

Energy & Environment Development Programme Disaster Plan

This Plan covers the following projects:

- **Technology Transfer and Market Development for Small Hydro Power Plants**
- **Climate Risk Management Project**
- **Sustainable Transport Management in Dushanbe**
- **Tajikistan Water Supply and Sanitation Project**
- **Promoting Integrated Water Resources Management and Fostering Trans-boundary Dialogue**
- **Human Rights Based Approach – GoAl Wash Project**
- **Enhance capacity to phase-out HSFC –Ozone Depletion Project**
- **GEF Small Grants Programme**

The plan has only been completed in full detail for the Technology Transfer and Market Development for Small Hydro Power Plants (HPP) and Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region Projects.

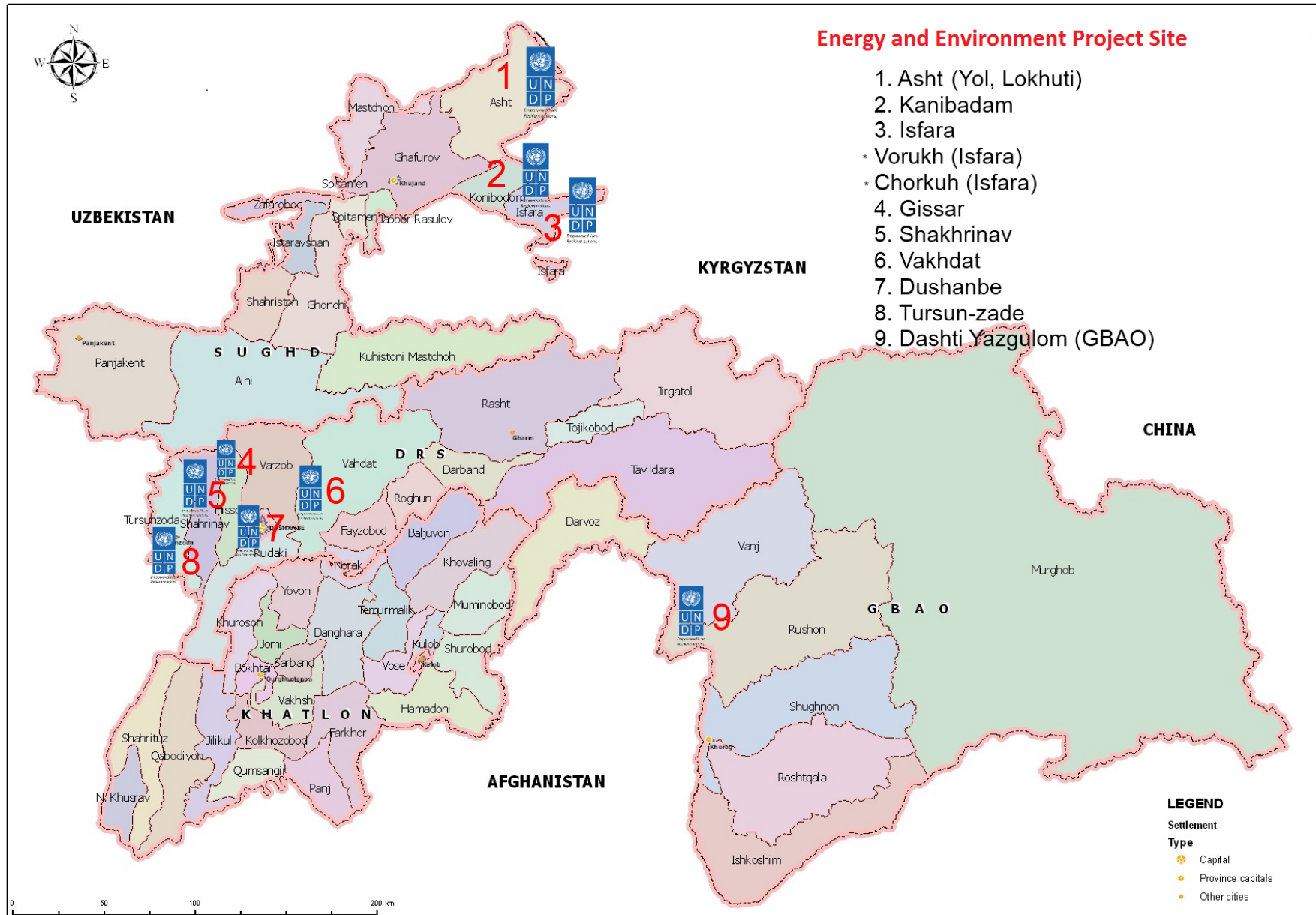
Date Completed: May 2013	By Khurshed Kholov, EEP, UNDP Tajikistan
Date Revised: June 2013	By C. Kelly, DRMP UNDP Tajikistan
Date Revised: September 2013	By C. Kelly, DRMP, UNDP Tajikistan
Date Revised:	By

This document is to be reviewed and revised annually.

I. Table to Contents

I.	Table to Contents	2
II.	Maps of Project Sites	3
III.	Map of Project Office	4
I.	Summary.....	4
II.	Purpose.....	5
III.	Contacts and Resources	6
A.	Contacts.....	6
B.	Resource Inventory	9
IV.	Background.....	11
A.	Country Context	11
B.	Project Summary.....	11
C.	Project Activity Summary	12
1.	Technology Transfer and Market Development for Small-Hydropower in Tajikistan.....	12
2.	Climate Risk Management in Central Asia.	14
3.	Sustainable Transport Management in Dushanbe City	16
4.	Tajikistan Water Supply and Sanitation Project.....	17
5.	Enabling activities to promote the national consultations on post-Rio agenda and demonstrate IWRM approaches in Tajikistan	17
6.	Concrete measures to improve HRBA practices in water governance designed and implemented.	18
7.	Strengthening conflict management capacities (including transparent resource allocation and sound water management principles) for dialogue in conflict-prone areas of Tajikistan.....	19
8.	Initial Implementation of accelerated HCFC Phase out in the CEIT Region	20
D.	Summary of Interagency Contingency Plan Risk Assessment (IACP).....	22
V.	Summary of Program-Specific Risk Assessments	24
A.	Program Level.....	24
B.	Implementation Level	24
C.	Vulnerability Assessment.....	37
D.	Office Level Safety Assessment	41
VI.	Risk Management.....	43
A.	Program-Level Risk Management Options	43
1.	Technology Transfer and Market Development for Small-Hydropower in Tajikistan.....	43
2.	Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region	46
B.	Standard Operating Procedures	47
1.	Preparedness Stage	48
2.	Warning Stage	52
3.	Response Stage	54
4.	Recovery Stage	56

II. Maps of Project Sites



This **Plan** covers the whole disaster management process, and addresses actions before, during and after disasters. The plan is compiled on the basis of a generic plan format including standard operating procedures and best practice which has been expanded to include risk-specific planning for disaster management challenges faced in Tajikistan. The **Plan** includes a description of staff responsibilities for addressing potential emergencies and disasters. The Plan also contains contact lists, maps of the program location and staff locations. The Plan is to be updated regularly and reviewed at least annually.

II. Purpose

Considering that Tajikistan is subject to a range of hazards and frequently experiences disasters (details provided below) the purpose of this **Plan** is to:

1. Reduce the threat to the life and performance of DRMP staff and their families,
2. Reduce the impact and disruption of disasters on program implementation, and
3. Incorporate disaster risk reduction into development programming.

Successful implementation of the **Plan** requires

- Anticipating the types of hazards and disasters which might affect EEP
- Identifying and addressing weaknesses in EEP's capacities to deal with the possible disasters,
- Identifying critical tasks that must be done before (*preparedness* and *warning*) and following a disaster (*relief* and *recovery*),
- Documenting procedures for all critical tasks,
- Identify primary and backup staff who are responsible for these tasks¹, and
- Identify opportunities to reduce disaster risk (*hazard impacts* or *social vulnerability*) through program activities.

¹It is hard to predict which staff members will miss work due to sickness or to care for loved ones. The **Plan** anticipates that all staff members are trained on the critical tasks.

III. Contacts and Resources

A. Contacts

Name	Position	Location	Phone Numbers: Direct and (Short Number)	Email
Khurshed Kholov	Programme Manager	Program Office, Dushanbe	981031668 (042)	khurshed.kholov@undp.org
Ahad Mahmoudov	Mainstreaming Environmental Advisor	Program Office, Dushanbe	918711797 (500)	ahad.mahmoudov@undp.org
Firuz Ibragimov	National Capacity Building Coordinator	Program Office, Dushanbe	985843323 (187)	firuz.ibragimov@undp.org
Umeda Khojimatova	Transport Project Manager	Program Office, Dushanbe	985863624 (198)	umeda.khojimatova@undp.org
Anatoliy Kholmatov	IWRM Project Manager	Program Office, Dushanbe	9815136743 (071)	anatoliy.kholmatov@undp.org
Mirzohaydar Isoev	HCFC Project Manager	Program Office, Dushanbe	981031669 (044)	mirzohaydar.isoev@undp.org
Shuhrat Igamberdiev	TAJWASS Project Officer	Program Office, Dushanbe	918116613 (037)	shukhrat.igamberdiev@undp.org
Jamshed Kodirkulov	Programme Analyst/Energy	Program Office, Dushanbe	918711798 (561)	jamshed.kodirkulov@undp.org
Urun Akhmedov	Finance and Administrative Associate	Program Office, Dushanbe	918682156 (906)	urun.akhmedov@undp.org
Madina Rakhmatova	Programme Administrative Assistant	Program Office, Dushanbe	985136748	madina.rakhmatova@undp.org
Madina Dehoti	Programme Assistant	Program Office, Dushanbe	918421904 (054)	madina.dehoti@undp.org
Abdujalilov Zafarjon	ICT Assistant	Program Office, Dushanbe	985000770	z_abdujalilov@mail.ru
Odil Ganiev	Driver	Program Office, Dushanbe	918730313 (513)	N/A
Mamadullo Shoev	Driver	Program Office, Dushanbe	985843593 (200)	N/A
Khurshed Madvaliev	Driver	Program Office, Dushanbe	918996433 (049)	N/A

	<u>Water Cluster Group Projects</u>			
Rakhmat Bobokalonov	Minister, Ministry of Land Reclamation and Water Resources of the RT	Dushanbe	+992 37 2353566	
Sulton Rakhimov	First Deputy Minister, Ministry of Land Reclamation and Water Resources of the RT	Dushanbe	+992 918 644 788	
Khurshed Islomov	Policy Specialist, Ministry of Land Reclamation and Water Resources of the RT	Dushanbe	+992 95 155 68 33	
	<u>Technology Transfer Project</u>			
Mr. Vaysiddin Tilloev	Head of SHPP Department of the Ministry of Energy and Industry	Dushanbe	992 935998432	tilloev_v_b@mail.ru
Ms. Roza Khoshmukhamedova	Director of the Energoremont Factory	Dushanbe	992 935051544	
Mr. Abdurasul Kayumov	Deputy Director of Tekstilmash	Dushanbe	992 919 416115	
	<u>Transport Project</u>			
Oyev Abdulkhak	Deputy Chairman, Khukumat of Dushanbe	Dushanbe	99237 221 53 24	
Juraev Abdusalim	Head of Environment Protection Department of Dushanbe, National Project Coordinator	Dushanbe	99237 221 01 63\ 907 717213	
Khushov Ziyoratsho	First Deputy head, State Traffic Police of Dushanbe	Dushanbe	99237 2210046\918424222	
	<u>CRM and CACILM Project</u>			
Talbak Salimov	Chairman of the Committee on Environmental Protection under the Government of the Republic of Tajikistan	Dushanbe	992372364059	orzuzoda@yahoo.com
Azizullo Ismatov	Director of the State Directorate of Forestry and Hunting of the Committee on Environmental Protection	Dushanbe	992374456700	Saidov_madibron@mail.ru
Ziyoratsho Sadullo	Member of the Parliament of the Republic of Tajikistan	Dushanbe	99237221-11-24	cabudsor-76@mail.ru
Rustam Latipov	Member of the Parliament of the Republic of Tajikistan	Dushanbe	99237221-11-24	rustam.latipov@yahoo.com
Safarov Nematullo	Project Manager of the Agrobiodiversity Project UNDP in Tajikistan	Dushanbe	992372212546	neimatullo.safarov@undp.org
Alisho Shomahmadov	Committee of Emergency Situation and Civil Protection	Dushanbe	99237221 56 50	alishomahmadov@mail.ru
Karimjon Abdualimov	State Agency for hydrometeorology,	Dushanbe	992935018407	abdualimov@mail.ru

	Committee on Environmental Protection under the Government of Republic of Tajikistan			
Contact details for UNDSS ²				
Faisal Mustafa	Security Adviser	Dushanbe	907722711	Faisal.Mustafa@undss.org
Maxim Kamarzaev	Deputy SA	Dushanbe	907703850	Maxim.Kamarzaev@undss.org
Khurshed Toshmukhamedov	Local Security Assistant	Dushanbe	907783849	Khurshed.Toshmukhamedov@undss.org
Anvar Mirzoev	Local Security Assistant	Dushanbe	907712663	Anvar.Mirzoev@undss.org
Madina Sufieva	Local Security Assistant	Dushanbe	907703847	Madina.Sufieva@undss.org
Ilhom Hukumatov	Area Security Assistant (ASA) Shaartuz	Shaartuz	907502010	Ilhom.Hukumatov@undss.org
Ismoil Khalifaev	ASA Khujand	Khujand	907501080	Ismoil.Khalifaev@undss.org
Ilhom Merganov	ASA Ayni	Ayni	905052309	Ilhom.merganov@undss.org
Khairullo Murodov	ASA Kulob	Kulob	907756970	Khairullo.Murodov@undss.org
Firuz Solikhov	ASA Kurgan Tube	Kurgan-Tube	907502010	Firuz.Solikhov@undss.org
Shamir Saidov	ASA Gharm	Gharm	907501070	@undss.org

² Details from UNDP Directory updated in March 2012

B. Resource Inventory³

Disaster Resource Inventory				
Category	Specific Resource	Specification	Location	Contact for Use
Shelter / Housing (indicate location and m ²)	Not available	Not available	Not available	Not available
Office Space	226 m ²	The office is located at 3 rd floor. No toilets, no wash rooms. Just offices – 6 rooms and one big hall and two balconies.	Office located at 91/10 Shevchenko Street, Dushanbe. Te. +992-44-6005517	Khurshed Akhmedov, AFA Tel.: 6005171
Water	Clean Water provided for tea and coffee by 18 liters bottle.	No water pipes are exists. Just water cooling machines and kettles.		Madina Dehoti, PA Tel.: 6005590
Sanitation	Not available	Not available	Not available	Not available
Transport (vehicles) (list type and fuel used and location)	Land Cruiser 200, #101 UN 09 Land Cruiser 105, #101 UN 23 Toyota Corolla, #101 UN 57	8 passenger, petrol 6 passenger, diesel 4 passenger, petrol	All three cars are parked at 91/10 Shevchenko Street, Dushanbe.	Odil Ganiev, 918-730313 Mamadullo Shoev, 985-843593 Khurshed Madvaliev, 918-996433
Communications (list)	Land Lines: 10 telephones numbers. 6005518, 6005517, 6005590, 6005519, 6005172, 6005173, 6005170, 6005171, 6005540, 6005176, Back-up- 6005174, 6005175 Thuraya, mobile with charger : +882-1655540857	N.A.	at 91/10 Shevchenko Street, Dushanbe.	Zafarjon Abdujalilov, IT Tel.: 6005172
Heavy Equipment (list by type, fuel and location)	Not available	Not available	Not available	Not available
Computers and related equipment ⁴	See Annex A	See Annex A	See Annex A	See Annex A Zafarjon Abdujalilov, IT Tel.: 6005172
Specialize Personnel (list names, specialization and contact information)	Odil Ganiev, Mamadullo Shoev,	Undergone UNDP training in First Aid. Undergone UNDP training for	at 91/10 Shevchenko Street, Dushanbe.	Odil Ganiev, 918-730313 Mamadullo Shoev, 985-

³ A separate inventory is attached as **Annex A**.

⁴ Printers, UPS and routers are listed in **Annex A**.

		use of vehicle HF/HVF communications (mobile radio).		843593
Storage Space (indicate size and current capacity)	None	--	--	--
Electrical supply/generators	None.	None.	None.	None.
Fuel supplies	None.	None.	None.	None.
Other Supplies (list)	None.	None.	None.	None.

IV. Background

A. Country Context⁵

Tajikistan, one of the poorest among CIS countries, is a disaster-prone country. The most frequent hazards occurring in Tajikistan are avalanches and mud flows (1,333 events over the last 11 years), followed by small-scale earthquakes (228 events) and floods (151 events). These natural hazards typically happen several times a year and their impact is often local, affecting a few households, communities, villages and occasionally a larger part of a district. In any given year, an average of 1,500 families is affected by small to medium scale events. Though the loss of human lives is usually relatively small, the damage to infrastructure, family assets and livelihoods can be significant

Much is made of Tajikistan being a mountainous country, and it is this geography which gives rise to many of the hazards which lead to small disasters on recurrent basis. At the same time, Tajikistan's mountainous nature provides little opportunity to live away from natural hazards. Mountain communities find little space away from rock-fall or avalanche zones. Even communities in the broader valleys of the country are subject to flooding coming from the mountains and hills of Tajikistan, or neighboring countries. As well, all communities in the country are subject to earthquakes.

Further, the physical infrastructure (e.g., roads, power lines, water systems) needed to sustain livelihoods in Tajikistan are under constant threat from hazards, particularly flooding, landslides, mudflows, earthquakes and avalanches. The consequence is that the cost of establishing and maintaining this infrastructure is high, as are the repair or replacement costs when the infrastructure is destroyed or damaged.

During pre-independence, these costs were absorbed within the larger Soviet Union. Now these costs fall on one of the poorest countries in Central Asia, with limited resources to meet competing needs for disaster risk management, health care, education, investment and all the other development related investment expected from the government.

Hazards in Tajikistan:

- ➔ Avalanches
- ➔ Conflict in neighboring countries (refugees influx)
- ➔ Earthquakes
- ➔ Economic crisis
- ➔ Epidemics (human)
- ➔ Epidemics (non-human)
- ➔ Extreme cold weather
- ➔ Extreme food insecurity
- ➔ Floods
- ➔ Glacial lake burst
- ➔ Heavy snowfall
- ➔ Landslides
- ➔ Mudflows
- ➔ Rock falls

The damage and loss figures above do not capture the impact of a catastrophic disaster in the country. For instance, a major earthquake near Dushanbe has been projected to result in the loss of over 55,000 persons and substantial damage to infrastructure. Disasters of similar scale could result from the failure of the dam at Lake Sarez or the hydro-electric dam at Nurek⁶.

B. Project Summary⁷

⁵ Program Document, Tajikistan Earthquake Recovery Support

⁶ UNDP DRMP Program Document 2010-2015

⁷ UNDP, Energy and Environment, Projects Overview and Key Achievements

The Energy and Environment Programme (EEP) is a five-year initiative that builds on the previous achievements of the UNDP in the environment and energy sectors. It supports the implementation of Tajikistan's National Development Strategy and Poverty Reduction Strategy 2010-2015. The EEP uses a programme-based approach, focusing on capacity development and long-term sustainability. The goal of the UNDP Energy and Environment Programme 2011-2015 is to support Tajikistan's transition to low emission and climate resilient development as a prerequisite for sustainable human development.

This is achieved through a twofold strategy based on market transformation towards low emission economies, including climate change mitigation projects; and capacity development for climate resilient communities, economies and ecosystems, including ecosystems, natural resources and climate change adaptation projects. The current UNDP Energy and Environment project portfolio seeks to improve the system of protected areas, notably via the adoption of a new Forestry Code, the revision of the Law on Protected Area and support to the planning and management of protected areas, and to establish fruit and forest tree plantations, as well as tree nurseries in target communities to achieve environmentally sustainable livelihoods in productive landscapes within and around the protected areas. Recently the programme supported the creation of a national resources centre at the Committee on Environmental Protection to enhance the resources available for environmental education.

In the energy sector, the EEP focuses on deploying an integrated development model as a scaling up mechanism designed to provide electricity from mini-hydro stations, while simultaneously addressing other pressing socio-economic issues, such as clean water, food, employment, education and health. The EEP is supported by the Ministry of Energy and Industry to develop an intermediate strategy for Renewable Energy Sources (RES), a National Programme on Integrated Rural Development Model, an Energy Efficiency Master Plan, as well as a Trust Fund on RES and E&E that will provide the impetus for economic development in the sectors related to RES and energy efficiency.

The EEP includes the following projects:

1	Technology Transfer and Market Development for Small Hydro Power Plants (HPP)
2	Climate Risk Management Project
3	Sustainable Transport Management in Dushanbe
5	Tajikistan Water Supply and Sanitation Project
4	Promoting Integrated Water Resources Management and Fostering Trans-boundary Dialogue
6	Human Rights Based Approach – GoAl Wash Project
7	Enhance capacity to phase-out HSFC –Ozone Depletion Project
8	GEF Small Grants Programme

C. Project Activity Summary⁸

1. Technology Transfer and Market Development for Small-Hydropower in Tajikistan

Activity 1: Adapted and enhanced legislative and regulatory framework for small-scale hydropower development in the country.

1.1 Formulated, approved and enforced Implementing Rules and Regulations (IRRs) of the Law for RES that will facilitate actions geared towards the enhancement of the market environment for SHP

1.1.1: Reviewing the existing procedures for SHP licensing and construction, their analysis and development of actions towards simplifying the procedures.

⁸ Details from the Energy and Environment draft combined 2013 work plan.

1.1.2: Facilitating enforcement of technical regulation to enable connection of SHP plants to the electric power grid with all relevant technical conditions for their integration in the electric power system

1.1.3: Facilitating the adoption of the law on “Energy Efficiency and Energy Saving” and other regulations in support to the law on RES through rendering support to the Parliamentary Committee on Energy and working groups;

1.1.4: Continued advocacy on establishment of a dedicated National Fund for RES and EE.

1.1.5: Support in the development of standard methodology for economic-financial evaluation of SHPs and tariffs to be paid to IPPs and charged to consumers by IPP; as well as a standard PPA format/template.

1.2 Institutional capacities in place at central and local level to implement and coordinate RES policies.

1.2.1: Needs identification of the central and local government officials in implementation of the RES policy.

1.2.2 Development of the training programme for central and local government officials on RES policy implementation

Activity 2: Enhanced technical and planning know-how and developed market chain for SHP.

2.1: Guidebook on technical and policy aspects of SHP project development (to be used in all trainings to be delivered by the project)

2.1.1: Preparing, disseminating a Guidebook on SHP project development summarizing regulatory framework, and providing guidelines, methodologies and description of recommended standardized technical solutions (i.e. 3 designs of common SHPs in the rated capacities range of 33 - 500 kW adopted based on available international standards and designs for application in Tajik rural communities)

2.1.2 Getting the endorsement of the Ministry of Energy and Industry for the use and dissemination of the Guidebook.

2.2: Local workshops and manufacturers with enhanced capacities to install, construct, manufacture and repair SHP system equipment and components

2.2.1: On-the-job capacity building program for selected manufacturers to be delivered by international SHP design/manufacturing company and include: joint SHP design, construction and O&M for pilot projects (under Component 3), quality assurance, personnel training, other business and technical advisory services

2.2.2: Improving the technological base of the selected companies via provision of required soft- and hard-ware (on cost-sharing basis)

2.3: Vocational training program for technicians involved in SHP design/construction and O&M

2.3.1: Introducing in partnerships with TTU and Kurgan-Tyube institute vocational trainings for SHP specialists on design, construction and O&M.

Activity 3: Demonstrated technical and economic viability of SHP technology in supporting socio-economic development.

3.1: Technical studies, political commitments and institutional framework secured for pilot SHP projects

3.1.1: Conducting pre-feasibility studies on at least 10 new sites (that includes cost-effectiveness, disaster risks, hydrology, etc.).

3.1.2: Conducting of feasibility analyses of at least three potential SHP sites

3.1.3: Preparing and/or updating of district development plans in pilot communities to a) prioritize investment in SHP as a viable alternative to centralized power provision and b) link local development with sustainable power supply in Sughd, Khatlon and DDR.

3.1.4: Raising awareness including trainings of local beneficiaries in selected localities on RE applications (SHP) and EE (e.g., efficient use of lighting, heating and proper building insulation) covering the population of target districts. Developing and adapting at least 5 types of brochures and information materials on RE and EE.

3.1.5: Updating of engineering design and securing required permissions and approvals for at least 2 SHP site.

3.1.6: Supporting identification and preparation of additional 2 SHP projects (site identification, community mobilization, technical feasibility, permissions and approvals, quality assurance, etc)

3.2: Operational SHP demos/pilots in selected communities, demonstrating the viability of the technology and O&M models

3.2.1: Starting the construction/upgrade/installation of at least 1 SHP pilot.

3.2.2: Operation and maintenance of SHP pilots (via on-the job training for SHP staff) and monitoring of SHPs operational performance in Burunov and Yazghulam

3.2.3 Constructing the SHPP for the border outpost in Dashti-Yazghulam

3.3: Pilot SHP operations sustained

3.3.1: Facilitating signature of Power Purchase Agreement with Barqi Tajik and local consumers in Burunov jamoat.

3.3.2: Providing grants and micro-loans to support creation of income-generating activities and energy efficiency measures in local SMEs and public buildings to minimize their power demand in Burunov jamoat.

Activity 4: National Scaling-up Programme of Renewable Energy-based Integrated Rural Development in supporting socio-economic development.

4.1 Project results assessed, analyzed and compiled into comprehensive national report

4.1.1 Preparing a knowledge product on the IRD model in Burunov and presenting it to the national stakeholders and partners;

4.1.2 Developing and approving the GHG emissions reduction calculation methodology and putting the monitoring system in place.

4.1.3 Collecting data on the GHG emissions reduction and compiling reports.

4.3. National Scaling-up Action plan adopted

4.3.1: Facilitating the implementation of National Scaling-Up action plan with specific activities and budget to be supported by National Trust Fund.

4.3.2 Conducting initial discussion on funding the SHP development programme and baselines identified and placed.

4.3.3 Developing and approving the templates for monitoring allocated funds in support to the investment in new SHP plants under the scaling-up plan.

4.3.4 Collecting data on the allocated funds in support to the investment in new SHP plants.

2. Climate Risk Management in Central Asia.

AR 1.1. Support mainstreaming of CRM objectives into existing and planned forestry and land management policy & by-laws and wider policy frameworks

1.1.1. Identification of priority interventions, building upon IPCC/UNFCCC/BSAP findings in close collaboration with the PPCR and Biodiversity secretariat Project. (cross cutting with 1.1.2.)

1.1.2. Cooperate with UNFCCC and PPCR working group to develop a baseline climate change country profile and national climate change adaptation action plan for Tajikistan (cross cutting with 3.1.1.).

1.1.3. Support the Committee on Environmental Protection on UNCBD/UNCCD NAP alignment

1.1.4. Develop TOR for NAP WG and further support the alignment process

1.1.5. Development of ToR for policy and legislative Group to elaborate normative regulatory acts related to agroforestry in the face of Climate Change and Risk Management

1.1.6. Mainstream the CRM principles into strategic documents (bylaw on agroforestry and Joint Forest Management) through integration into existing inter-ministerial working group. (climate Proofing Mechanism)

AR 1.2. Review and propose changes to current institutional mandates for key line ministries to improve CRM focus

1.2.1. International Consultant on Agro-Forestry Assessment with consideration of climate change and DRR principles in Tajikistan and provide recommendations for improvements to institutional mandates of key line ministries/

AR 1.3. Provide training on CRM to policy makers on integrating CRM into regulatory development and operational planning

1.3.1. Mobilization of information and training center on agroforestry (cross cutting with 3.2.1.)

1.3.2. Develop a brochure on simple climate change adaptation strategies and technologies and mainstream it within education and upgrade qualification system in Tajikistan.

1.3.3. Identification of the potential Institution to undertake training needs assessment for key ministries and other relevant institutions and prioritize training needs and relevant stakeholders including designing training modules

1.3.4. Design training courses for delivery to local experts and policy makers, using learning-in-action activities and programmes to support CRM adoption into government strategy and policy formulation

Activity Result 2: Sustainable productive agro-forestry CRM tools, financing and implementation models demonstrated in the Gissar Mountains

AR 2.1. Undertake climate risk mapping in the Gissar Mountains.

2.1.1. Conduct climate change vulnerability analyses (segregated by gender) in order to select areas to pilot and improve CRM.

2.1.2. Conduct climate change vulnerability mapping exercises (including poverty) in order to identify adaptation strategies and to select areas to pilot and improve EWS(s).

AR 2.2. Assess potential financing mechanisms and incentives to support community level CRM activity

2.2.1. Support the local community on CRM principles in Tajikistan (support of Micro-Loan Foundation)

2.2.2. Support and improve the CRM profile at the forestry agency through introduction of financial instruments. (One SMS one Seedling).

AR 2.3. Identify and conduct cost-benefit /multi-criteria analysis of potential CRM interventions related to agro-forestry

2.3.1. Develop recommendations for comprehensive gender mainstreaming and its implementation within UNDP Climate Risk Management Project in Tajikistan

2.3.2. Investigate examples of agroforestry from other countries.

AR 2.4. Implement priority CRM measures in the Gissar Mountains

2.4.1. Implement agroforestry models in cooperation with GEF SGP, ADB and GEF National projects.

Activity Result 3: Knowledge on how to incorporate climate variability and change knowledge and risks into development processes at local, sub-national and national level disseminated.

AR 3.1. Establish national climate network (NCN) of CRM professionals and database of ongoing/ planned projects

3.1.1. Cooperate with PPCR on integration of CRM activities into the National Climate Network. (TAJNET, NGO Network, CARNET) and support for development of national climate change adaptation strategy. (cross cutting with 5.1.6. - 5.1.9.)

3.1.2. Cooperation with Committee on Emergency Situation to collect and provide CRM relevant socio-economic and bio-physical data inputs to update IMAC to support the development of national climate change risk profiles.

AR 3.2. Support development of regional/ national CRM profile and identify GoT institutional ownership

3.2.1. Mobilization of information and training center on agroforestry

3.2.2. Conduct regional conference on forestry/community forestry/agroforestry.

AR 3.3. Create case studies of demonstration projects and training programmes from CRM project/3rd parties

3.3.1. Compile a list of stakeholders to whom lesson learned best practices and other programme knowledge to be disseminated.

AR 3.4. Disseminate results and best practices through regional web platform and other local channels

3.4.1. Development of manual on tree planting and dare to share fair on adaptation to climate change in the face of climate change with the participation of mahala leaders, PAs representatives, Forestry agencies, and responsible staff of the Jamoats (municipality).

3.4.2. Develop a Film-Movie (including scenario based Mobile Theater) on the topic of climate change and natural resource management.

AR 3.5. Undertake a targeted awareness raising campaign on CRM at the district and community level in target regions

3.5.1. Strengthen climate risk management practices and awareness on climate change and variability amongst targeted stakeholders (including government, district level authorities, civil society, the media, and highly vulnerable groups such as women and the marginalized families.

AR 3.6. Lobby government to continue with public broadcast announcements on CRM after the CA-CRM has ended

3.6.1. Undertake trainings for the key governmental institutions how to produce mass-media on CRM related activities and their broadcast (cross cutting with 1.3., 4.1.3., 5.1.9.)

Activity Result 4: Foster adoption of the Forest code and new Pasture law within PAs of Gissar mountains

4.1. 1. Conduct stakeholders and project beneficiaries meeting to identify the measures for sustainable forest and pasture management in the face of climate change

4.1.2. Provide technical and informational support for further implementation of management planning of PAs, fostering Forest code and new Pasture law among PAs in Gissar mountains

4.1.3. Improve knowledge and increase awareness of project stakeholders and project beneficiaries on Forest code and pasture law through focused meetings and workshops with forest dependant community groups, PAs management and stakeholders

4.1.4. Mainstream the CRM principles into a new revision of the state program on sustainable forest and pasture management

4.1.5. Develop recommendations, methodology and agro-technology in the face of climate change in Tajikistan. (Cross cutting with 4.1.2.)

Activity Result 5: Regional Dialogue on Wheat, Climate Change and National Food Security Supported (Component Tajikistan).

5.1.1. Assessment on the impact of climate change and variability into wheat production sector, gap analysis and applicability of conducted studies and develop an appropriate climate resilience measures to improve the productivity of the wheat sector.

5.1.2. Improve the seeding quality and establishment of wheat seed bank (cooperation with Research Institute of crop husbandry).

5.1.3. Implement improved wheat production agro technology with assistance from appropriate research institutions and government organizations, local farmers.

5.1.4. Implement trainings in climate variability and change and their influences into a wheat production and with assistance from NGOs, appropriate research institutions.

5.1.5. Develop manuals on wheat cultivation and develop coping strategy to improve wheat sector climate resiliency.

5.1.6. Foster dialogue between Tajhydromet, Ministry of Agriculture, CoEP, CoES, Research Institutions and other relevant institutions on alternative models and technical support to strengthen weather data forecasts and exchange.

5.1.7. Conduct assessment of strengths and weaknesses of existing weather forecasting and EWS(s).

5.1.8. Propose and implement changes or improvements to weather forecasting and EWS, based on the assessment undertaken.

5.1.9. Disseminate weather forecast and CRM best practices through regional web platform and other local radio channels through radio spots.

5.1.10. Mainstream automatic weather data/information through SMS in cooperation with AgroDonish information portal.

3. Sustainable Transport Management in Dushanbe City

Activity 1 - Lower emissions from vehicles in Dushanbe, with safety and health quality in mind

Action 1.1. Capacity and Needs Assessment

Action 1.2. Overview of Fuel Quality and Vehicle efficiency Standards

Action 1.2.1. Study on further harmonization of local fuel and vehicle efficiency quality standards with international ones.

Activity 2 - Use of public transport, particularly trolleybuses increased

Action 2.1. Overview of Legal Framework of Transport Sector

Action 2.1.2. Development of draft Action Plan on improvement of public transport management system (Preparation of draft Governmental Resolution)

Action 2.2. Introduction of segregated lanes for public transport modes along a pilot transport corridor in Dushanbe city

Action 2.3. Introduction of a Single Dispatcher Controller Center (with piloting one GPS navigated trolleybus route along a selected corridor)

Action 2.4. Assessment of a unified fare system and simplified fare collection for all public transport modes, with fares set to achieve financial equilibrium for the system as a whole without increasing the current average fare level

Action 2.5. Assessment of priced parking for cars.

Activity 3 - Integrated land use and urban transport planning at the metropolitan level

Action 3.1. Development of integrated land-use/transport model for Dushanbe city;

Activity 5 - Institutional transformation of government, businesses and general public to embrace sustainable transport

Action 5.1. Targeted packages of technical and institutional trainings to strengthen the capacity of project staff, transport sector and government representatives

Action 5.1.1. Training on enterprise development for trolleybus, bus and marshrutkas operators, including dispatch and revenue management. Training on customer service and drivers behavior.

Activity 6 - Effective, efficient, and adaptive project management, monitoring and evaluation

Action 6.1. Effective, efficient, and adaptive project management, monitoring and evaluation

Action 6.1.1. Day-to-day management and reporting

Action 6.1.2. Preparation and submission of report for 4 Quarters

Action 6.1.3. Prepare and submission of Annual report

Action 6.1.4. Organize 2 PSC meeting(s)

Action 6.1.5. Ensure posting of all project information and related publications on UNDP webpage

Action 6.1.6. Mid-term Evaluation

4. Tajikistan Water Supply and Sanitation Project

Activity1: Establishment and capacity building of the Inter Ministerial Coordination Group.

- Developing capacity of governmental authorities from selected ministries;
- Conducting analysis of implication, advantages and disadvantages of the potential changes and reform of the governance of the WSS sector building on the research carried out by TajWSS network members;
- Formulating policy recommendations through research and preparation of policy brief.
- Maintaining IMCC meetings on quarterly basis.

Activity2: Legal Framework for Water Supply and Sanitation sector is improved.

- Developing methodology for the inventory of WSS objects jointly with TajWSS network and endorsing by IMCC. Testing the approach through inventorying all WSS objects in two pilot districts.
- Designing and implementing mechanism to include planning considerations of WSS sector activities into DDPs and within national policy development.

5. Enabling activities to promote the national consultations on post-Rio agenda and demonstrate IWRM approaches in Tajikistan

Activity Result 1: Facilitation of the national consultations on post-Rio agenda and formulation of the road map to promote the “green” economy at the policy-making level in the country

- 1.1 Facilitate the National Dialogue on post-Rio agenda through parliamentary hearings and holding a series of national events, with involvement of high-level governmental officials, international development community, civil society and academia;
- 1.2 Identify the methodology to formulate the road map on “green economy” in Tajikistan;
- 1.3 Development of the road map document, which will map out the available resources and conditions for promoting the eco-innovative and “green” measures and recommendations for mainstreaming them to the policy level.

- 1.4 Circulation of the relevant publications on “green” economy and Post-Rio process to improve the information coverage of the target group.

Activity Result 2: Support to the GoT for the preparation to the International Year for Water Cooperation in Tajikistan

- 2.1. Support to hold the International Conference in the frames of the International Year for Water Cooperation 2013 in Dushanbe;
- 2.2. Development and publication of handouts and preparatory materials for the events and the Conference, which will ensure the informational coverage of the participants and improved access of general public to reference and resource materials.

Activity Result 3: Strengthened IWRM based policy framework and practical application of reform principles at local level (Isfara river basin)

- 3.1 Support to development and implementation of mechanisms for inter-stream cooperation between water institutions/organizations purposed to coordinate and regulate fair and sustainable water resources distribution in Isfara river basin;
- 3.2 Improving transparency and accountability of water institutions/organizations in service delivery and strengthening confidence between water users and suppliers: through (a) application of water assessment devices and techniques, (b) monitoring of water related data to improve planning and decision making, (c) improving information and accountability of water institutions, (d) supporting mechanisms for consumer voice and citizen feedback;
- 3.3 Support to rehabilitation and management of target water infrastructure aimed to promote integrated water resources management (hydrological station ‘Tangi-Vorukh’);
- 3.4 Development and implementation of comprehensive capacity building programme on (a) elaboration of water use plans, water distribution techniques, economic sustainability of WUAs, water integrity and good governance, ICT enabled tools in water governance, water security, etc.

Activity Result 4: Feasibility study to explore the possibilities of construction and operation of small hydropower plants on irrigation facilities in Tajikistan

- 4.1. Review of available project documentation and field studies to determine the capacity of the possible construction of small hydro power plants, the availability and the need for electrical networks, connectivity and interaction with the general energy networks, as well as potential customers and their needs in energy supply
- 4.2. Development of the feasibility study, with contents agreed with Eurasian Development Bank, with identification of the priority projects potentially attractive for investment;
- 4.3. Stakeholder consultations and workshops to discuss the feasibility study results and receive feedback from stakeholders both nationally and internationally (with involvement of JSC “RusGidro” as an observer);
- 4.4. Presentation of the feasibility study to Eurasian Development Bank, Ministry of Land Reclamation and Water Resources of the Republic of Tajikistan, OJSC “Barki Tojik”, JSC “RusGidro” to initiate the attraction of investments

6. Concrete measures to improve HRBA practices in water governance designed and implemented.

Activity Result 1. Concrete measures to improve HRBA practices in water governance designed and implemented.

- 1.1. Identifying and addressing the structural obstacles found in policies and strategies, legislations, institutional and social practices that prevent people from accessing basic water and sanitation services;
- 1.2. Piloting the implementation of relevant policy recommendations at the local level in Isfara district in cooperation with IWRM and TajWSS projects ensuring accountability, transparency and strengthening water sector integrity.

- 1.3. Provision of overall support to introduce HRBA concept to the draft Water Sector Reform Strategy currently under consideration by the Government of Tajikistan;
- 1.4. Promote policy dialogue on Human Rights Based Approach (HRBA) to water governance among the relevant key stakeholders involved in water sector policy making through joint preparation of policy briefs: Inter-ministerial Coordination Council (IMCC), human rights based NGOs, policy research institutions, electronic and print media;

Activity Result 2. Capacity of national key stakeholders to implement HRBA measures strengthened.

- 2.1. Develop different capacity building, advocacy and awareness tools on HRBA to water and apply them through workshops, round-table discussions, policy briefings, information bulletins, media partnership and networking; and implemented jointly with relevant state structures.
- 2.2. Capacities of relevant stakeholders are to be strengthened through provision of trainings on current policy, legal and institutional framework and strategies on how to ensure their compliance to effective implementation of HRBA to water and sanitation.
- 2.3. Final assessment of the efficiency and efficacy of the scaled-up campaign in bringing change both at the policy and pilot district levels.

Activity Result 3. Consumer rights protection practices implemented in drinking water and sanitation sector

- 3.1. Elaboration and endorsement of methodic recommendations on good governance (*including transparency, accountability and citizen participation*) in water sector;
- 3.2. Practical implementation of proposed measures guided by the methodology on good governance in water sector at the local level;
- 3.3. Elaboration and publishing of a manual “Consumers Rights in Drinking Water Supply in the RT”;
- 3.4. Elaboration of modules and delivery of trainings on (a) consumer rights in drinking water sector, (b) legislation of the drinking water supply and sanitation sector;
- 3.5. Establishment of a network of volunteers from amongst the training participants, heads of communities and households’ committees with the purpose of monitoring of the Law of RT “On protection of consumer rights” in the sphere of drinking water supply and sanitation.

Activity Result 4. Assessment (economic, legal, social, etc) of drinking water supply and sanitation systems conducted and evidence backed policy briefs and information to strengthen reform is accessible to policy makers and consumers.

4. 1. Inventory and socio-economic assessment of drinking water supply and sanitation systems and management in pilot districts;
- 4.2. Defining the procedures and mechanisms for transfer of ownership in the sphere of DWSS, particularly in relation to ownerless systems and infrastructure.

Activity Result 5. Comprehensive capacity building programme on water integrity and governance developed and implemented

- 5.1. Elaboration of training programme and at least 3 modules on water integrity and governance;
- 5.2. Conduction of Training of Trainers (ToT) courses for 10 focal specialists of key stakeholder representatives and organization of subsequent trainings by trainers within their respective organizations and localities for at least 20 more specialists;
- 5.3. Publications and dissemination of knowledge products amongst stakeholders.

7. Strengthening conflict management capacities (including transparent resource allocation and sound water management principles) for dialogue in conflict-prone areas of Tajikistan.

Activity result 1. Increased social cohesion and confidence-building between local and national levels, capacities of local authorities and communities are strengthened to undertake collaborative development processes in a conflict sensitive manner.

- Review and amendment of DDPs through participatory discussions;
- DDPs should be participatory but also be aligned with ministerial strategy and implemented in coordination with local governance structures ;
- Capacity development for local governments on conflict sensitive analysis, responsiveness, transparency and etc.
- Development of the citizen perception methodology applicable in the local context
- Conducting citizen perception survey/information collection disaggregated by age and gender
- Preparation of the report on citizen perception analysis disaggregated by age and gender
- Presentation of the report and provision recommendations to the local government institutions
- Introduction of gender responsive citizen perception mechanism in the local governance system
- Introduction of best inclusive participation mechanism ensuring systematic joint decision making at the local level
- Implementation of initiatives fostering gender responsive participation (public hearings, open door meetings, joint working groups, local government regulations and etc.)
- Development and dissemination of knowledge products;

Activity result 2.

Strengthened trans-boundary cooperation mechanisms (policies, institutions, practices, etc.) for effective water management and improved confidence between cross-border communities

- Enhancement of the existing and development of additional information and data sharing mechanisms and arrangements;
- Support to bilateral cooperation and conflict prevention through facilitating regular working meetings, visits, seminars and roundtables;
- Developing proposals and action plans aimed to support joint water-related operations in the basin, and facilitate selection of priority activities to improve joint water management at the national and trans-boundary level;
- Provision of trainings for local stakeholders on water and security issues (conflict prevention, mitigation and resolution, sustainable water use, income generation, water metering, water saving measures, etc.). At least 40% of the participants are women.
- Pilot implementation of selected priority proposals and the action plan developed to support joint water related operations in Isfara river basin.
- Development and dissemination of knowledge products;

Activity result 3

Conflict analysis and conflict- sensitive principles integrated into the work of UNDP/UNCT.

- Conflict-sensitive planning, implementation, and monitoring manual is developed and introduced as a guide for programme and project staff.
- Capacity development for relevant UNDP and UNCT staff and government officials in conflict sensitive programming with at least 40% of female participants.
- Development of conflict sensitive and gender responsive indicators for UNCT M&E framework.

8. Initial Implementation of accelerated HCFC Phase out in the CEIT Region

Activity result 1 – Development of the HCFC Phase Out Strategy and Action Plan

- 1.1. HCFC phase-out strategy fully formulated, packaged as draft legislation for Government approval and cleared by line Ministries/departments for final endorsement;
- 1.2. Widely accessible information on HCFC phase-out strategy and its elements
- 1.3. Inter-agency coordination related to HCFC phase-out is improved
- 1.4. Regulatory measures (quotas etc) are developed and updated

Activity result 2 - Trainings for working level customs and enforcement officials, and refrigeration technicians using resources (trainers and training materials) from Component 1 with respect to legislation, regulations, customs controls, refrigeration servicing techniques, and general best practices

- 2.1. Customs training and equipment support to enhance customs control capability
- 2.2. Upgrade the specialized warehouse for seized HCFC chemical/containing goods
- 2.3. Refrigeration technicians training and equipment support to enhance refrigeration servicing

Activity result 3 - Targeted HCFC Phase-out Investment Program and Demonstration projects

- 3.1. Upgrades of HCFC re-use system through strengthening R/R/R centers and improving storage of unwanted ODS capacity
- 3.2. Initiate the demonstration of benefits of natural cooling technologies in A/C Sector

Activity result 4 - Monitoring, learning, adaptive feedback, outreach and evaluation

- 4.1. M&E and adaptive management applied to project in response to needs and extract lessons learned
- 4.2. Project Steering Committees conducted

D. Summary of Interagency Contingency Plan Risk Assessment (IACP)⁹

The main natural hazards affecting Tajikistan are of two categories: geophysical hazards, a function of the geological make up, and meteorological hazards, which are the result of weather conditions. Geophysical hazards include natural hazards where the principal causal agent is geological and geomorphological (e.g. landslides and earthquakes). Examples of meteorological hazards include flooding and mudslides (could be also geophysical).

The most frequent natural hazards occurring in Tajikistan are avalanches and mudflows (1,333 events over the last 11 years), followed by small-scale earthquakes (228 events) and floods (151 events). These natural hazards typically happen several times a year and their impact is local, affecting a few households, communities, villages and occasionally a larger part of a district.

Many of these disasters are linked to spring thaw and precipitation and therefore occur mostly between April and June. Minor events also comprise rock falls, hail, wind, heavy snowfall, and high ground water. In any given year, an average of 1,500 families (i.e. 7,500 people) is affected by such small- to medium-scale events. Though the loss of human lives is usually relatively small, the damage to infrastructure, family assets and livelihoods can be significant.

A severe earthquake hitting capital Dushanbe or another major urban centre is a permanent threat. With few residential and social buildings being resistant to high intensity earthquake, a high magnitude earthquake would result in the devastating destruction in the city. Based on century-long research and observations, seismologists warn that the time for a major earthquake is overdue.

Adverse weather conditions over a prolonged period of time, such as drought or severe cold, occur less frequently but, when they do, have grave consequences for large parts of the population. For instance, an estimated 2 million people were affected by the extreme cold in the first weeks of 2008, while another 800,000 suffered from the consequences of the drought in October of the same year. Matters are further complicated by the impact of severe weather on the country's hydro-powered energy production and agricultural output, thereby increasing food insecurity and interfering with livelihoods.

Another slow-onset hazard is an economic and financial crisis: over 1 million Tajiks earn their living abroad, mostly in Russia, and their remittances constitute up to half of the country's income. A dramatic decrease or collapse of this money flow would severely impact livelihoods, access to basic services and food security.

Epidemics are one of the most deadly hazards in Tajikistan, with an average of 12 human fatalities per event over the last 11 years. The 2010 polio epidemic took 12 lives, while hundreds more fell ill and remained permanently disabled as a consequence (see IACP Tajikistan 2010).

Instability and conflict-related hazards include the current low probability of a spill-over or refugee influx from the potential internal conflicts in Kyrgyzstan and Afghanistan. The long-standing disputes with downstream countries of Central Asia's major rivers, especially Uzbekistan, over the use of precious water resources constitute another risk.

Presently relatively low risk hazards include dam failure, hazardous industrial and biological waste, unplanned chemical releases, transport accidents and accidents affecting gas, fuel and heating pipelines or life support systems.

⁹ The full document can be accessed at <http://untj.org/coordination-mechanisms/disaster-management/resource-page>.

The updated IACP Tajikistan 2012, similarly to IACP 2010, considers three different scenarios of potential disasters, categorized according to the impact and the speed of the onset. A more frequent or more likely hazard is used as a sample scenario for each type of disaster.

As a result, the focus of the IACP is the three most likely disasters: (i) medium-scale natural events and disasters, (ii) rapid-onset large-scale disasters and (iii) slow-onset crisis set off by several mutually reinforcing triggers.

V. Summary of Program-Specific Risk Assessments

A. Program Level

No program-level hazard or risk analysis has been completed for the project.

B. Implementation Level

The results of the hazard analysis should be included in program and project implementation plans, including the **Annual Work Plan** and activity-specific plans.

Program: Technology Transfer and Market Development for Small-Hydropower in Tajikistan.		Date Completed: March 2013
Hazard	<i>Will the hazard have a significant impact the implementation of the project? Yes or No</i>	<i>If yes, will the impact be positive or negative? Summarize impacts.</i>
Flooding	1.2, 2.2, 2.3, 3.1, 3.2, 3.3,	1.2 Yes – it may create difficult access to the training points, as well as minimize attendance of key government counterparts at the trainings and other decision making processes. 2.2; 2.3; 3.1; 3.2; 3.3 Yes – delivery of equipment to the project sites and SHP construction/maintenance processes can be hampered, as well as the selected locations may no longer be suitable for construction of SHP. Solution: Alternative would be the postponement of the project, wait for favorable time, cancellation of the project, changing the location depending on the severe nature of hazards.
Drought	3.2, 3.3	3.2 – Lack of water in the rivers or channels will stop the operation of SHP. 3.3 Recipients of loans for agricultural activities may lose their crops, and will not be able to return loans.

		Solution: Alternative would be the postponement of the project, wait for favorable time, cancellation of the project, changing the location depending on the severe nature of hazards.
Frosts and freezing	1.2, 2.2, 2.3, 3.1, 3.2, 3.3	1.2 Yes – it may create difficult access to the training points, as well as minimize attendance of key government counterparts at the trainings and other decision making processes. 2.2; 2.3; 3.1; 3.2; 3.3 Yes – delivery of equipment to the project sites and SHP construction/maintenance processes can be hampered, as well as the operation of the SHPs due to lack of water inflow can be affected. SHP operating staff will not be able to properly look after the SHP. Solution: Alternative would be the postponement of the project, wait for favorable time, cancellation of the project, changing the location depending on the severe nature of hazards. Prior to construction of the SHP facilities or installation/assembly works engineering solutions for construction of the SHP facilities needs to be considered and applied.
Heavy Snowfall	1.2, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.3	1.2 Yes – it may create difficult access to the training points, as well as minimize attendance of key government counterparts at the trainings and other decision making processes. 2.2; 2.3; 3.1; 3.2; 3.3 Yes – delivery of equipment to the project sites and SHP construction/maintenance processes can be hampered, as well as the operation of the SHPs due to lack of water inflow can be affected. Electricity transmission lines can break. SHP operating staff will not be able to properly look after the SHP. 4.1; 4.3 Difficult access to the project areas for data collection, monitoring and replication activities Solution: Alternative would be the postponement of the project, wait for favorable time, cancellation of the project, changing the location depending on the severe nature of hazards. Where possible good weather forecast to be done and favorable timing to be selected for the projects.
Heavy Rainfall	1.2, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.3	1.2 Yes – it may create difficult access to the training points, as well as minimize attendance of key government counterparts at the trainings and other decision making processes. 2.2; 2.3; 3.1; 3.2; 3.3 Yes – delivery of equipment to the project sites and SHP construction/maintenance processes can be hampered, as well as the operation of the SHPs due to lack of water inflow can be affected. SHP operating staff will not be able to properly look after the SHP. Agriculture works can be affected (crops lost)

		4.1; 4.3 Difficult access to the project areas for data collection, monitoring and replication activities Solution: Alternative would be the postponement of the project, wait for favorable time, cancellation of the project, changing the location depending on the severe nature of hazards. Where possible good weather forecast to be done and favorable timing to be selected for the projects.
Hail	1.2, 2.2, 2.3, 3.1, 3.2, 3.3	1.2 Yes – it may create difficult access to the training points, as well as minimize attendance of key government counterparts at the trainings and other decision making processes. 2.2; 2.3; 3.1; 3.2; 3.3 Yes – delivery of equipment to the project sites and SHP construction/maintenance processes can be hampered, as well as the operation of the SHPs due to lack of water inflow can be affected. SHP operating staff will not be able to properly look after the SHP. Agriculture works can be affected (crops lost) Solution: Alternative would be the postponement of the project, wait for favorable time, cancellation of the project, changing the location depending on the severe nature of hazards. Where possible good weather forecast to be done and favorable timing to be selected for the projects.
Prolonged Winter Weather	1.1, 1.2, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.3	1.1; 1.2 Yes – it may create difficult access to the training points, as well as minimize attendance of key government counterparts at the trainings and other decision making processes. 2.2; 2.3; 3.1; 3.2; 3.3 Yes – delivery of equipment to the project sites and SHP construction/maintenance processes can be hampered, as well as the operation of the SHPs due to lack of water inflow can be affected. Electricity transmission lines can break. SHP operating staff will not be able to properly look after the SHP. Agriculture works can be affected (crops lost) 4.1; 4.3 Difficult access to the project areas for data collection, monitoring and replication activities Solution: Alternative would be the postponement of the project, wait for favorable time, cancellation of the project, changing the location depending on the severe nature of hazards. Where possible good weather forecast to be done and favorable timing to be selected for the projects.
High Wind	1.2, 2.2, 2.3, 3.1,	1.2 Yes – it may create difficult access to the training points, as well as minimize attendance of key

	3.2,	government counterparts at the trainings and other decision making processes. 2.2; 2.3; 3.1; 3.2; 3.3 Yes – delivery of equipment to the project sites and SHP construction/maintenance processes can be hampered, as well as the operation of the SHPs due to lack of water inflow can be affected. Electricity transmission lines can break. SHP operating staff will not be able to properly look after the SHP. Solution: Alternative would be the postponement of the project, wait for favorable time, cancellation of the project, changing the location depending on the severe nature of hazards. Where possible good weather forecast to be done and favorable timing to be selected for the projects.
Avalanches	1.2, 3.1, 3.2, 4.1, 4.3	1.2 Yes – it may create difficult access to the training points, as well as minimize attendance of key government counterparts at the trainings and other decision making processes. 3.1; 3.2; 3.3 Yes – delivery of equipment to the project sites and SHP construction/maintenance processes can be hampered, as well as the operation of the SHPs can be affected. Electricity transmission lines can break. SHP operating staff will not be able to properly look after the SHP. 4.1; 4.3 Difficult access to the project areas for data collection, monitoring and replication activities Solution: Alternative would be the postponement of the project, wait for favorable time, cancellation of the project, changing the location depending on the severe nature of hazard. Zones for construction of SHP need to be selected based on prolonged observations of avalanche prone areas and safe zones to be selected. Where possible good weather forecast to be done and favorable timing to be selected for the projects.
High Ground Water	2.2, 2.3, 3.1, 3.2, 3.3,	2.2; 2.3; 3.1; 3.2; 3.3 Yes – high water table can hamper construction of the SHP building, specifically laying proper foundation. If the building already exists, water can penetrate into the machine hall and create risks for staff's lives – risk of electricity shocks. SHP operating staff will not be able to properly look after the SHP. Solution: Engineering solution to be sought for diverting ground water or changing the location of construction.

Mudflows	1.2, 2.2, 2.3, 3.1, 3.2, 3.3	1.2 Yes – it may create difficult access to the training points, as well as minimize attendance of key government counterparts at the trainings and other decision making processes. 2.2; 2.3; 3.1; 3.2; 3.3 Yes – delivery of equipment to the project sites and SHP construction/maintenance processes can be hampered, as well as the operation of the SHPs can be affected. Electricity transmission lines can break. SHP operating staff will not be able to properly look after the SHP. Damage to the turbines and SHP equipment can be tremendous. Agricultural activities can be affected, crops lost. 4.1; 4.3 Difficult access to the project areas for data collection, monitoring and replication activities Solution: Alternative would be the postponement of the project, wait for favorable time, cancellation of the project, changing the location depending on the severe nature of hazard. Zones for construction of SHP need to be selected based on prolonged observations of mudflow prone areas and safe zones to be selected. Constructions need to be done in safe areas.
Landslide	1.2, 2.2, 2.3, 3.1, 3.2, 3.3	1.2 Yes – it may create difficult access to the training points, as well as minimize attendance of key government counterparts at the trainings and other decision making processes. 2.2; 2.3; 3.1; 3.2; 3.3 Yes – delivery of equipment to the project sites and SHP construction/maintenance processes can be hampered, as well as the operation of the SHPs can be affected. Electricity transmission lines can break. SHP operating staff will not be able to properly look after the SHP. Damage to the turbines and SHP equipment can be tremendous. Agricultural activities can be affected, crops lost. Solution: Alternative would be the postponement of the project, wait for favorable time, cancellation of the project, changing the location depending on the severe nature of hazard. Zones for construction of SHP need to be selected based on prolonged observations of landslide prone areas and safe zones to be selected. Constructions need to be done in safe areas.
Earthquake	1.1, 1.2, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.3	Depending on the earthquake amplitude and the damage it may cause, all project areas will be affected. Construction of buildings for the SHPs therefore should be earthquake resistant, at least to stand shocks. Engineering solutions required

Rock fall	1.2, 2.2, 2.3, 3.1, 3.2, 4.1, 4.3	1.2 Yes – it may create difficult access to the training points, as well as minimize attendance of key government counterparts at the trainings and other decision making processes. 2.2; 2.3; 3.1; 3.2; 3.3 Yes – delivery of equipment to the project sites and SHP construction/maintenance processes can be hampered, as well as the operation of the SHPs can be affected. Electricity transmission lines can break. SHP operating staff will not be able to properly look after the SHP. Damage to the turbines and SHP equipment can be tremendous. Agricultural activities can be affected, crops lost. 4.1; 4.3 Difficult access to the project areas for data collection, monitoring and replication activities Solution: Alternative would be the postponement of the project, wait for favorable time, cancellation of the project, changing the location depending on the severe nature of hazard. Zones for construction of SHP need to be selected based on observations of rock fall prone areas and safe zones to be selected. Constructions need to be done in safe areas. Alternative access routes need to be known.
Epidemics	1.1, 1.2, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.3	Access to the project areas that is hit by epidemics will be limited. Projects cannot be implemented there. Solution: to postpone the project until the zone is cleared from epidemics.

Project: Technology Transfer and Market Development for Small-Hydropower in Tajikistan.																	
Outcome/Activity (Based on ProDoc and 2013 Work Plans)	Hazard (Check if applicable)																
	Floods	Drought	Frost and freezing	Heavy Snowfall	Heavy Rainfall	Hail	Prolonged Winter Weather	High winds	Avalanches	High Ground Water	Mudflows	Landslides	Earthquake	Rockfall	Epidemics	Animal Disease	Plant Disease
Activity 1: Adapted and enhanced legislative and regulatory framework for small-scale hydropower development in the country.																	

1.1 Formulated, approved and enforced Implementing Rules and Regulations (IRRs) of the Law for RES that will facilitate actions geared towards the enhancement of the market environment for SHP	X	X					X		X		X		X	X				If Regulations don't cover hazards which can affect MHPS the result will be loss of investment and lack of power for communities.	Include hazard assessment in rules and regulations.
1.2 Institutional capacities in place at central and local level to implement and coordinate RES policies.	X		X	X					X	X			X		X			Hazards may prevent capacity building.	Adjust capacity building when hazards are not likely to affect training events; select seismically safe locations.
Activity 2: Enhanced technical and planning know-how and developed market chain for SHP.																			
2.2: Local workshops and manufacturers with enhanced capacities to install, construct, manufacture and repair SHP system equipment and components	X		X	X	X	X	X	X		X	X	X	X	X	X			All the hazards can have negative impact on technology transfer especially, in delays with bringing new technology and launching the production	Adjust the technology transfer plans and foresee the hazards that are likely to impact the process of technology transfer.

2.3: Vocational training program for technicians involved in SHP design/construction and O&M	X		X	X	X	X	X	X		X	X	X	X	X	X			Delay in introducing education module to technical universities.	To foresee and forecast potential hazards and plan activities at favorable location (for more appropriate time and place)
Activity 3: Demonstrated technical and economic viability of SHP technology in supporting socio-economic development.																			
3.1: Technical studies, political commitments and institutional framework secured for pilot SHP projects	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Hazards might prevent from having proper feasibility studies at the project location. If there is no feasibility studies then construction of MHPP is not possible	Foresee and forecast potential hazards and plan feasibility studies during appropriate seasons.
3.2: Operational SHP demos/pilots in selected communities, demonstrating the viability of the technology and O&M&M models	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Collapse of the construction of MHPP resulting in financial and human loss	Make proper study (feasibility and the risk-assessment) to minimize financial and human loss. Make an evacuation plan at the project site.

3.3: Pilot SHP operations sustained	X		X	X	X	X	X			X			X		X			Barrier for scaling up the project. Hindrance in providing micro-loans resulting negative impact in the access of economic opportunities	Establishing a cash point in the village where they can easily access these loans. These loans are given only to the people who have collateral as a security for loss.
Activity 4: National Scaling-up Programme of Renewable Energy-based Integrated Rural Development in supporting socio-economic development.																			
4.1 Project results assessed, analyzed and compiled into comprehensive national report				X	X		X		X				X	X	X			Barrier for scaling up the project	Demonstrate a proper analysis of the risk associated with the implementation of the project. These documents should incorporate risk assessment plan as an alternative solution.

4.3. National Scaling-up Action plan adopted				X	X		X		X					X	X	X			Barrier for scaling up the project	Demonstrate a proper analysis of the risk associated with the implementation of the project. These documents should incorporate risk assessment plan as an alternative solution.
--	--	--	--	---	---	--	---	--	---	--	--	--	--	---	---	---	--	--	------------------------------------	--

Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region																	Completed: 20 September 2013		
Outcome/Activity (Based on 2013 Work Plans)	Will Any of These Hazards Affect the Implementation or Outcomes of the Project?																Impact (List hazards checked and impacts) (Use additional pages if needed.)	Mitigation Measures (List measure/s for each impact) (Use additional pages if needed.)	
	Hazard (Check if applicable)																		
	Floods	Drought	Freezing	Frost and Heavy Snowfall	Heavy Rainfall	Hail	Winter Weather	Prolonged High winds	Avalanches	High Ground Water	Mudflows	Landslides	Earthquake	Rockfall	Epidemics	Animal Disease			Plant Disease
HCFC phase-out strategy fully formulated, packaged as draft legislation for Government approval and cleared by line Ministries/departments for final endorsement																			
Recruit a National Consultant on development of national HCFC phase-out strategy and action plan																			
Establish a Working Group for development of national HCFC phase-out strategy and action plan																			
Undertake a Round Table on discussion of further steps to develop HCFC phase-out strategy		X		X	X				X		X		X		X			Could cause meetings to be canceled.	Monitor weather reports; alternate date/location
Widely accessible information on HCFC phase-out strategy and its elements																			
Develop a ToR for PR National Consultant and recruitment																			
Develop information leaflets and materials																			
Organization of Information Campaign devoted to the International Day for the Preservation of the Ozone Layer		X		X	X				X		X		X		X			Could cause meetings to be canceled.	Monitor weather reports; alternate date/location
Inter-agency coordination related to HCFC phase-out is improved																			

Undertake working meetings with the representatives of relevant government agencies, HCFC users and private sector to improve inter-agency coordination		X		X	X				X		X		X		X			Could cause meetings to be canceled.	Monitor weather reports; alternate date/location
Regulatory measures (quotas etc) are developed and updated																			
Carry out a National Workshop on discussion of normative - regulatory acts to develop HCFC phase-out strategy		X		X	X				X		X		X		X			Could cause meetings to be canceled.	Monitor weather reports; alternate date/location
	Floods	Drought	Freezing	Heavy Snowfall	Heavy Rainfall	Hail	Prolonged Winter Weather	High winds	Avalanches	High Ground Water	Mudflows	Landslides	Earthquake	Rockfall	Epidemics	Animal Disease	Plant Disease		
Customs training and equipment support to enhance customs control capability																			
Undertake a baseline survey, basic training needs assessment and identify capacity building measures for project stakeholders		X		X	X				X		X		X		X			Could cause meetings to be canceled.	Monitor weather reports; alternate date/location
Identify relevant topics for development of Training Modules & Action Plan for Capacity Building of the project stakeholders and participants																		No impact	
Refrigeration technicians training and equipment support to enhance refrigeration servicing																			

Develop a list of necessary equipment for maintaining refrigeratory facilities and air conditioning systems and announcement of Tender to deliver necessary equipment																		No impact	
Upgrades of HCFC re-use system through strengthening R/R/R centers and improving storage of unwanted ODS capacity																			
Undertake meetings with relevant stakeholders on upgrading of HCFC re-use system;		x		x	x				x		x		x		X			Could cause meetings to be canceled.	Monitor weather reports; alternate date/location

C. Vulnerability Assessment

Project Activity: Technology transfer and Market Development for Small-Hydropower in Tajikistan (For General Population)					Date: March 14 th , 2013
Capital	Indicator	Level of Capital			
		1	2	3	4
Human	Level of education	No formal education	Education up to 5 years	Education up to 9 years	University or professional degree
Social	Contacts with others	Isolated	Limited contact with others (for winter)	Daily contact with family and friends locally (for summer)	Local, national and international connections
Financial	Assets to cover needs	Funds available do not cover basic daily needs	Funds cover basic needs	Funds to cover full daily needs	Full daily needs covered; Excess funds to invest
Natural	Access to natural resources	Almost no natural resources	Access meets some needs	Access meets immediate needs	Access exceeds needs
Physical	Physical assets	No regular housing or assets	At least one room; no vehicle, land	Housing/heating, land but no vehicle	Housing/heating, land and vehicle
Political	Level of Engagement of Government	No engagement	Engagement sufficient to meet some needs.	Engagement sufficient to meet most needs.	Total engagement

Any change after the project is accomplished?

- Human- yes, increases in school attendance due to improved access to electricity and heating especially, during winter season.
- Social- yes, we can improve better access towards social communication during winter by providing access to electricity.
- Financial- yes, but limited as this project might create some job opportunities. In the areas where loans are provided we expect some improvements in their financial status.
- Natural- yes, Sustainable use of water resources; water accumulation/ domestic purposes and irrigation;

- Physical- No changes
- Political- No changes

Project Activity: Technology transfer and Market Development for Small-Hydropower in Tajikistan (For Women)					Date: March 14 th , 2013
Capital	Indicator	Level of Capital			
		1	2	3	4
Human	Level of education	No formal education	Education up to 5 years	Education up to 9 years	University or professional degree
Social	Contacts with others	Isolated	Limited contact with others	Daily contact with family and friends locally	Local, national and international connections
Financial	Assets to cover needs	Funds available do not cover basic daily needs	Funds cover basic needs	Funds to cover full daily needs	Full daily needs covered; Excess funds to invest
Natural	Access to natural resources	Almost no natural resources	Access meets some needs	Access meets immediate needs	Access exceeds needs
Physical	Physical assets	No regular housing or assets	At least one room; no vehicle, land	Housing/heating, land but no vehicle	Housing/heating, land and vehicle
Political	Level of Engagement of Government	No engagement	Engagement sufficient to meet some needs.	Engagement sufficient to meet most needs.	Total engagement

Any change after the project is accomplished:

- Human- yes, increases in school attendance due to improved access to electricity and heating especially, during winter season.
- Social- No changes because of the traditional and cultural values. After marriage, the woman does not much contact with family or friends on a daily basis. Therefore, improvement in technology or electricity will not have quantifiable changes.
- Financial- No changes. Directly they might not be benefited from this project as they are dependent on their husband. Also, the loans are given to men rather than women.
- Natural- No changes
- Physical- No changes

- Political- No changes

Project Activity: Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region		All Beneficiaries: business persons/Importers/recyclers/shop keepers			Date: 20 Sept 13
Capital	Indicator	Level of Capital			
		1	2	3	4
Human	Level of education	No formal education	Education up to 5 years	Education up to 9 years	University or professional degree
Social	Contacts with others	Isolated	Limited contact with others	Daily contact with family and friends locally	Local, national and international connections
Financial	Assets to cover needs	Funds available do not cover basic daily needs	Funds cover basic needs	Funds to cover full daily needs	Full daily needs covered; Excess funds to invest
Natural	Access to natural resources	Almost no natural resources	Access meets some needs	Access meets immediate needs	Access exceeds needs
Physical	Physical assets	No regular housing or assets	At least one room; no vehicle, land	Housing/heating, land but no vehicle	Housing/heating, land and vehicle
Political	Engagement of GovT	No engagement	Some engagement	General engagement	Total engagement

Project Activity: Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region			Females: business women/Importers/recyclers/shop keepers/semi-gross retainers (e.g., deodorant sellers)		Date: 20 Sept 13
Capital	Indicator	Level of Capital			
		1	2	3	4
Human	Level of education	No formal education	Education up to 5 years	Education up to 9 years	University or professional degree
Social	Contacts with others	Isolated	Limited contact with others	Daily contact with family and friends locally	Local, national and international connections
Financial	Assets to cover needs	Funds available do not cover basic daily needs	Funds cover basic needs	Funds to cover full daily needs	Full daily needs covered; Excess funds to invest
Natural	Access to natural resources	Almost no natural resources	Access meets some needs	Access meets immediate needs	Access exceeds needs
Physical	Physical assets	No regular housing or assets	At least one room; no vehicle, land	Housing/heating, land but no vehicle	Housing/heating, land and vehicle
Political	Engagement of GovT	No engagement	Some engagement	General engagement	Total engagement

Opportunities to increase capitals

Human - Specialized training for women
 Social - Exchange of experience – men and women
 Social - Civic awareness – men and women

D. Office Level Safety Assessment

Office: Energy and Environment Program			
Person Completing Form: Khurshed Kholov			
Date: February 2013			
Safety Question	Yes	No	Actions to be Taken
Is the office VHF radio in the office charged and checked each week?	✓		Thuraya Satellite phones are used as alternative
Is the office Satphone in the office charges and checked each week?	✓		
Has a hazard assessment been done for the building where you are located?	✓		
Has your building been subject to a seismic upgrade or built to seismic codes updated since 2000?	✓		
Is your office outside a flood zone?	✓		
Is the building in which your office is located outside areas subject to landslides, rock falls or avalanches?	✓		
Have the water pipes in your building been replaced in the last 15 years? (Skip if building is less than 15 years old.)	✓		
Is no more than one extension cord connected to each plug in the office, and only one device connected to each pug available on the cord?	✓		
Is there a fire extinguisher in each major room?	✓		
Has the staff been trained in the use of a fire extinguisher?	✓		
Does the office have a warden?	✓		
Is there an indication of the number of normal occupants in your office posted outside the office?	✓		
Are there two exits from your office (e.g., through a door and through a window)?	✓		Procurement of ladder to be arranged by DRMP Office and cost shared
If your office is above the 5th floor, have you identified a way to exit your office if the normal staircase and fire escape are blocked?			Not applicable
If there are metal grills on your windows, can they be opened from the inside?			Not applicable
Is the glass in windows covered by anti-blast plastic?	✓		
Do windows have heavy curtains or blinds?	✓		

Are all bookcases, pictures, lights and heavy items secure against seismic shaking?	✓		
Will room and office exits still be usable if heavy items fall in the room(s)?	✓		
Are all staff protected from falling items (e.g., book cases, printers, pictures, etc.)?	✓		
Does the office use a check-in/check-out board or service for travel outside Dushanbe?	✓		
Do you have a basic first aid kit in the office?		✓	First Aid Kit to be purchased as per UNDSS recommendation
Has the staff been trained in basic first aid?		✓	
Are there flashlights or safety lights available in the office?	✓		
Are evacuation plans posted in visible locations?	✓		Evacuation plan to be approved and posted.
Are office computer files backed up regularly?	✓		
Are office computer files saved away from the office?		✓	A safe deposit box to be rented in a bank and hardware for replication and carrying of server data as per UNDP audit recommendation
Comments: Staff who's driver's licenses should be provided with training in driving project vehicles.			

VI. Risk Management

A. Program-Level Risk Management Options

1. Technology Transfer and Market Development for Small-Hydropower in Tajikistan

Options to Manage Hazard Impacts		
Hazard	Impact Management Option	Option Incorporated into Project Plans?
Flooding	Postpone project, wait for favorable time, cancellation of the project, changing the location depending on the severe nature of hazards.	No – this will be incorporated during a specific project design
Drought	As above.	No – this will be incorporated during a specific project design
Frosts and freezing	Prior to construction of the SHP facilities or installation/assembly works engineering solutions for construction of the SHP facilities needs to be considered and applied.	No – this will be incorporated during a specific project design
Heavy Snowfall	Postpone project, wait for favorable time, cancellation of the project, changing the location depending on the severe nature of hazards.	No – this will be incorporated during a specific project design
Heavy Rainfall	As above.	No – this will be incorporated during a specific project design
Hail	As above.	No – this will be incorporated during a specific project design
Prolonged Winter Weather	As above.	No – this will be incorporated during a specific project design
High Wind	As above.	No – this will be incorporated during a specific project design
Avalanches	Zones for construction of SHP need to be selected based on prolonged observations of avalanche prone areas and safe zones to be selected. Where possible good weather forecast to be done and favorable timing to be selected for the projects.	No – this will be incorporated during a specific project design
High Ground Water	Engineering solution to be sought for diverting ground water or changing the location of construction.	No – this will be incorporated during a specific project design
Mudflows	Zones for construction of SHP need to be selected based on prolonged	No – this will be

	observations of mudflow prone areas and safe zones to be selected. Constructions need to be done in safe areas.	incorporated during a specific project design
Landslide	Zones for construction of SHP need to be selected based on prolonged observations of landslide prone areas and safe zones to be selected. Constructions need to be done in safe areas.	No – this will be incorporated during a specific project design
Earthquake	Construction of buildings for the SHPs therefore should be earthquake resistant, at least to stand shocks. Engineering solutions required	No – this will be incorporated during a specific project design
Rock fall	Zones for construction of SHP need to be selected based on observations of rock fall prone areas and safe zones to be selected. Constructions need to be done in safe areas. Alternative access routes need to be known.	No – this will be incorporated during a specific project design
Epidemics	Solution: to postpone the project until the zone is cleared from epidemics.	No – this will be incorporated during a specific project design

Outcome/Activity Level Hazard Impact Mitigation		
Outcome/Activity (Based on ProDoc and 2013 Work Plans)	Hazard Mitigation Measures	Option Incorporated into Project Outputs?
1.1 Formulated, approved and enforced Implementing Rules and Regulations (IRRs) of the Law for RES that will facilitate actions geared towards the enhancement of the market environment for SHP	Include hazard assessment in rules and regulations.	Yes – the standardization for mHPP construction guidelines provides recommendations on mitigating hazards
1.2 Institutional capacities in place at central and local level to implement and coordinate RES policies.	Adjust capacity building to when hazards are not likely to affect training events; select seismically safe locations.	No – to be included as part of the implementation methodology for the training provider
2.2: Local workshops and manufacturers with enhanced capacities to install, construct, manufacture and repair SHP system equipment and components	Adjust the technology transfer plans and foresee to the hazards that are likely to impact the process of technology transfer.	No – to be included as part of the overall requirement
2.3: Vocational training program for technicians involved in SHP design/construction and O&M.	To foresee and forecast potential hazards and plan activities at favorable location (for more appropriate time and place).	No – to be included in the overall plan of training programme
3.1: Technical studies, political commitments and institutional framework secured for pilot SHP projects	Foresee and forecast potential hazards and plan feasibility studies during appropriate seasons.	Yes – the feasibility studies were planned for

		summer that reduced the risks of avalanches, frost, etc. However, flush-floods occurred due to weather anomalies in Rasht, hence the project team had to drop out one area from their plans.
3.2: Operational SHP demos/pilots in selected communities, demonstrating the viability of the technology and O&M&M models.	Make proper study (feasibility and the risk-assessment) to minimize financial and human loss. Make an evacuation plan at the project site.	No – to be incorporated during the project design stage
3.3: Pilot SHP operations sustained	Establish a cash point in the village where they can easily access these loans. These loans are given only to the people who have collateral as a security for loss.	Yes – the MLF officer collects requests for loans in the villages. The requests are analyzed in the MLF office in Dushanbe and the positive requestors are notified to come at the appointed time to an appointed place in the village (Jamoat administration for instance) to collect cash. Due to lack of means for safe-cash storage in the villages, cash points could not be established.
4.1 Project results assessed, analyzed and compiled into comprehensive national report	Demonstrate a proper analysis of the risk associated with the implementation of the project. These documents should incorporate a risk assessment plan as an alternative solution.	No – to be included in the report once it is due.
4.3. National Scaling-up Action plan adopted	Demonstrate a proper analysis of the risk associated with the implementation of the project. These documents should incorporate risk assessment plan as alternative solution.	No – to be included in the report once it is due.

2. Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region

Outcome/Activity Level Hazard Impact Mitigation Actions: Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region		Completed: 20 September 2013	
Activities	Hazards	Impact	Mitigation Measures
HCFC phase-out strategy fully formulated, packaged as draft legislation for Government approval and cleared by line Ministries/departments for final endorsement			
Undertake a Round Table on discussion of further steps to develop HCFC phase-out strategy	Drought, Heavy Snowfall, Heavy Rainfall, Avalanches, Mudflows, Earthquake, Epidemics	Could cause meetings to be canceled.	Monitor weather reports; plan for alternate date/location
Widely accessible information on HCFC phase-out strategy and its elements			
Organization of Information Campaign devoted to the International Day for the Preservation of the Ozone Layer	Drought, Heavy Snowfall, Heavy Rainfall, Avalanches, Mudflows, Earthquake, Epidemics	Could cause meetings to be canceled.	Monitor weather reports; plan for alternate date/location
Inter-agency coordination related to HCFC phase-out is improved			
Undertake working meetings with the representatives of relevant government agencies, HCFC users and private sector to improve inter-agency coordination	Drought, Heavy Snowfall, Heavy Rainfall, Avalanches, Mudflows, Earthquake, Epidemics	Could cause meetings to be canceled.	Monitor weather reports; plan for alternate date/location
Regulatory measures (quotas etc) are developed and updated			
Carry out a National Workshop on discussion of normative - regulatory acts to develop HCFC phase-out strategy	Drought, Heavy Snowfall, Heavy Rainfall, Avalanches, Mudflows, Earthquake, Epidemics	Could cause meetings to be canceled.	Monitor weather reports; plan for alternate date/location
Customs training and equipment support to enhance customs control capability			
Undertake a baseline survey, basic training needs assessment and identify capacity building measures for project stakeholders	Drought, Heavy Snowfall, Heavy Rainfall, Avalanches, Mudflows, Earthquake, Epidemics	Could cause meetings to be canceled.	Monitor weather reports; plan for alternate date/location
Upgrades of HCFC re-use system through strengthening R/R/R centers and improving storage of unwanted ODS capacity			
Undertake meetings with relevant stakeholders on upgrading of HCFC re-use system;	Drought, Heavy Snowfall, Heavy Rainfall, Avalanches, Mudflows, Earthquake, Epidemics	Could cause meetings to be canceled.	Monitor weather reports; plan for alternate date/location

B. Standard Operating Procedures

The follow tables provide a list of expected actions by sector covering disaster preparedness, warning, response and recovery reflecting the risk management priorities internal to the project. These lists constitute Standard Operating Procedure (SOP) guidance for use at each stage of managing a disaster.

The lists include specific tasks for each stage of the disaster management process as well as space to indicate

1. Who is responsible for a specific task, and
2. What actions have been taken by the project to address the tasks?

Note that a number of the tasks and linked actions are covered by normal project operations, e.g. evacuation plans.

The **Preparedness** SOP should be completed at the same time as the **Plan**. The **Warning** SOP should be updated based on the seasonal nature of disasters (e.g., in the spring for flooding/landslide season and in the fall for the snow and cold weather period). The **Relief** and **Recovery** SOPs should be reviewed once a warning has been issued. The **Recovery** SOP should again be reviewed once a major relief operation has been initiated. Note that the Recovery SOP provides a general summary of recovery-related tasks and would be complemented by specific recovery plans developed using the **REACT Recovery Framework**. All the SOPs should be reviewed at least annually.

For projects working in different locations a separate set of lists will need to be prepared as the persons who will manage specific tasks and the actions to be taken may be different.

1. Preparedness Stage

Standard Operating Procedures – Preparedness				
Sector	Task	Who is to manage the task?	Backstop	Action to be Taken
Coordination	Ensure that all aspects of the disaster response can work effectively and in a coordinated manner.	Khurshed Kholov	Jamshed Kodirkulov	- Ensure that Russian and English versions of the Disaster Plan are prepared appropriately and accessible to all staff members, with a copy to DSS and OCHA. - Ensure that all members understand their roles and responsibilities - Ensure that the Plan is updated on regular basis
Early Warning	Assure warning systems exist for potential disasters. ¹⁰	Madina Dehoti	Madina Begmatova	- Establish a contact point for early warning information and distribute the warning information when received. - Ensure that all contact details of all staff member are up to date. - Ensure that the home address of each staff is available and updated
Office Facilities	Assure office facilities can be used during a disaster.	Admin/Finance Associate	Zafar Abduljalilov	- Ensure that a back-up power supply system is available in case of absence of the main electricity supply - Ensure that the “H” drive and internet are accessible when the main power supply is out. - Identify possible sources of food and bedding for use if office is used on 24 hr basis or as shelter.
	Assure disaster risk reduction measures are implements for the office and other	Admin/ Finance Associate	Zafar Abduljalilov	- Ensure that evacuations signs are installed in the office - Ensure that shelves/cupboards are attached to the walls to prevent them from

¹⁰ Note that a staff contact list should be developed as part of this task.

	facilities.			falling during earthquake - Ensure that the evacuation exits are kept clear at all times - Establish a second evacuation route from the second floor.
	Assure that adequate safety equipment is available and preparedness measures have been established.	Admin/ Finance Associate	Violetta Strizhakova	- Ensure that fire extinguishers are available in the office and staff members are aware how to use them - Ensure that the office is equipped with smoke detectors and a fire alarm - Ensure that a first aid kit is at handy at all time and includes all the necessary items.
Evacuation	Ensure that there is a safe evacuation plan and everyone is informed.	Admin/ Finance Associate	Khurshed Kholov	- Ensure that an evacuation point is identified and staff are aware of the gathering point - Ensure that an evacuation exercise is conducted at least twice per year.
Shelter/Housing	Ensure that plans have been made for sheltering project staff after a disaster.	Madina Dehoti	Madina Begmatova	- Ensure that list of all staff members along with their next of kin are up to date - Ensure that arrangements are made for provision of temporary shelter - Ensure that the temporary shelter facilities can be equipped with basic sanitation, hygiene facilities, water supply and heating facilities.
Food and Non-food Items	Ensure that basic food and non-food needs can be met following a disaster.	Admin/ Finance Associate	Madina Begmatova	- Ensure that a certain amount of cash is available for purchase of basic food and non-food items
Water and Sanitation	Ensure that water for human consumption and other needs and gender and child appropriate sanitation facilities will	Admin/ Finance Associate	Madina Dehoti	- Minimum 3 ton of water including 1 ton of drinking water at the office must be kept in reserve all the time - Availability of necessary materials for construction of temporary toilets.

	be available after a disaster.			- Determine where sanitary items can be purchased if needed. - Stockpile sanitary items needed for normal operations.
Health	Identify means to provide emergency health care following a disaster.	Odil Ganiev	Mahmadullo Shoev	- Agreements with local health facilities should be used to make sure that staff in needs of medical assistance get the required treatment - Staff members must be aware of the medical insurance policies to which they are entitled
	Ensure all staff have basic first aid training and first aid supplies are available in the office and project vehicles.	Admin/ Finance Associate	Odil Ganiev	- Ensure that all staff have basic first aid training. - Ensure that all EEP vehicles and the office are equipped with first aid kits.
Logistics	Develop plans to ensure project vehicles will be able to operate following a disaster, including the availability fuel and alternative drivers.	Umeda Khojimatova	Farukh Shoimardonov	- Staff members possessing driving license should be able to operate EEP vehicles whenever needed - At least 3 tons of fuel should be stored at the office or in UNERT warehouses for emergency situation. - Vehicles should have at least a ½ a tank of fuel at the end of each working day.
Education	Ensure basic education needs can be met for children of project staff following a disaster.	Farukh Shoimardonov	Madina Dehoti	- Liaise with local education authorities in terms of assignment of children to new schools if they were deprived from their own.
Social Services	Develop plans to ensure basic social services, including welfare support and counseling, are available to project staff and their families	Violetta Strizhakova	Madina Begmatova	- Develop a list of organizations and agencies providing social services and define how staff members benefit from these services.

	following a disaster.			
Finance	Define options for expedited expenditures by the project to support relief and recovery operation.	Admin/ Finance Associate	Madina Begmatova	- Define mechanisms through which DRMP can access up to \$10,000 in cash following a disaster. - Define mechanisms for providing staff with salary advances following a disaster. - Define mechanisms for direct payment of salary to staff.
Communications	Ensure that emergency communications systems are established and operating as needed.	Zafar Abdujalilov	Admin/ Finance Associate	- To maintain an updated list of communications equipment - To assure that relevant staff members are trained and capable to use communications equipment - To ensure that all staff members carry Thuraya's, GPS and other necessary communication equipment during field trips - Develop a plan to set up a communication operation following a disaster.

2. Warning Stage

Standard Operating Procedures – Warning - actions to be taken when a warning has been received				
Sector	Task	Who is to manage the task?	Backstop	Actions Taken
Coordination	Ensure that warning systems are operational and that warning-related tasks are completed.	Khurshed Kholov	Jamshed Kodirkulov	
Early Warning	Disseminate warnings as available. ¹¹	Madina Dehoti	Madina Begmatova	
Office Facilities	Assure office facilities can be used during a disaster	Admin/Finance Associate	Zafar Abdujalilov	
	Assure that adequate safety equipment is available and preparedness measures have been established.	Admin/ Finance Associate	Zafar Abdujalilov	
Evacuation	Ensure that the evacuation plan is up to date and everyone is informed. ¹²	Admin/ Finance Associate	Odil Ganiev	
Shelter/Housing	Ensure that plans are up to date for sheltering project staff after a disaster.	Admin/ Finance Associate	Khurshed Kholov	
Food and Non-food Items	Ensure that basic food and non-food supplies are available based on expected post-disaster needs.	Madina Dehoti	Madina Begmatova	
Water and Sanitation	Ensure that water for human consumption and other needs and gender and child appropriate sanitation facilities will be available as needed.	Admin/ Finance Associate	Madina Begmatova	
Health	Ensure the means to provide emergency health care will be available following a disaster.	Admin/ Finance Associate	Madina Dehoti	
	Ensure all staff have basic first aid training and first aid supplies are available in the office and project vehicles.	Odil Ganiev	Khurshed Madvaliev	
Logistics	Implement plans to ensure project vehicles can operate following a disaster, including the availability fuel and alternative drivers.	Admin/ Finance Associate / Odil Ganiev	Umeda Khojimatova Farukh	

¹¹ Note that a staff contact list should be developed as part of this task.

¹² Note that a staff contact list should be developed as part of this task.

			Shoimardonov	
Education	Ensure basic education needs can be met for children of project staff during and following a disaster.	Madina Begmatova	Madina Dehoti	
Social Services	Verify plans to ensure basic social services, including welfare support and counseling, are available to project staff and their families following a disaster.	Violetta Strizhakova	Farukh Shoimardonov	
Finance	Verify options for expedited expenditures by project to support relief and recovery operation can be implemented immediately.	Admin/ Finance Associate	Madina Begmatova	
Communications	Ensure that emergency communications systems are operating.	Zafar Abdujalilov	Khurshed Kholov	

3. Response Stage

Standard Operating Procedures – Response – actions to be taken in response to a disaster				
Sector	Task	Who is to manage the task?	Backstop	Action Taken
Coordination	Ensure that all aspects of the disaster response can work effectively and in a coordinated manner	Khurshed Kholov	Jamshed Kodirkulov	
	Identify and coordinate the disaster response activities using project resources.	Madina Dehoti	Madina Begmatova	
	Ensure that all staff are safe, and medical care is provided as needed.	Admin/Finance Associate	Zafar Abduljalilov	
Office Facilities	Assure office facilities are operational.	Admin/ Finance Associate	Zafar Abduljalilov	
	Assure that adequate safety equipment is available as needed.	Admin/ Finance Associate	Odil Ganiev	
Evacuation	Ensure a safe evacuation is taking place (if needed).	Admin/ Finance Associate	Khurshed Kholov	
Shelter/Housing	Ensure that shelter is available to project staff as needed.	Madina Dehoti	Madina Begmatova	
Food and Non-food Items	Ensure that basic food and non-food needs for project staff are met as needed.	Admin/ Finance Associate	Madina Begmatova	
Water and Sanitation	Ensure that water for human consumption and other needs and gender and child appropriate sanitation facilities are available as needed.	Admin/ Finance Associate	Madina Dehoti	
Health	Ensure that emergency health care is available following a disaster as needed.	Odil Ganiev	Khurshed Madvaliev	
	Ensure first aid supplies are available in the office and project vehicles following the disaster.	Admin/ Finance Associate /Odil Ganiev	Umeda Khojimatova Farukh Shoimardonov	

Logistics	Ensure project vehicles are able to operate following the disaster, including fuel and alternative drivers if needed.	Madina Begmatova	Madina Dehoti	
Education	Ensure basic education needs are met for children of project staff.	Violetta Strizhakova	Farukh Shoimardonov	
Social Services	Ensure basic social services, including welfare support and counseling, are available to project staff and their families following a disaster.	Admin/ Finance Associate	Madina Begmatova	
Finance	Ensure procedures for expedited expenditures by project to support relief and recovery operation are operational.	Admin/ Finance Associate	Khurshed Kholov	
Communications	Emergency communications systems are operating as needed.	Zafar Abdujalilov	Admin/ Finance Associate	

4. Recovery Stage

Standard Operating Procedures – Recovery – actions to be taken to support disaster recovery
Also see the REACT Recovery Framework -

Sector	Task	Who is to manage the task?	Backstop	Action Taken
Coordination	Ensure that disaster recovery work is coordinated.	Khurshed Kholov	Jamshed Kodirkulov	
	Identify and coordinate the disaster recovery activities using project resources.	Madina Dehoti	Madina Begmatova	
Office Facilities	Assure office facilities are functional based on recovery workload.	Admin/Finance Associate	Zafar Abduljalilov	
	Assure that adequate safety equipment is available.	Admin/ Finance Associate	Zafar Abduljalilov	
Shelter/Housing	Ensure that project staff have adequate shelter.	Admin/ Finance Associate	Odil Ganiev	
Food and Non-food Items	Ensure that basic food and non-food needs of staff and families are met.	Admin/ Finance Associate	Khurshed Kholov	
Water and Sanitation	Ensure that water for human consumption and other needs and gender and child appropriate sanitation facilities are available.	Madina Dehoti	Madina Begmatova	
Health	Ensure that staff and families have adequate access to appropriate health care during the recovery period.	Admin/ Finance Associate	Madina Begmatova	
Logistics	Ensure project vehicles operate at levels necessary to support recovery, including the availability of fuel and alternative drivers.	Admin/ Finance Associate	Madina Dehoti	
Education	Ensure basic education needs are met for children of project staff.	Odil Ganiev	Khurshed Madvaliev	
Social Services	Ensure basic social services, including welfare support and counseling, are available to project staff and their families during recovery.	Admin/ Finance Associate Odil Ganiev	Umeda Khojimatova Farukh Shoimardonov	
Finance	Expedite expenditures by the project to support recovery operation.	Madina Begmatova	Madina Dehoti	
Communications	Ensure that normal communications systems operating as needed.	Violetta Strizhakova	Farukh Shoimardonov	