better target and address priorities and development challenges of targeted beneficiaries?

II. EFFECTIVENESS – *To what extent have the goal and expected outcomes been achieved?*

- II.1. Was the programme effective in achieving its goal that was to support Tajikistan's transition to low emission and climate resilient development as a prerequisite for sustainable human development?
- II.2. Was the programme effective in achieving its expected outcomes?
 - o Low emission development strategies developed and appropriate mitigation actions implemented
 - Renewable Energies and Energy Efficiencies Developed
 - Sustainable Low-Emission Transport Developed
 - A Clean Development Mechanism (CDM) Established
 - o Capacity for climate resilient ecosystems and economies developed
 - Management of Ecosystems Strengthened and the Capacity for Sustainable Land Management (SLM) Increased
 - Capacity for an Integrated Water Resources Management (IWRM) Approach Strengthened
 - Capacity for Climate Risk Management (CRM) Developed
 - Management of Chemicals Strengthened
 - An Environmental Learning (EL) Programme Developed and Implemented
- II.3. How are the Programme impacts on the local environment?
- II.4. How was risk and risk mitigation being managed?

Future directions for similar programmes

- II.5. What lessons have been learnt for the programme to achieve its outcomes?
- II.6. What changes could have been made (if any) to the formulation of the programme in order to improve the achievement of programme's expected results?
- II.7. How could the programme have been more effective in achieving its results?

III. EFFICIENCY - *Was the programme implemented efficiently, in-line with international and national norms and standards?*

- III.1. Was adaptive management used or needed to ensure efficient resource use?
- III.2. Did the programme Result and Resources Framework used as management tools during implementation?
- III.3. Were the accounting and financial systems in place adequate for programme management and producing accurate and timely financial information?
- III.4. How adequate was the M&E framework (indicators & targets)?
- III.5. How and were progress reports produced accurately, timely and responded to reporting requirements?
- III.6. Was programme implementation as cost effective as originally proposed (planned vs. actual)?
- III.7. Were financial resources utilized efficiently?

- III.8. How was RBM used during programme implementation?
- III.9. Did the government provide strategic directions to the programme's formulation and implementation?
- III.10. Was the programme decision-making effective?
- III.11. Have these directions provided by the government guided the activities and outcomes of the programme?
- III.12. Were there an institutionalized or informal feedback or dissemination mechanisms to ensure that findings, lessons learned and recommendations pertaining to programme formulation and implementation effectiveness were shared among stakeholders, UNDP staff and other relevant organizations for ongoing programme adjustment and improvement?
- III.13. Did the programme mainstream gender considerations into its implementation?
- III.14. Was an appropriate balance struck between utilization of international expertise and local capacity?
- III.15. Did the Programme use local capacity in formulation and implementation of the Programme?
- III.16. Was there an effective collaboration with scientific institutions with competence in environmental protection, sustainable natural resources management, and alternative renewable energy?
- III.17. Was the government engaged?
- III.18. How did the government demonstrate its ownership of the programme?
- III.19. Did the government provide counter-parts to the programme?
- III.20. To what extent partnerships/linkages between institutions/organizations were encouraged and supported?
- III.21. Which partnerships/linkages were facilitated? Which one can be considered sustainable?
- III.22. What was the level of efficiency of cooperation and collaboration arrangements? (between local actors, UNDP and relevant government entities)
- III.23. Which methods were successful or not and why?

Future directions for the programme

- III.24. What lessons can be learnt from the programme on efficiency?
- III.25. How could the programme have more efficiently addressed its key priorities (in terms of management structures and procedures, partnerships arrangements, etc., ...)?
- III.26. What changes could have been made (if any) to the programme in order to improve its efficiency?

IV. SUSTAINABILITY - *To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term programme results?*

- V.1. Were sustainability issues adequately integrated in the design of the Programme?
- V.2. Did the programme adequately address financial and economic sustainability issues?
- V.3. Is there evidence that programme partners will continue their activities beyond programme support?
- V.4. Were laws, policies and frameworks addressed through the programme, in order to address sustainability of key initiatives and reforms?
- V.5. Is the capacity in place at the national and local levels adequate to ensure sustainability of results achieved to date?
- V.6. Does the programme contribute to key building blocks for social and political sustainability?
- V.7. Are programme activities and results being replicated elsewhere and/or scaled up?
- V.8. What are the main challenges that may hinder sustainability of efforts?

Future directions for the programme

- V.9. Which areas/arrangements under the programme show the strongest potential for lasting long-term results?
- V.10. What are the key challenges and obstacles to the sustainability of results of programme initiatives that must be directly and quickly addressed?

Annex 6: Evaluation Mission Agenda

SCHEDULE of VISIT
Mr. Jean-Joseph Bellamy
International Consultant to conduct Portfolio Outcome Evaluation
(Energy and Environment Programme, Disaster Risk Management Programme, Poverty Environment Initiative, Communities Programme, Agrobiodiversity Project)
26 November - 05 December 2015 Dushanbe, Tajikistan

Time	Meeting	Translator	Place	Remarks
26 November (Thursday)				
04:50am	Arrival to Dushanbe airport pick-up		Hotel "Atlas BB"	Confirmed
10:30-11:30	Briefing: Presentation of evaluation methodology, process and discussion of mission programme Participants: Mr. Ghulam Isaczai, Country Director a.i., UNDP Mr. Jean-Joseph Bellamy, Evaluation Expert Ms. Nargizakhon Usmanova, Program Analyst, UNDP Mr. Khurshed Kholov, EEP Programme Manager, UNDP Mr. Mirzohaydar Isoev, Chemicals Cluster Coordinator, UNDP Ms. Malika Khakimova, Programme Associate, UNDP		UNDP Country office 39 Aini St.	Confirmed
12:00-13:00	Lunch			
13:30-15:00	Meeting with PEI_CP/EEP portfolio project: discussion of projects inputs to achieve the results under the Outcome 6 Participants: Mr. Jean-Joseph Bellamy, Evaluation Expert, Ms. Zebo Jalilova, Programme Analyst, UNDP Mr. Firuz Khamidov, CP Programme Manager Ms. Tahmina Azizova, PEI Coordinator Mr. Jurabek Sattorov, CP Senior LG officer		CP Office/UNDP Country office 39 Aini St.	Confirmed
15:30-16:30	Meeting with World Bank, Mr. Bobojon Yatimov		World Bank	Confirmed
17:00-18:00	Wrap up of the day/any other business			
27 November (Friday)				
9:00-11:30	Meeting with relevant EEP portfolio projects: HCFC, Technology Transfer, Transport Management, CCCD, SGP, TAJWSS/IWRM and others.		EEP Office Shevchenko Street	Confirmed

Time	Meeting	Translator	Place	Remarks
	Participants: Mr. Jean-Joseph Bellamy, Evaluation Expert, EEP Programme Manager and other relevant programme/project staff			
12:00-13:00	Lunch			
13:30-15:00	Meeting with other vertical programmes: DRMP Participants: Mr. Jean-Joseph Bellamy, Evaluation Expert, DRMP Programme Manager and relevant project staff		DRMP Office Shevchenko Street	Confirmed
15:30-16:30	Meeting with Agrobiodiversity Project Participants: Mr. Jean-Joseph Bellamy, Evaluation Expert, Agrobiodiversity Project manager and relevant project staff/national implementing partner team	Shoista Shaimardonova	National Biodiversity and Biosafety Center 47 Shevchenko St.	Confirmed
17:00-18:00	Meeting with the Deputy Minister of the Ministry of Energy and Water Resources of the RT - Water Cluster Mr. Sulton Rakhimov	Shoista Shaimardonova	MOEWR	Confirmed
28 November (Saturday)				
08:30-10:30	Field Visit to JRC Sabo, Shahrinav district	Noor Umarov		Mirzo (confirmed)
11:00-13:00	Arrival to Dushanbe Visit to EnergoRemont and Korgohi Moshinasozi factories (Technology Transfer)			Confirmed.
13:30-14:30	Lunch			
14:00-15:00	Meeting with Ms. Nozigul Khushvakhtova, SSTMD Project Lawyer			Confirmed
15:15-16:30	Visit to Dispatch Center (Transport)			Confirmed /Surayo
30 November (Monday)				
09:00-10:00	Meeting with the Deputy head of the Committee on Environmental Protection, Ms Oykhon Sharipova	Karina Davidova	Committee on Environmental Protection 5/1 Shamsi St.	confirmed /Surayo
10:30-11:30	Meeting with the Director of the Forestry Agency Mr. Ismatov Azizullo; Tel: 906660966, 2255996		Forestry Agency Nagornaya St.	Confirmed/ Madina B
12:00-13:00	Lunch			
13:30-14:30	Meeting with the Deputy Minister of the Ministry of Economic Development and Trade, Ms. Gulru Kayumova; Tel: 2273604, 2216914		MEDT	confirmed by (Surayo)

Time	Meeting	Translator	Place	Remarks
15:00-17:00	Meeting with SGP Grantees: 1) Christensen Fund , Mr. Alibek Otambekov (confirmed); 2) NGO “Zan va Zamin” – winner of Equator prize (TBC); 3) TajNET group of NGOs (confirmed) ; 4) Ms. Rafika Musaeva, NGO Association of Energy experts (tbc).		EEP Shevchenko office	Confirmed / Madina B
01 December (Tuesday)				
9:30-10:30	To be agreed?	Karina Davidova		
11:00-12:00	Meeting with the Ministry of Energy and Water Resources of the RT_ Energy Cluster Mr. Jamshed Shoimov		MOEWR	confirmed /Surayo
12:30-13:30	Lunch			
14:00-15:00	Meeting with EU Mr. Emil Dankov, Attaché , Programme Manager – Water and Energy Sectors		EU office Delegation to Tajikistan 74, Adhamov Street 734013	Confirmed
15:30-16:30	Meeting with ADB Mr.		ADB Office	Confirmed
17:00-19:00	Mr. Khurshed Khusainov		EEP Office, Shevchenko	Confirmed /Mirzo
02 December (Wednesday)				
9:00-10:00	Meeting with JICA Ms. Yuko Kusama; Mr. Fujii. Takuro; Mr. Tojiddin Najmedinov		JICA office /Serena Hotel/5 th floor	Confirmed
10:30-11:30	Meeting with SDC Mr.		SDC Office	To be confirmed by Malika
12:00-13:00	Lunch			
13:30-14:30	Meeting with Deputy Head of Hydrometeorology Center– UNFCCC Mr. Abdualimov Karimjon 93 501 84 07; 221 41 24;	Eleonora Yunusova	Hydromet	confirmed (Surayo)
15:00-16:00	Meeting with Director IFAD in Tajikistan Mr. Karimov Saadi 90 000 47 17		Ministry of Agriculture	Confirmed /Surayo
16:30-17:30	Debriefing: preliminary presentation of evaluation findings Participants: Mr. Ghulam Izacsai, Country Director a.i., UNDP Ms. Nargizakhon Usmanova, Program Analyst, UNDP Mr. Jean-Joseph Bellamy, Evaluation Expert Mr. Khurshed Kholov, EEP Programme Manager, UNDP Mr. Mirzohaydar Isoev, Chemicals Cluster Coordinator, UNDP Ms. Malika Khakimova, Programme Associate, UNDP		UNDP Country office 39 Aini St.	Confirmed
CCCD Mission: 03 December (Thursday)				

Time	Meeting	Translator	Place	Remarks
09:30-13:00	Project Board Meeting	Larisa Gvasalia		Mirzo
13:00-14:00	Lunch			
14:00-16:00	Meeting with Mr. Safarov, NBBC			Mirzo, Dilovar
16:00-17:00	Desk work			
CCCD Mission: 04 December (Friday)				
10:00-11:00	Meeting with Mr. Rahmatullo Khayrulloev (progress on elaboration of the list of environmental indicators)	Larisa Gvasalia		Dilovar
11:00-12:00	Meeting with Mr. Norov, Deputy Director of the Agency on statistics under the President of the Republic of Tajikistan			
12:00-13:00	Lunch			
13:00-17:00	Desk work			
05 December (Saturday)				
	Departure to the airport (Atlas BB)			

Annex 7: List of People Interviewed

Ms. Abdiyeva Nazik, Country Liaison Analyst, Central Asia and Russia Regional Bureau for Europe and the CIS, UNDP New York (Interim Deputy Country Director)

Mr. Abdulhaq Aliev, Director, SEU “Dushanbenaqliyotkhadamotrason” under Dushanbe Mayor Office

Ms. Azizova Tahmina, PEI Coordinator, UNDP

Mr. Azizullo Ismatov, Director of the Forestry Agency;

Mr. Bobojon Yatimov, Senior Rural Development Specialist, The World Bank

Ms. Burkhanova Muazama, Chairperson, Foundation to Support Civil Initiatives

Mr. Dankov Emil, Attaché Programme Manager, Delegation of the European Union

Mr. Faizulloev Firdavs, Programme Manager, UNDP

Ms. Farosatshoeva Gulsun, Senior Project Assistant, Tajikistan Resident Mission, ADB

Mr. Fujii Takuro, Assistant Representative (Agriculture and Water), JICA

Mr. Gaforovich Karimov Sadi, Director, State Enterprise Project Management Unit “Livestock and Pasture Development”, IFAD

Mr. Igamberdyev Shuhrat, Water Cluster Coordinator, EEP, UNDP

Mr. Isaczai Ghulam, Country Director a.i., UNDP

Mr. Isoev Mirzohaydar, Chemicals Cluster Coordinator, UNDP

Ms. Jalilova Zebo, Programme Analyst, UNDP

Ms. Kayumova Gulru, Deputy Minister of the Ministry of Economic Development and Trade

Ms. Khakimova Malika, Programme Associate, UNDP

Mr. Khamidov Firuz, CP Programme Manager, UNDP

Mr. Kholov Khurshed, EEP Programme Manager, UNDP

Mr. Khusainov Khurshed, National Technical Advisory, HCFC

Ms. Khushvakhtova Nozigul, Lawyer, SSTMD Project

Mr. Kodirkulov Jamshed, Project Analyst/ Manager, EEP, UNDP

Mr. Mamadaminov Parviz, SUE “Korgohi Mashinasozi” (ex TajikTextileMash)

Dr. Musaev Vali, Project Manager, Project Support to Effective National Aid Coordination and Monitoring

Mr. Mustafokul Sultonov, deputy Director of the Forest Agency;

Mr. Najmedinov Tojiddin, Program Officer, JICA

Mr. Nematullo Safarov Director of NBBC, CoEP Tajikistan

Mr. Nurali Hisainov, director Forest Institute;

Mr. Nuraliev Temurjon, Manager IT department, Transportation Authority

Mr. Otambekov Alibek, National Program Consultant, the Christensen Fund

Ms. Oykhon Sharipova, Deputy head of the Committee on Environmental Protection

Mr. Rakhimov Sulton, Deputy Minister of the Ministry of Energy and Water Resources (Water Cluster)

Mr. Raupov Suhrob, Project Manager, EEP, UNDP

Mr. Safovudin Jaborov, Project Coordinator, State Enterprise Project Management Unit “Livestock and Pasture Development”, IFAD

Mr. Saidov Madibron, Director of State Institution on Protected Areas under Forest Agency;

Mr. Sattorov Jurabek, CP Senior LG officer, UNDP

Mr. Shoimov Jamshed, Deputy Minister of the Ministry of Energy and Water Resources (Energy Cluster)

Mr. Skochilov Yuri, Executive Director, Youth Ecological Center

Ms. Usmanova Nargizakhon, Program Analyst, UNDP

Mr. Ziganshin Ruslan, LITACA Project Coordinator, UNDP Communities Programme

Annex 8: List of Projects under the EEP

Completed EEP Projects

Project Title	Project Objectives	Category	Project Budget	Donor	Implementing Agency	Project Location	Project Duration	Status
Demonstrating new approaches to Protected Areas and Biodiversity Management in the Gissar Mountains as a model for strengthening the national Tajikistan Protected Areas System	The objective of the project is to catalyze the improved conservation of globally significant biodiversity in Tajikistan through the demonstration of new mechanisms and approaches to effective management of protected areas and natural resources adjacent to them.	Biodiversity	1,745,000	GEF/UNDP	UNDP	Gissar	2005-2010	Completed
Environmental Learning and Stakeholder Involvement as Tools for Global Environmental Benefits and Poverty Reduction	The main objective of the project is to expand Tajikistan's capacity to generate global environmental benefits through educating and involving diverse national and local stakeholders in addressing Rio Convention themes. To strengthen capacity to use environmental learning and stakeholder involvement as tools to address natural resource management issues as part of poverty reduction	Environmental education	940,000	GEF/UNDP	UNDP, Committee for environmental protection	National, piloted in Gissar, Shahrinav, Tursunzade and Vahdat districts	2008-2011	Completed
Promotion of Renewable and Sustainable Energy Use for Development of Rural Communities in Tajikistan	The overall development objective of the project is to reduce widespread poverty in Tajikistan by enhancing socio-economic development and increasing household incomes through the promotion income-generating end-use applications of renewable sources of energy in areas with either unreliable and limited power supply or no supply at all	Renewable Energy	3,500,000	UNDP, including other donors (TBD)	UNDP, Committee for environmental protection	Rasht Valley, Sogd Province and Khatlon Province	2009-2013	Completed
Do IT Yourself	This project idea deals with training people on how to build/install/maintain solar thermal systems and rising awareness among the population on benefits and opportunities of solar energy. Focus is on women in rural areas, and on people employed in local companies dealing with energy and technology. As a result, trained women will be able to introduce solar thermal systems in their households that will reduce use of traditional biomass for heating and domestic hot water (and to free available electricity for other needs apart from heating water). Also, they will be able to establish SME focused on producing cheap but effective solar thermal systems for other households in the region, to do maintenance and support distribution.	Renewable Energy	19,000	LITACA, UNDP Istanbul	UNDP in Tajikistan	Jilikul	2014-2015	Completed
CACILM CPP: Multi-country	The main objective of the project is the	Sustainable land	6,176,500	GEF/UNDP	UNDP	Kazakhstan,	2009-2012	Completed

Project Title	Project Objectives	Category	Project Budget	Donor	Implementing Agency	Project Location	Project Duration	Status
Capacity Building Project	restoration, maintenance, and enhancement of the productive functions of land in Central Asia leading to improved economic and social well-being of those who depend on these resources while preserving the ecological functions of these lands in the spirit of the UNCCD	management				Kyrgyzstan, Uzbekistan, Turkmenistan and Tajikistan		
Support to Sustainable Transport Management in Dushanbe	The project aims at reducing local and GHG emissions while improving access and quality of public transport services for all residents.	Sustainable transport	6,831,130	UNDP/GEF	UNDP, Dushanbe city government, Ministry of Transport	Dushanbe	2008-2015	Completed
Enabling activities to promote the national consultations on post-Rio agenda and demonstrate IWRM approaches in Tajikistan, Project ID: 00085475	This project aims to support the Government of Tajikistan in promoting sustainable development frameworks, by facilitating the National Dialogue on post-Rio agenda (integrating the concept of the “green” economy to the decision-making process), holding the International Conference in the frames of the International Year for Water Cooperation in 2013 (IYWC) and demonstrating the Integrated Water Resource Management (IWRM) approaches.	Water Resources	580,000	UNDP	UNDP	Tajikistan	2013	Completed
Promoting IWRM and Fostering Transboundary Dialogue in CA	The objective will be to develop and implement national integrated water resources management and water efficiency strategies (IWRM Planning) at national and basin level. In doing this, the project will focus both IWRM governance and institutional reform, as well as on concrete interventions to improve (a) irrigated agriculture, (b) the rural water supply and sanitation situation, and (c) small-scale hydropower service delivery. In the Ili-Balkash River Basin, the main focus will be on fostering transboundary dialogue and enhance cooperation between Kazakhstan and the People’s Republic of China, aiming at improved management of the shared River Basin system and its resources. On a regional level, the programme will focus besides efficient and effective programme management and project coordination on (i) capacity building – a joint IWRM training plan with GWP, SDC and possibly other partners and initiatives is under preparation – (ii) knowledge and experience exchange as well as (iii) trans-regional trust-building and coordination interventions.	Water Resources	663,900	UNDP/EC	UNDP Kazakhstan (Output 3); UNDP Kyrgyzstan (Output 1); UNDP Tajikistan (Output 2); Bratislava Regional Centre (Output 4)	Isfara, Kanibadam of Sogd oblast	2009-2012	Completed
Tajikistan Water Supply and	The project aims to strengthen policy	Water Resources	382,000	UNDP/Oxfam	UNDP	Tajikistan	2010-2012	Completed

Project Title	Project Objectives	Category	Project Budget	Donor	Implementing Agency	Project Location	Project Duration	Status
Sanitation Project (TajWSS) Phase I, Project ID: 00075791	development and reform at the national level in water supply and sanitation management and governance in Tajikistan. This project seeks to improve the overall coverage of rural communities that have access to a piped water supply and thus to improve the lives of substantial numbers of people living in situations of poverty in Tajikistan.							
Strengthening conflict management capacities (including transparent resource allocation and sound water management principles) for dialogue in conflict-prone areas of Tajikistan. Project ID: 00085003	The project aims to strengthen conflict management capacities for dialogue in conflict-prone areas of Tajikistan. The project aims to establish dialogue between (1) local governments and the citizens on one side, (2) and between cross border communities on the Kyrgyz-Tajik border.	Water Resources	600,000	UNDP/ BCPR	UNDP CP and UNDP EEP (only activity 2)	Isfara district (RT) and Batken province (KR)	2012-2013	Completed

On-Going EEP Projects

Project Title	Project Objectives	Category	Project Budget	Donor	Implementing Agency	Project Location	Project Duration	Status
Technology Transfer for Small Hydropower in Tajikistan	The objective of the project is to significantly accelerate the development of small-scale hydropower (SHP) by removing barriers through technology transfer and developing sustainable delivery models and financing mechanisms, thus substantially avoiding the use of conventional biomass and fossil fuels for power and other energy needs	Renewable energy	8,200,000	GEF/UNDP	UNDP, Ministry of Energy and Industry	Shurobod, Jilikul, Ayni, Gharm, Vahdat districts	2011-2017	On-going
Applying Human Rights Based Approach (HRBA) to Water Governance in Tajikistan, Project ID: 00084269	The project aims improve the overall coverage of rural and urban communities that have access to safe drinking water supply and sanitation through creating an enabling policy environment for effective implementation of human right to water and sanitation in Tajikistan. The project is built upon the locally implemented GoAL WaSH/HRBA Pilot Campaign Project, which seeks to raise the awareness of rural populations about their rights to water and the responsibilities of local administration to provide water.	Water Resources	180,000	SIWI	UNDP	Isfara, Muminobad and Rudaki	2012-2014	On-going
Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region	The project is a response to the obligations incurred by Tajikistan under the phase out schedule for HCFCs of the Montreal Protocol. It is a timely capacity building effort (with investment	Chemicals / Waste	1,100,000	UNDP/GEF	UNDP	National	2013-2016	Ongoing

Project Title	Project Objectives	Category	Project Budget	Donor	Implementing Agency	Project Location	Project Duration	Status
	elements for the servicing sector) that is designed to improve regulatory measures to help address the accelerated HCFC phase-out in the medium and longer term, and to strengthen the country's preparedness for the complete phase-out of HCFCs from current use							
Strengthening Capacity for Environmental Information Management and Monitoring System in Tajikistan	The goal of this project is to strengthen capacity for environmental monitoring and information management in Tajikistan in order to improve the reporting process to the Rio Conventions and ensure sustainable development through better environmental policy	Environmental Management	1,450,200	GEF	UNDP	National	2014-2017	Ongoing
Support to effective regulatory framework and private sector involvement for drinking water supply and sanitation sector in Tajikistan, Project ID: 00089553	The project seeks to improve access to safe drinking water and sanitation by improving the sustainability of the water and sanitation sector.	Water Resources	250,000	SIWI	UNDP	Dushanbe, Khujand, Rudaki, Muminobad	2014-2015	Ongoing
Support to IWRM-based water sector reform implementation in Tajikistan, Project ID: 00089519	The project is aimed at strengthening water resources management guided by the principles of IWRM-based reform and thereby increasing water and food security and improved livelihoods in rural areas of Tajikistan.	Water Resources	1,297,900	SDC/UNDP	UNDP	Isfara, Kanibadam	2014-2016	Ongoing
Tajikistan Water Supply and Sanitation Project (TajWSS) Phase II, Project ID: 00088773	TajWSS project seeks to improve access to safe drinking water and sanitation in rural areas by improving the sustainability of the water and sanitation sector. Given the sustainability problems within the sector, focusing on the delivery of physical infrastructure alone will not improve access to water and sanitation in the long-term.	Water Resources	1,320,000	SDC/Oxfam GB/UNDP	UNDP	Kulyab, Rudaki, Muminobad	2014-2017	Ongoing

Pipeline EEP Projects

Project Title	Category	Project Budget	Donor	Implementing agency	Project location	Project duration	Status	Comments
Transboundary Cooperation for Snow Leopard and Ecosystem Conservation	Biodiversity	1,000,000	GEF (Global)	UNDP, GSLEP Secretariat, Snow Leopard Trust			Pipeline	Implementing agencies: UNDP, GSLEP Secretariat, Snow Leopard Trust

Project Title	Category	Project Budget	Donor	Implementing agency	Project location	Project duration	Status	Comments
Conservation and Sustainable Use of Pamir A lay and Tian Shan Ecosystems for Snow Leopard Protection and Sustainable Community Livelihoods	Biodiversity	4,181,370	GEF, UNDP (TRAC)	UNDP			Pipeline	Tajikistan; the PIF approved in Sep 2015; implementation is to start as of 2016.
Protect human health and the environment from unintentional releases of POPs and Mercury from the unsound disposal of healthcare waste in Tajikistan	Chemicals / Waste	2,100,000	GEF, UNDP	UNDP			Pipeline	The PIF submitted to GEF (via Istanbul Office), but was not approved (called back by UNDP). The reason, mercury issues is integrated in the PIF, but due to Minamata convention is not ratified by GoT, the project was not presented / approved.
Waste Management Programme in Tajikistan	Chemicals / Waste	6,000,000	TBD	UNDP			Pipeline	Tajikistan; the concept developed and potential donors are to be determined
Financing Sustainable Energy in Tajikistan through Remittance Flows from Russia	Energy / RES	1,000,000	Russian Trust Fund, UNDP	UNDP			Pipeline	Tajikistan – Russia. The project proposal developed and submitted to Russian Trust Fund in Sep 2015. Concept was accepted, but approval is pending;
Green Energy SMEs Development Project	Energy / RES	2,500,000	GEF, UNDP (TRAC)	UNDP			Pipeline	Tajikistan; the PIF submitted in July 2015, and was re-submitted in Aug 2015 to GEF; approval is pending
Support to IWRM-based water sector reform implementation in Tajikistan (IWRM)	Water Resources	650,000	SDC / UNDP	UNDP			Pipeline	Support Ministry of Energy and Water Resources in implementation of National Water Sector Reform Programme (adopted by GoT in 28 December 2015)
Enabling Countries of the Transboundary Syr Darya Basin to make sustainable use of their groundwater potential and subsurface space with consideration to climate variability and change	Water Resources	3,500,000	GEF / UNESCO / UNDP	UNDP	Kazakhstan, Kyrgyzstan, Tajikistan. GOT approved the project concept.		Pipeline	Not all Governments of CA countries provided their clearance to this Regional Project yet; if it is approved the focus of the Project in Tajikistan will be in the Syr-Darya River Basin - that is in the Sough Region / Oblast on the border with Uzbekistan.
Support regional cooperation in the area high-mountain snow-Glaciers ecosystem evaluation, with a purpose to develop complex methods of water resource management within snow-Glaciers system of Central Asia	Water Resources	7,000,000	GEF-UNESCO-UNDP (Regional)	UNDP	Kyrgyzstan, Tajikistan, Turkmenistan, Kazakhstan and Uzbekistan		Pipeline	Not all Governments of CA countries provided their clearance to this Regional Project yet; if it is approved the focus of the Project in Tajikistan will be districts of GBAO (especially), border with Afghanistan, Kyrgyzstan and China

