







Developing climate resilience of farming communities in the drought prone parts of Uzbekistan

Inception Report

March, 2015

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Acronyms

| | 1 |
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| ADB | Asian Development Bank |
| AF | Adaptation Fund of UNFCCC |
| BTOR | Back to Office Report |
| CAREC | Central Asia Regional Development Center |
| DEWS | Drought Early Warning System |
| APA | Annual Plan of Activities |
| AWP | Annual Work Plan and Budget |
| FAO | Food and Agriculture Organization |
| GPS | Global Positioning System |
| IAWG | Inter-Agency Working Group |
| IDB | Islamic Development Bank |
| IFAS | International Fund for Saving the Aral Sea |
| IFI | International Financial Institution |
| JICA | Japan International Cooperation Agency |
| KFAED | Kuwait Fund For Arab Economic Development |
| M&E | Monitoring and Evaluation |
| OECD | Organisation for Economic Co-operation and Development |
| OPEC | Organization of the Petroleum Exporting Countries |
| SCO | Shanghai Cooperation Organisation |
| TIKA | Turkish International Cooperation and Development Agency |
| TOR | Terms of Reference |
| UN | United Nations |
| UNDP | United Nations Development Programme |
| UNFCCC | United Nations Framework Convention on Climate Change |
| USA | United States of America |
| USD | United States dollar |
| USAID | US Agency for International Development |
| WMO | World Meteorological Organization |
| WB | World Bank |

Executive summary

The UNDP/Adaptation Fund's project "Developing climate resilience of farming communities in the drought prone parts of Uzbekistan" has been endorsed by the Adaptation Fund in 2013. Funds for project implementation were available in January 2014 and project document was signed between UNDP and the Center of Hydrometeorological Services under the Cabinet of Ministers of the Republic of Uzbekistan (i.e. Uzhydromet as a national implementing partner agency) on 26 May, 2014. It is a six-year project which commenced in May of 2020. The project total budget is USD 5,190,878.

The overall objective of the project is to develop climate resilience of farming and pastoral communities in the drought prone parts of Uzbekistan, specifically in Karakalpakstan. Karakalpakstan is the most vulnerable region of Uzbekistan due to its unfavorable geographic location at the tail end of the Amudarya River and arid hydro-climatic conditions. It often receives low-quality and little or even no water from the upstream regions, especially during dry seasons. An analysis undertaken by the Second National Communication to UNFCCC by Uzbekistan showed that the number of days with 'high' temperatures (higher than 40 ⁰C) increased more than twice in the Aral Sea coastal zone, including Karakalpakstan. Climate change will further aggravate the already unfavorable environmental conditions in this region. Trends of falling yields and land productivity are already observed in Karakalpakstan, requiring immediate attention and priority adaption action. The project is comprised of four main components: (i) institutional capacity and mechanisms for drought risk management and early warning; (ii) climate resilient agricultural and pastoral production systems; (iii) landscape level approach to adaptation to climate change risks of increased aridity; (iv) knowledge management and awareness raising. Overall, project will help the central, regional and local governments and vulnerable farmers/households and pastoralists to withstand the current and future impacts of climate change: aridification and projected drying of this region that places serious strains on water availability resulting in a decline in land productivity.

The project activities have been prioritized through consultation with a wide round of negotiations with representatives of the Cabinet of Ministers of Karakalpakistan, district administration officials, local communities, farmers and dekhans had been undertaken. Useful recommendations and comments to enrich the project activities and to make them more effective and practicable were adopted into the project design as a result.

The inception phase began with the initiation of national approval procedure set up for starting up of any project funded by international donors to ensure the central (Uzbekistan) and regional (Karakalpakstan) governments' ownership and commitments since June, 2014. It was completed by conducting a national external inception workshop was organized on 22 October in Tashkent followed by the regional inception workshop held in Nukus, Karakalpakstan on 27 October, 2014 (Minutes of both inception workshops are given in Annexes 1 and 2). Preparations to both inception works were supported by Mr. Yusuke Taishi, Regional Technical Specialist - Adaptation, Green Low Emission Climate Resilient Development Strategies, UNDP - Global Environment Facility, UNDP in Bangkok within his mission to Uzbekistan held during 20-28 October, 2014. He also attended and substantively contributed to presenting the goals and expected result of the projects financed by the Adaptation Fund as well as the corresponding M&E and reporting requirements to be met (BTOR is enclosed in Annex 3). Information about the applied approached to monitoring and evaluation of project activities This inception report is the summary of this phase. It documents the changes in the project environment since its endorsement by the Adaptation Fund, and review of all updates and/or new relevant processes, initiatives, policies, and programs and corresponding updates on the project strategy, outcomes and priority areas. It also includes consideration of relevance of project targets and indicators strategy, and justifications for additional indicators required for monitoring evidence-based and quantifiable impacts and identification of the corresponding and well-grounded baselines.

A Project Board at the central level to provide strategic guidance and decision-making but Inter-Agency Working Group at regional level to enable adaptation activities to be implemented in Karakalpakstan were established based on the corresponding government resolutions.

The project implementation agency is the Centre of Hydro-meteorological Service under the Cabinet of Ministers of the Republic of Uzbekistan is the National Implementing Partner. Other partners are crops and livestock farmers, rural communities, dehkhans, households in Karakalpakstan, the Council of Ministers of the Republic Karakalpakstan, district level local authorities in Karakalpakstan, Council of Farmers in Karakalpakstan, Hydro Meteorological Department of Karakalpakstan, State Committee for Nature Protection, Ministry of Agriculture and Water Resources, Ministry of Economy, Ministry of Health, Ministry of Finance, State Committee for Land, Geodesy, Cartography and State Cadaster, and Ecological Movement of Uzbekistan.

The project management approach includes a project management team composed of one Project Manager, one Administrative/Financial Assistant, and Field Coordinator in Karakalpakstan and driver.

Detailed 4-year work plan has been prepared. It describes all activities for all four thematic components, provides information on experts needed and estimations for related costs and timeframes. Requirements for trainings as well as procurement of goods/equipment, services and works were also defined. Annual Work Plan and budget (AWP) for 2014 has been adjusted based on the actual project operational start up in 2014 but AWP for 2015 has also been prepared, presented and approved during the first Project Board held on 24 December 2014 (minutes of PB meeting are given in **Annex 4**).

1 Project inception update

1.1 Context and Purpose of Inception Report

The project inception phase, lasting 6 months (June 2014 – November 2014) marks the launch of the UNDP/AF project "Developing climate resilience of farming communities in the drought prone parts of Uzbekistan".

The six months inception phase started with the national procedures set up in the country by the Government to get the project approved by the central government, namely Cabinet of Ministers of the Republic of Uzbekistan (Order of the Prime-Minister of Uzbekistan, #03/5-885 of 29.08.2014) and by the regional authorities of the autonomous Republic of Karakalpakstan, namely Council of Ministers (Decree #213-b of 09.10.14).

The General Director of the Center of Hydrometeorological Services under the Cabinet of Ministers (Uzhydromet) has been appointed as National Project Coordinator by the above mentioned Order the Prime-Minister of Uzbekistan, and UNDP was officially informed about this nomination by the letter from Uzhydromet, #07-67-74 of 04 September, 2014.

The Project Manager has been selected and hired based on the corresponding UNDP's rules and regulations, and has started his assignment on 18 September, 2014.

The two Inception Workshops were held: one in Tashkent on October 22 (central government level), and another one in Nukus, Karakalpakstan on 27 October, 2014 (regional administration level).

The main focus of the inception phase was to:

- Review the project strategy;
- Review the stakeholders and partners involvement in project implementation;
- Review the project performance measurement (indicators);
- Review and/or update risks and assumptions;
- Identify key methodological elements for the implementation of the project;
- Identify thematic areas (work packages, list of expertise required) to be implemented during first year of the project;
- Review and develop detailed work plan and budget for 2015, including technical expertise requirements
- Organize two inception workshops with key stakeholders at national and regional levels.

The inception phase findings are summarized in the inception report and they provides adjusted basis for the implementation of the project, reflecting changes in circumstances and/or practical methodological and implementation issues.

The inception report is to ensure that all relevant parties have the same baseline information, the same understanding and are committed to the implementation of the project; in particular to the detailed plan of actions developed for the first year of project implementation. The practical implementation methodology, as well as a detailed work plan and budget for 2015 were developed with the assistance of the colleagues from the Environment and Energy Unit, Finance Unit and Resource Management Unit of UNDP Country Office based on the outcomes of the two inception workshops (close consultation all relevant national partners) and were presented and adopted during the first meeting of Project Coordination Board held on 24 December, 2014.

1.2 **Project Scope**

1.2.1 Situation Analysis

Whilst the terrain of Uzbekistan is mostly flat and extremely arid (the plains), there are also a number of agriculturally-important river valleys (namely, the Amu-Darya, Syr-Darya, Zarafshon and the FerghanaValley), mountainous areas in the east and the shrinking Aral Sea in the westⁱ. This varied topography has resulted in highly variable climate and rainfall patterns throughout the country. Rainfall in the plains, for example, ranges between 80-200 mm, whilst in the mountainous zones it ranges between 600-800mm annually. Most of the country is, however, characterised by aridity – according to the UNEP aridity index¹, most of Uzbeksitan's territory is classified as a drought zone, suseptible to land degrdation and desertification². The Kyzylkum desert, the largest in Central Asia is also found within Uzbekistan.

Low water availability during summer, combined with very little rainfall, makes the area prone to drought conditions. Climate change scenarios for Uzbekistan indicate greater warming and aridification in this region. Because of high social vulnerabilities the region has drawn considerable attention from the government and donor community. However assistance so far has mainly focused on agricultural practices and natural resource management without due account of prospective climate change impacts and adaptation needs. Farm-based and landscape level adaptation measures must be implemented to sustain livelihoods of a growing population. At the farm level, an introduction of a range of traditional and innovative water saving and agronomic measures that support increase in land and water productivity; and a landscape restoration to maintain ecological functions and integrity necessary to sustain the agro-pastoral practices in the face of climate change are the priority adaptation solutions for large parts of arid Uzbekistan, especially Karakalpakstan.

Farmers and pastoralists in the downstream, most arid regions such as Karakalpakstan are particularly vulnerable, as they often receive no water from the upstream regions, especially during the dry seasons. Karakalpakstan is the poorest and most vulnerable region to climate change in Uzbekistan. It occupies about 166,600 km² area, about a third of the country's total land area. Yet only about 16% is most habitable – the valley of the Amu-Darya river. Karakalpakstan suffers high levels of poverty and unemployment compared to other regions in Uzbekistan.

Additionally, the provision of drought risk management options such as the quality and timely seasonal and long term forecasting and early warning; and targeted extension service geared towards drought risk management are the normative solutions for the most vulnerable agropastoral groups to maintain and even further develop their rural livelihoods despite climate change. However, there are number of critical barriers that need to be addressed to achieve long term adaptation in Uzbekistan, and in Karakalpakstan in particular, where the adaptation needs are pressing.

1.2.2 Changes in the project environment since approval

(i) Policy context

The active policies are still required to promote inclusive regional development and rural development, while at the same time managing urban development and preventing urban deprivation as people migrate from rural areas to find work opportunities. Targeted programs

¹ The UNEP aridity index is based on the ratio of rainfall to potential evapotranspiration (Middleton & Thomas, 1992, 1997).

² CACILM- UNPD-GEF project document: "Achieving Ecosystem Stability on Degraded Land in Karakalpakstan and the Kyzylkum Desert".

were designed and implemented in order to improve the quality of life of people living in rural areas and regions lagging behind especially, in the regions lagging behind the country average.

Since 2011, the government paid special attention to ensuring balanced socio-economic development of the regions, especially rural areas. It implemented the Program on socio-economic development of the regions for 2013-2015 and a number of programmes devoted to providing additional housing in rural areas and improving the services sector, construction of plants stimulating the development of farms, and food-processing enterprises equipped with modern equipment and technology.

UNDP supports the Government in formulating regional development strategies. Strategy on social and economic development of the Republic of Karakalpakstan has been developed and presented to the Government at the end of 2013. In brief, it includes situation analysis, assessment of the potential of social and economic development of Karakalpakstan, scenarios of regional development, and outline of organizational arrangements/inputs required for efficient implementation of the strategy. It is endorsed nationally and corresponding resources and action plan to implement the regional strategy is currently under consideration by Karakalpakstan administration.

(ii) Climate change and water resources

During the a number of meeting with subsistence farmers and households from rural communities held within the inception phase, they all have emphasized that the key barrier preventing development of their agriculture activities and increased their yields and livestock is shortage of water resources and decrease of water quality.

From October 2013 to March 2014, accumulation of precipitation water within rivers of Surkhandarya, Kashkadarya, right-bank of Naryn, Chirchik and Akhangaran at heights of below 2,000 m was 90-10% but in the river basins of Vakhsh, Zeravshan as well rivers of Fergana Valley and Chirchik at heights of higher 2,000 m was 50-90%, and in the river basins of Pyandzh and left-bank of Naryn river was 60-80% of the standard amounts.

By the end of March 2014, snow coverage levels measured at the surface snow-points located in the river basins of Kashkadarya, Karadarya and Chirchik at the heigts of below 1,500 m were 60-80% of the standard levels. According to the data received from the avia-remote rods installed in the river basins of Syrkhandarya and Chirchik was 100-110% of the standard one.

Based on the above, forecast for irrigation water consumption for the vegetation period in 2014 has been produced, based on the expected water content but it was compared then with the actual water yield in 2014. (see Table 1 below).

Table 1 Comparison of expected water content and actual water yield for vegetationperiod in Uzbekistan in 2014

| River Basin | Expected water content, % | Actual water yield, % of | |
|--------------------------|---------------------------|--------------------------|--|
| | of standard one | standard one | |
| Naryn | 80-90 | 70-90 | |
| Southern part of Fergana | 80-90 | 95-100 | |
| Valley | | | |
| Northern part of Fergana | 70-80 | 70-90 | |
| Valley | | | |
| Akhangaran | 70-80 | 90-95 | |
| Chirchik | 75-85 | 90-95 | |
| Vakhsh | 70-80 | 95-100 | |

| Zeravshan | 70-80 | 60-70 |
|--------------|-------|-------|
| Surkhandarya | 70-80 | 70-90 |
| Kashkadarya | 70-80 | 70-90 |
| Karadarya | 70-80 | 60-70 |

Source: Uzhydromet, 2014

Based on the analysis above, it can be concluded that 2014 was characterized by a wide variation of water availability levels depending on the various river basins (e.g. Karadarya and Zeravshan rivers had 60-70% of the standard amounts but Vakhsh river level was 95-100%) but it was quite close to the standard water availability level for Amudarya river (e.g. river basin of Vakhsh was 95-100%).

Thought 2014 was not a drought year, farmers and households declared serious risks on their yields due to irrigation water deficiency that have faced with. Those risks related to potential reduced yields even during the years with the closed to normal (standard) water resources availability at it was occurred in 2014 can be explained by location of agricultural lands at the end streams of Amydaria and Syrdarya rivers that is resulted to reduced amounts of irrigation water compared with the actual water demand in Karakalpakstan. Critically, Uzbekistan's water basins are today increasingly stretched to provide the water needed to meet the country's growing agricultural, industrial, social and household needs. This is particularly the case in dry years, which climate risk projections suggest will become the "new normal."

(iii) Investments and projects

The excessive withdrawals from the two rivers since the 1960s has led to the drying of the Aral Sea and Amudarya delta, causing significant ecosystem damage; this is considered the greatest human-caused disaster in Uzbekistan, and of global significance. The Aral Sea catastrophe also may be exacerbating changes in climatic conditions in the region. While environmental challenges beset virtually the entire country, the impacts of the catastrophe are felt most acutely in Karakalpakstan, where income poverty, growing salinization of land and water resources, lack of food security, exposure to dust storms, poor quality of drinking water, and the declining health status of the local population are forcing many to relocate or to endure severe living conditions.

To respond to the natural disaster, Uzbekistan (the International Fund for Saving the Aral Sea - IFAS) as an intergovernmental body of the five Central Asian states established for tackling direct and indirect impacts of the depleting Aral Sea) has organized an international conference on Aral Sea in Urgench, Khorezm region (on 28-29 October, 2014) that is neighboring to Karakalpakstan. In its current capacity as the rotating chair of IFAS, Uzbekistan has intensified its efforts to generate international attention to the Aral Sea disaster, including through organizing this large international conference to mobilize resources of the international donor community for improving the environmental and socio-economic situation in the Aral Sea Basin. The two day conference consisted of field visits (tree planting and visits to health facilities of Urgench) as well as the conference itself (plenary and break-out sessions). The conference was attended by representatives of 24 international and regional organizations such as the UN, IFIs, SCO, OECD and other multilateral and bilateral organizations, donor countries and experts from 26 countries.

As the outcome of the conference a resolution "On measures on implementation of agreements, reached within the international conference", #363 of 21.12.2014 has been issued by the Government of Uzbekistan "Development of cooperation in the Aral Sea Basin to mitigate consequences of environmental catastrophe". The resolution said that the agreements on implementation of national and regional projects for US\$3 billion were signed on

implementation of the projects with international foreign financial institutions and foreign donors. In particular, the long-term loans for US\$1.9 billion and technical assistances and grants for US\$200 million were attracted. The Government of Uzbekistan approved a list of national projects on mitigation of consequences of ecological catastrophe in Aral Sea Basin for US\$2.971 billion, including grants and loans worth US\$2.068 billion, and the list of regional projects for US\$80.2 million (loans and grants for US\$80.2 million). According to the resolution, Uzbekistan will implement 16 national projects for US\$2.857 billion (loans – US\$1.956 billion) with attraction of loans of international financial institutions and 11 national projects for US\$114.5 million (US\$112.3 million) with attraction of grants and technical assistance. The ADB, IDB, World Bank, JICA, OPEC Fund, TIKA, K-Water, KFAED, FAO, UN agencies and others will participate in realization of these projects.

(iv) Programmes

The UN Aral Sea Programme is under implementation since 2012. The overall goal of the Programme is to improve the economic, food, health and environmental security of poor rural communities of Karakalpakstan. By employing top-down protection and bottom-up empowerment measures within the human security framework the Programme aims to promote community level efforts in protecting people from sudden economic downturns and natural disasters as well as increase living standards of population. The direct beneficiaries of the programme include 130,000 people from three of the most vulnerable districts of Karakalpakstan (Muynak Shumanay, and Kanlikul). Around 494, 000 of indirect beneficiaries from ten districts benefit from improved primary healthcare and governance. The Programme is to be completed by February 2015 and has achieved significant outcomes. Some of those are very relevant to the present adaptation project planned activities and are enabling and establishing a sound ground for sustainability, scaling up and wider replication, in particular:

- network of 50 agro-consultants formed to promote improved agricultural practices; capacity of 23 veterinary service providers enhanced for more advanced access to services for rural population;
- 92 demonstration plots and business projects established to create income generation sources and ensure economic and food security for targeted population thus enabling to create 139 (77 female) new jobs places;
- 75 demonstration plots established creating 94 (32 female) on degraded forestry areas of the Lower Amu Darya Biosphere Reserve to ensure environmental sustainability through restoration of forests, mainstreaming water and soil protection, anti-erosion activities;
- 509 households have access to irrigation water thanks to reconstructed irrigation canal in the Kazakhdarya village of Muynak District enabling local population to engage in farming, sowing seeds and gardening in their lands creating additional 32 self-employment (9 female), to ensure access to safe agricultural products and food for their families and potential to increase their income;
- Support provided in development of tourism sector in the region by establishing 2 Visitors and Information Centres in theLower Amu Darya State Biosphere Reserve and Dzhambas Kala touristic complex;
- 363 farmers and dehkans enhanced their skills on improved agriculture technologies (i.e. application of land laser levelling technology, growing cash crops, sustainable development, efficient use of the natural resources, effective agricultural management) through capacity building activities provided by the Programme.

2 Update on project strategy, outcomes and priority areas

2.1.1 **Project Objectives and Scope**

The project objective identified in the approved project document remains very relevant and is to develop climate resilience of farming and pastoral communities in the drought prone parts of Uzbekistan, specifically Karakalpakstan. The project will help the central, regional and local governments and vulnerable farmers and pastoralists to withstand the current and future impacts of climate change: aridification and projected drying of this region that places serious strains on water availability resulting in a decline in land productivity. With a view to achieving this objective the following interconnected **outcomes** will be achieved through the proposed project:

- 1. The institutional and technical capacity for drought management and early warning developed
- 2. Climate resilient farming practices established on subsistence dekhkan farms
- **3.** Landscape level adaptation measures for soil conservation and moisture retention improves climate resilience of over 1,000,000 ha of land
- 4. Knowledge of climate resilient agricultural and pastoral production systems in arid lands generated and widely available

In short, from an adaptation perspective, the improved weather monitoring and climate modeling capacity, together with a more effective early warning system, will put this most vulnerable region of Uzbekistan on a more solid footing in terms of identifying the local effects of climate change and taking these into account in land management decisions at various levels. This capacity will be reinforced by awareness of more adaptive crop and livestock options and demonstration of their effectiveness. A wide range of water efficient agronomic practices and locally adapted technologies will be implemented, improving income levels and livelihood diversification, all of which improves resilience at the household level.

2.1.2 Inception Workshops

The Government of Uzbekistan organized an Inception Workshop for the joint UNDP and Adaptation Fund project. The UNDP-GEF staff facilitated an internal inception meeting (20-22 October) with UNDP CO staff and the National Project Manager. The national external inception workshop was organized on 22 October in Tashkent followed by the regional inception workshop on 28 October held in Nukus, Karakalpakstan. Mission to Karakalpakstan included field trips to some selected pilot districts (Kegeli and Kanlykol) on 25 October, 2014.

(i) Inception Workshop in Tashkent (national level)

The national level external workshop was in Tashkent was held on the 22 October and was attended by over 50 key relevant stakeholders from the Legislative Chamber of Oliy Majlis (Parliament) of Uzbekistan, Analytical Department, Cabinet of Ministers, Uzhydromet, Ministry of Economy, Ministry of Finance, State Committee for Nature Protection, Ministry of Foreign Affairs, Ministry of Emergency Situations, Ministry of Agriculture and Water Resources, Ministry of Higher and Specialized Secondary Education, Ecological Movement of Uzbekistan, Tashkent Irrigation and Melioration Institute, Tashkent National University, representatives of National Association of Non-Government and Non-Commercial organizations in Uzbekistan, Trade and Industries Chamber of Uzbekistan, Women Committee of Uzbekistan, UNDP Uzbekistan, international organizations such as EU Delegation to Uzbekistan, USA Embassy/USAID, CAREC, ADB, WB as well as national mass media. The presentations delivered during the workshop covered overviews of: (i) brief information about

the project proposal development and endorsement processes; (ii) goals, objectives and outcomes of projects funded by Adaptation Fund; and M&E framework and reporting requirements for Adaptation Fund; (iii) overall project goal, objectives, duration, budget, and management approach; and first year tentative project work plan; (iv) logical framework, including adjustments/changes related to thematic indicators/timelines and other important issues (Minutes of the national level Inception Workshop is given **in Annex 1**).

(ii) Inception Workshop in Nukus, Karakalpakstan (sub-national level)

The mission to Karakalpakstan was conducted by Mr. Abduvakkos Abdurahmanov, Head of EEU, Ms. Rano Baykhanova, Climate Change Specialist, EEU, Mr. Aleksandr Merkushkin, Project Manager, and Mr. Yusuke Taishi, Regional Technical Specialist on Adaptation, Green Low Emission Climate Resilient Development Strategies, UNDP-Global Environment Facility, UNDP in Bangkok, Thailand, during 23-30 October, 2014.

As preparations to the sub-national Inception Workshop, a number of meetings were held (24 October) with the key regional stakeholders, including:

- 1. Members of sub-national Inter-Agency Working Group represented by the Council of Ministers of the Republic of Karakalpakstan, Ministry of Agriculture and Water Resources of Karakalpakstan, and Kengash (Council) of Framers in Karakalpakstan. The meeting was chaired by Mr. Murat Mukhanov, Head of Secretariat on Agriculture and Water of the Council of Ministers the Republic of Karakalpakstan and he confirmed that the project objectives are in line with the national priorities. He also assured that Government is committed to providing full support to timely and efficient project activities to achieve the expected results. He also highlighted that farmers and dekhans are keen to be engaged in project activities and expect to benefit from its results;
- 2. The Karakalpakstan branch of the Administration of the Centre on Support and Promotion of Entrepreneurship and Farming in the Republic of Uzbekistan (NGO) was visited and the Chairman, Mr. Azat Tilyaumuratov was met and a number of issues related to the agenda of the Centre' activities aimed at promoting and enabling deployment of innovative agricultural technologies applicable for farmers as well as improvement and diversification of farm-based insurance portfolio were discussed;
- 3. UN Aral Sea Programme office was visited and Area Coordinator, Mr. Bakhadur Paluaniyazov was met. Establishing synergy and cooperation between the Programme and Adaptation Project were discussed;
- 4. Administration of Hydrometeorological Services of Karakalpakstan was visited and Head, Mr. Aybosyn Kdyrniyazov was met and Mr. Taishi discussed the expectations from Adaptation Project implementation by the Administration, in particular the first project component focused on strentheming technical and institutional capacities of Uzhydromet and its branch in Karakalpakstan. Mr. Kdyrniyazov emphasized that automatization of meteo stations located in this region will improve the data input for weather and hydrological forecasting; moreover establishing the Drought Early Warning informational platform was prioritized.

Field trips to Kanlykol and Kegely districts have been conducted on 25 October. The Chairman of Kengash (Council) of Framers in Karakalpakstan as well as farmers from Kalynkol and Kegeily districts were met and confirmed that the key barriers to sustainable crop production, including cotton, wheat, sorghum, millet, sesame, etc., are water deficiency and shortage, lack knowledge about the relevant agricultural techniques, increasing land salinization, poor shape of inter-farm irrigation systems and scarcity of fuel/petrol required for the agricultural

machinery. They confirmed that are interested with establishing greenhouses with drip irrigation to explore the advantages. However, it would be reasonable to conduct prior the costbenefit analyses at taking into consideration different types of products can be produced in greenhouse and corresponding payback period estimates. Constant petrol/diesel fuel shortage that this region is facing with can be mitigated through use of renewable energy sources. Demonstrations on how to use PV systems for water pumping from wells and electricity generation for lighting and some home appliances were already done in this region, and proved to be a reliable solution. Moreover, biogas units can be another potential source of energy for farmers and dekhans/households to cover some of their needs in electric and thermal energy.

The sub national level external workshop was held in Nukus, the capital of Karakalpakstan, on 27 October. It was hosted by the Council of Ministers of the Republic of Karakalpakstan, and was attended by up to 50 key relevant stakeholders from the Legislative Chamber of Oliy Majlis (Parliament) of Uzbekistan, Council of Ministers of the Republic of Karakalpakstan, Uzhydromet and its regional department, Ministry of Finance, Ministry of Economy of Karakalpakstan, Ministry of Agriculture and Water Resources in Karakalpakstan, State Committee for Nature Protection of Karakalpakstan, Ministry of Public Education and Ministry of Health in Karakalpakstan, Lower-Amudarya River Basin Management Administration, Nukus Branch of Agrarian University, Karakalpak Pedagogical Institute, Karakalpak Branch of Academy of Science of Uzbekistan representatives Council of Farmers in Karakalpakstan, Karakalpak Department of Center supporting entrepreneurs and farmers of Uzbekistan, Trade Industrial Chamber of Karakalpakstan, UNDP Uzbekistan, including the Joint UN Program «Support to livelihood of people suffered from Aral Sea crises» well as regional mass media. The presentations presented during the workshop covered overviews of: (i) brief information about the project proposal development and endorsement processes; (ii) goals, objectives and outcomes of projects funded by Adaptation Fund; and M&E framework and reporting requirements for Adaptation Fund; (iii) overall project goal, objectives, duration, budget, and project management principles; (iv) logical framework, including adjustments/changes related to thematic indicators/timelines and other important issues; and (v) establishing a project coordination group in Karakalpakstan, including appointment of members and its working schedule (Minutes of the sub-national level Inception Workshop is given in Annex 2).

Overall, both at the national and regional workshops, a strong commitment and appreciation from the Government for the project were expressed. An agreement was also obtained with regards to the project outputs and M&E indicators.

3 Revisions to indicators and targets

There are no major changes proposed but rather few minor suggestions to adjust timelines initially set up for some outcome level targets to be achieved in the Project Result Logframe based on Adaptation Fund's template; and annual targets in RRF Lograme based on UNDP template. The reason is the delayed operational start-up of the project due to national requirements set up for approval of any project funded by international donors to ensure governments' ownership and commitments as well as establishing project team and project office in the National Implementing Agency, Uzhydromet.

The changes are indicated and justified in the Project Result Logframe (AF-based template and UNDP-based template) below.

| Objective: To develop climate resilience of farming and pastoral communities in the drought prone parts of Uzbekistan | | | | | |
|---|--|---|---|---|--|
| Outcomes and indicators | Baseline | Targets and Milestones (initial as per Project Document) | Targets and Milestones (adjusted based on decision of Inception Workshop) | Justification for adjusted indicators and targets | |
| Outcome 1: Institutional and technical capacity for drought management and early warning developed Indicator 1.1: Number and quality of forecasts and drought early warnings for Karakalpakstan region; Indicator 1.2: Percentage of vulnerable farmers and pastoralists receiving science- based extension services to promote drought risk reduction among vulnerable farmers and pastoralists. | The Uzhydromet provides a full coverage throughout the country. However, for a comprehensive and well-functioning drought early warning system new technical skill, hardware and institutional coordination and feedback mechanisms are necessary. The density of meteorological and hydrological stations is insufficient to provide adequate coverage for drought monitoring. A wide range of data is necessary to adequately monitor climate and water supply status (i.e., precipitation, temperature, stream flow, ground water and reservoir levels, soil moisture, snow pack). These data are often not available at the density required for accurate assessments. With climate change, seasonal forecasts and warning systems should be also linked with water user and farmer groups as well as extension services for the warnings to be effectively and timely delivered. The role of extension service becomes | Instalment of 2 Doppler water meters and 8 automated meteorological stations; At least 40,000 km ² of the Karakalpakstan region will be covered by automated hydro- meteorological observation network; Season ahead forecasts and 2 weeks ahead temperature forecasts for effective warnings will be practiced; At least 40% of Dekhkan farmers and pastoralists of Karakalpak region will be served by science- based extension; At least 3 Field School/Extension established to deliver training in adaptation practices to farmers and pastoralists; At least 20% of targeted Dekhkan beneficiaries will be female. | | | |

TABLE 1 ADJUSTED TARGETS BASED ON PROJECT RESULTS FRAMEWORK (ADAPTATION FUND TEMPLATE)

| Outcome 2: Climate resilient | critically important in the context of climate change adaptation worldwide, but Uzbekistan does not yet have the extension system in place | At least 40,000 Dakhkan | | |
|--|---|--|---|--|
| farming practices established on subsistence dekhkan farms of Karakalpakstan Indicator 2.1: Percentage of population adopted climate resilient conservation agriculture and water saving measures at the farm level | in the arid lands of Uzbekistan. Especially the regions that are located downstream suffer the most. Fears of scarcity often results in over-irrigation by upstream farmers, leaving very limited amounts of water for the downstream farmer and pastoral communities. Over-irrigation is often detrimental for the crops and cause secondary salinization. This over reliance on irrigation system diverts the attention from water and soil conservation measures that can offer greater land and water productivity as well as greater resilience to droughts. The government is becoming increasingly aware of pressures posed by drought and climate change induced reductions in water flows. In response to severe droughts of 2008/09 the government has issued the policy measures to help minimise the losses (such as fodder production, establishment of greenhouses, etc.). Since 2002 it has invested \$1,000,000 million in agricultural modernisation, land consolidation and infrastructure | farmers have adopted climate resilient conservation agriculture practices (e.g. low till, mixed cropping, fodder production, and residue crop soil covering adopted measures adopted at 80,000 ha of dekhkan farms) by end of the project; At least 40,000 Dekhan farmers have adopted water saving irrigation practices (e.g. land levelling, furrow, drip irrigation systems adopted at 80,000 ha dekhkan farms to improve farm- level drainage and minimise salinization) by end of the project; Female lead horticulture greenhouses will be established by end of 2014 ; Laws on agricultural practices and water management will be amended by to integrate regulations on the adoption of conservation agriculture and water saving techniques and technologies on the farms by end of 2016. | Female lead horticulture greenhouses will be established by mid of 2016 | Project has been operationally started up since June, 2014. Six months inception phase was started with passing the national procedures set up for any project funded by international donor organizations to be approved by the central government, namely Cabinet of Ministers of the Republic of Uzbekistan (Order of the Prime-Minister of Uzbekistan, #03/5-885 of 29.08.2014) and by the regional authorities of the autonomous |

| | upgrade. This however mainly covered private, commercial farms that replaced inefficient shirkats after the two phase reform since 2003 and more recently since 2008, when the government launched its new 'land optimisation' policy. As a result of this policy, currently, there are over 3,000 private farmers in Karakalpakstan, compared to over 9,000 farmers in 2007. The government is seeking for the options to optimise agricultural production and minimise the adverse impacts of droughts both in short and long term. The reform processes, however slow, provide positive political impetus towards the adaptation solutions. | | | Republic of Karakalpakstan, namely Council of Ministers (Decree #213-b of 09.10.14). National Project Coordinator and Project Manager were appointed/hired in September, 2014. Therefore, the target has been re-scheduled for mid of 2016. |
|---|--|--|--|---|
| Outcome 3: Landscape level adaptation measures for soil conservation and moisture retention improves climate resilience of 1,042,094 ha of land. Indicator 3.1: Coverage (in ha) of landscape level adaptation measures implemented for sand stabilization and moisture retention | There have been sporadic and largely unsuccessful attempts to stabilise sands and prevent their detrimental encroachment to the farm and pasture lands. With climate change induced aridification and change in intensity, direction and speed of the winds, sand movement will be augmented and productivity of farm lands further derailed. It will activate the salt migration processes. The main reasons for failed attempts to encourage larger scale rehabilitation of vegetation cover and | By end of the project over 70,000 ha of arid land of Karakalpakstan is covered with saksaul and tamarix plantations to deliver sand stabilization and soil desalinization function; At least 20,000 people organized in at least 10 cooperatives at the khokimiyat and makhalla levels to participate in sand stabilization plantation scheme; At least 10 community organizations (at least 5 female groups and village | At least 10 community organizations (at least 5 female groups and village organizations) | Due to the above indicated reasons related to actual start-up of project activities, and also |

| | to the ad-hoc nature of such efforts that are not linked with broader view of landscape functions, poorly planned coverage that do not have perceived effects on farm and pasture lands in their function of windbreaks or sand fixing barriers. Previous efforts of plantations are not planned and implemented based on climate change scenarios and wind models that are to show the dynamic of change of hysteresis line where the future plantations need to be moved and expanded. | and makhalla level have clear mandates, institutional capacities and skills to manage saksaul and tamarix plantations by end of 2015 . | at khokimiyat and makhalla level have clear mandates, institutional capacities and skills to manage saksaul and tamarix plantations by end of 2019. | development of a model mandate, its testing and adjusting/improving to make workable in the local environment as well as development of institutional capacities and skills of 20,000 people taking into consideration long-distance location of rural communities in Karakalpakstan, this target has been re-scheduled for 2019 to be realistically achieved in the full scale. At the same time this will be tested at one community-based organization in 2017 and increasing then to at least 5 ones based on what works well approach. |
|--|--|--|---|---|
| Outcome 4: Knowledge of climate resilient agricultural and pastoral production systems in arid lands generated and widely available Indicator 4.1 Percentage of population aware of and practicing well tested, climate resilient agricultural practices | While the government and rural communities are very well aware of increasing variability that is negatively affecting agricultural production and people's livelihoods there is little awareness and knowledge how to move towards climate resilient solutions. This is an underlying cause of the current situation when despite some sporadically demonstrated water saving irrigation and agronomic methods take up rates are very low and the farmers continue the same inefficient and unsustainable practices that increase their vulnerability to drought and climate change risks. | At least two sets of lessons learned bulletins produced to cover successful climate resilient agronomic and water saving measures; At least 5 farmland demonstration meetings covered by the local and national media for adaptation advocacy. | | |

| Existing good practices have | |
|---------------------------------------|--|
| largely been demonstrated at the | |
| angely been realized to instification | |
| scale that makes the justification | |
| for broader application difficult. | |
| Khorezm University definitely | |
| represents a strong knowledge | |
| centre in agronomic and | |
| agricultural research. However | |
| outreach mechanism, | |
| transmission of knowledge is | |
| limited in scope (within the | |
| scientific community), not well | |
| tailored or systematic. Moreover, | |
| any lessons learned are not being | |
| captured in a fashion that | |
| facilitates broader sharing, or that | |
| casts light on ways to address an | |
| aggravation of the food security | |
| situation during the droughts and | |
| as a result of climate change | |
| as a result of childle change | |

| INTENDED OUTPUT | OUTPUT TARGETS FOR YEARS (initial as per Project Document) | OUTPUT TARGETS FOR YEARS (adjusted based on decision of Inception Workshop) | JUSTIFICATION FOR ADJUSTED INDICATORS AND TARGETS |
|---|--|---|---|
| Climate resilience of farming and pastoral communities in the drought prone parts of Uzbekistan, specifically Karakalpakstan developed Baseline 1: 1.1 Density of meteorological and hydrological stations is insufficient to provide adequate coverage for drought monitoring 1.2 Lack of data (insufficient coverage) to adequately monitor climate and water supply status 1.3 Warning systems are not linked with water user and farmer groups; and drought early warning is not effectively and timely delivered 1.4 No extension services for climate change adaptation by farmers in place | 2014Target 1:1.1 Locations of 8 automated meteo stations and monitoring equipment identified1.2 Technical requirements for IT equipment of automated hydro-meteorological observation network developed1.3 N/A1.4.1 N/A1.4.2 N/ATarget 2:2.1 N/A2.2 N/A2.3 N/A2.4 N/ATarget 3:3.1 N/A3.2 N/A3.3 N/A | 2014 Target 1: 1.1 Cooperation with national and subnational stakeholders will be involved in automatization of meteo stations established 1.2 Initial screening of needs to improve hydro-meteorological observation network conducted | 1.1 Due to the above indicated reasons related to actual start-up of project activities; identification of locations of 8 meteo stations to be automated and monitoring equipment is postponed to 2015 as this requires involvement of national experts and international consultant to be hired by the project. This was not possible to implement in 2014 as project team was not yet established and operational. Therefore, sub- target 1.1 has been adjusted to actual situation and achievement in 2014. 1.2 Due to the above indicated reasons related to actual start-up of project activities. Development of technical requirements for IT equipment of automated hydro- meteorological observation network required hiring of national experts but project team was not yet established and operational in 2014. Therefore, the only initial screening of needs was conducted by Project Manager in cooperation of specialist of Uzhydromet. Therefore, sub-target 1.2 has been adjusted to actual situation and achievement in 2014. |
| Indicator 1: 1.1 # of automated meteo stations and monitoring equipment for field data collection and transmission | 1arget 4: 4.1 N/A 4.2 N/A | Target 4: 4.1 One international practice on agronomic and effective water and land management documented and shared with project partners | 4.1 Using the opportunity emerged from partnership with Uzhydromet as national implementing agency and Israeli Programme MASAV, project managed learning and documenting best international practice on |

TABLE 2 ADJUSTED ANNUAL TARGETS BASED ON PROJECT RESULTS FRAMEWORK (UNDP TEMPLATE)

1.2 Coverage of hydrometeorological observation network in km² 1.3 Lead time (weeks) for drought early warning 1.4.1 # of Field School/Extension services delivering training in adaptation practices to farmers and pastoralists 1.4.2 % Dekhkan farmers (including % of female Dekhkan farmers) receiving extension services to introduce farm-based climate risk management measuresBaseline 2:

2.1 Low awareness of dekhkan farmers on adaptation solutions to optimize agricultural production and minimize the adverse impacts of droughts both in short and long term 2.2 Low awareness of dekhkan farmers on water saving irrigation practices 2.3 Limited use of horticulture greenhouses as drought mitigation solutions 2.4 Insufficient legal and regulatory framework to support well-tested farm-based adaptation measures **Indicator 2:**

2.1 # of dekhkan farmers (%

of women) adopted

4.3 One farm and pasture land demonstration meeting conducted with participation of national, local authorities, media and communities, and associated printing and publications produced and disseminated

Target 5:

5.1 Monitoring and Evaluation system developed

5.2 N/A

<u>2015</u>

Target 1:

1.1 8 automated meteo stations and monitoring equipment (2 Doppler water meters) procured

1.2 IT equipment (20 low capability computers, 10 high capability computers, including 1 high capability server) procured

1.3 Drought early warning mechanisms elaborated and its locations identified

1.4.1 Concept of establishing science-based extension services for subsistence dekhan farmers developed

1.4.2 N/A

Target 2:

2.1 At least 5,000 stakeholders (30% of women) provided with printing and publications associated with the climate resilient conservation agriculture practices

2.2 At least 5,000 stakeholders (30% of women) trained in application of land leveling, furrow, siphon and drip irrigation systems

<u>2015</u>

Target 1:

1.1 Locations of 8 automated meteo stations and hydrological monitoring equipment identified; and equipment to automate those 8 and 2 Doppler water meters for 2 hydro meteorological posts procured

1.2 Technical requirements for IT equipment of automated hydrometeorological observation network developed and IT equipment procured (20 low capability computers, 10 high capability computers, including 1 high capability server) agronomic and effective water and land management that was then shared with key project stakeholders at national level. Therefore, sub-target 4.1 has been adjusted to actual situation and achievement in 2014.

Based on the above justified delay with identification of location of 8 meteo stations to be automated (form the total 10 ones existing and functioning in Karakalpakstan), this sub-target 1.1 has been reformulated

Based on the above justified delay with development of technical needs and requirements and IT equipment to be procured, this sub-target 1.2 has been reformulated correspondingly

2.3 Project has been operationally started up since June, 2014. Six months inception phase

conservation agriculture practices (e.g. low till, mixed cropping, fodder production, and residue crop soil) 2.2 # of dekhkan farmers (% of women) adopted water saving irrigation practices (e.g. land levelling, furrow and drip irrigation systems) 2.3 # of Dekhans established horticulture greenhouses and # of female lead ones 2.4 # of legal acts and regulations enacted to support well tested farm-based adaptation measures

Baseline 3:

3.1 Insufficient coverage of landscape level adaptation measures (plantations) for sand stabilization and moisture retention
3.2 Low involvement of dekhkan farmers and pastoral community in landscape level adaptation measures
3.3 Lack of institutional mechanisms for community management of sand stabilizing plantations

Indicator 3:

3.1 # of ha with saksaul and tamarix plantations to deliver sand stabilization and soil desalinization function 3.2 # of Dekhkan farmer and pastoral community members 2.3 16,000 households (50% of women) trained in horticulture greenhouse establishing

2.4 Gaps in existing legal and regulatory framework and required improvements to support well tested farm-based adaptation measures identified

Target 3:

3.1 Technical assistance in best practices on development of management plan for sand stabilization and soil desalinization and comprehensive landscape rehabilitation provided at least 5,000 ha of lands

3.2 At least one community management scheme for planting and maintenance as community employment scheme for landscape level adaptation developed

3.3 At least 5,000 (20% of women) stakeholders are aware of best practices and provided with technical assistance in establishing cooperative management system for landscape rehabilitation and management to enhance community control and ownership

Target 4:

4.1 N/A

4.2 N/A

4.3 At least 2 farm and pasture land demonstration meetings with participation of national, local authorities, media and communities, and associated printing and publications produced and disseminated

Target 5:

r and 5.1 N/A

2.3 16,000 households (50% of women) trained in horticulture greenhouse establishing, including 5 female lead horticulture greenhouses established was started with passing the national procedures set up for any project funded by international donor organizations to be approved by the central government, namely Cabinet of Ministers of the Republic of Uzbekistan (Order of the Prime-Minister of Uzbekistan, #03/5-885 of 29.08.2014) and by the regional authorities of the autonomous Republic of Karakalpakstan, namely Council of Ministers (Decree #213-b of 09.10.14). National Project Coordinator and Project Manager were appointed/hired in September, 2014. Therefore, the target is reasonable to be achieved in 2015, though was initially set up for 2014 in AF RRF.

Re Target 3.3.: Due to the above indicated reasons related to actual start-up of project activities, and also given the timing required for development of a model mandate, its testing and adjusting/improving to make workable in the local environment as well as development of institutional capacities and skills of 20,000 people taking into consideration long-distance location of rural communities in Karakalpakstan, this target has been re-scheduled for 2019 to be realistically achieved in the full scale. In 2015, it focuses on providing assistance in development of a workable concept of cooperative management system for landscape rehabilitation and management to enhance community control and ownership.

| (% of women) involved in | 5.2 N/A |
|---------------------------------|---|
| landscape level adaptation | 2016 |
| measures (e.g. saksaul and | 2010 |
| tamarix planting) through | <u>Target 1</u> |
| local employment programme | 1.1 8 automated meteo stations and 2 new |
| 3.3 # of cooperatives | Doppler water meters installed and |
| established at Knokimiyat and | commissioned; |
| Makhalla levels lor | |
| sond stabilizing plantations | 1.2 At least 8 national experts trained for |
| sand stabilizing plantations | maintenance of automated weather stations |
| Baseline 4: | network; |
| 1 1 Some water saying | 1.3 At least 8 hardware components for |
| irrigation and agronomic | maintenance of automated weather stations |
| methods were sporadically | identified and procured; |
| demonstrated but farmers | 1 4 1 N/A |
| continue inefficient and | |
| unsustainable practices that | 1.4.2 At least 5,000 (at least 20% of |
| increase their vulnerability to | women) stakeholders targeted by science- |
| drought and climate change | based extension services trained within |
| risks | trainings and workshops |
| 4.2 Lessons learned are not | Target 2: |
| being captured for broader | 2.1. At least 40 solits of comparenties |
| sharing to address an | 2.1 At least 40 units of conservation |
| aggravation of the food | agriculture equipment procured |
| security situation during the | 2.2 At least 55 units of land leveling, furrow, |
| droughts and as a result of | siphon and drip irrigation systems equipment |
| climate change | procured |
| 4.3 Outreach mechanism, | 2.3 At least 500 units of horticulture |
| transmission of knowledge is | greenhouse equipment procured; and at least |
| limited in scope (within the | 16 000 households (50% of women) provided |
| scientific community), not | with printing and publications associated with |
| well tailored or systematic | the horticulture greenhouse best practices: and |
| Indicator 4: | female lead horticulture greenhouses |
| | established |
| 4.1 # of documented good | |
| practices (bulletins) of | 2.4 At least 500 stakeholders (30% of women) |
| agronomic and water saving | provided with expertise and technical |
| measures | assistance in development/improvement of |

| 4.2 # of lessons learned bulletins disseminated through printed and web-based media | legal and regulatory framework to support well tested farm-based adaptation measures for replication and upscale | |
|---|--|---|
| 4.3 # of farm and pasture land demonstration meetings | Target 3: | |
| covered by media and attended by national and local authorities Baseline 5: 5.1 No Monitoring and Evaluation system 5.2 No evaluation of project output and outcomes Indicator 5: 5.1 Monitoring and Evaluation system is in place | 3.1 At least 10,000 of local saksaul and tamarix plantings procured and planted at fields, and at least 8 survey equipment to monitor sand stabilization and soil desalinization based on wind models and comprehensive landscape rehabilitation procured 3.2 At least 10,000 stakeholders (50% of women) trained in community management for planting and maintenance for landscape level adaptation 3.3 At least 10,000 stakeholders (30% of | Re Target 3.3: In 2016, it concentrates on increasing awareness and knowledge about the developed mechanism among the wider range of stakeholders to get their ownership |
| 5.2 Project outputs and outcomes evaluated at mid and final points of project implementation cycle, and lessons learned codified | women) provided with the printing and publications associated with the cooperative management system for landscape rehabilitation and management to enhance community control and ownership, and trained in its application | and commitments for its practical implementation |
| | Target 4: | |
| | 4.1 N/A | |
| | 4.2 N/A | |
| | 4.3 At least 2 farm and pasture land demonstration meetings conducted with participation of national, local authorities, media and communities, and associated printing and publications produced and disseminated | |
| | Target 5: | |
| | 5.1 N/A | |

| 5.2 M&E and adaptive management applied to project in response to needs, mid-term evaluation conducted and its findings extracted | |
|---|--|
| <u>2017</u> | |
| Target 1 | |
| 1.1 Data flow from 2 new Doppler water meters and 8 automated meteorological stations integrated for end-users | |
| 1.2 At least 15,000 stakeholders and end-users (50% of women) are aware of the automated hydro-meteorological observation network | |
| 1.3 At least 10,000 stakeholder (at least 20% of women) of early warning mechanisms trained in their use | |
| 1.4.1 At least 3 Field School/Extension established to deliver training in adaptation practices to farmers and pastoralists | |
| 1.4.2 N/A | |
| Target 2 | |
| 2.1 Technical assistance in best practices and application of low till, mixed cropping, fodder production, and residue crop soil provided to at least 20,000 stakeholders (at least 30% of women) | |
| 2.2 Technical assistance in best practices and application of land leveling, furrow, siphon and drip irrigation systems provided to 20,000 stakeholders (at least 25% of women) | |
| 2.3 16,000 households (at least 50% of women) provided with expertise and | |

| technical assistance in establishing horticulture greenhouses | |
|---|---|
| 2.4 At least 500 stakeholders (30% of women) provided with printing and publications associated with the best practices legal and regulatory framework to support well tested farm-based adaptation measures for replication and upscale | |
| Target 3 | |
| 3.1 At least 10,000 stakeholders (at least 20% of women) provided with expertise and technical assistance in local saksaul and tamarix plantations deliver for sand stabilization and soil desalinization based on wind models and landscape rehabilitation management plan | |
| 3.2 20,000 stakeholders (50% of women) provided with expertise and technical assistance in development of community management scheme for planting and maintenance as community employment scheme for landscape level adaptation | Re Target 3.3: In 2017, piloting and testing the developed mechanism will be implemented to get evidence what works and what not |
| 3.3 At least one cooperative management system for landscape rehabilitation and management established by national sub- contractors | |
| Target 4 | |
| 4.1 N/A | |
| 4.2 At least 3 lessons learned for climate resilient agricultural and pastoral production systems in arid lands from stakeholders through providing them with provided with technical assistance in | |

| analysis and documentation of those lessons learned | |
|--|--|
| 4.3 At least 3 farm and pasture land demonstration meetings with participation of national, local authorities, media and communities, and associated printing and publications produced and disseminated | |
| Target 5 | |
| 5.1 N/A | |
| 5.2 N/A | |
| <u>2018</u> | |
| Target 1 | |
| 1.1 2 Doppler water meters and 8 automated meteorological stations generated data flow that is integrated and delivered to end-users | |
| 1.2 Multi-module platform for integration of data flow from hydrometeorological observation network to end users established | |
| 1.3 Drought early warning mechanisms to minimize impacts of droughts are in place and operational | |
| 1.4.1 Printing and publications associated with the 3 extension services for subsistence dekhan farmers produced and distributed | |
| 1.4.2 N/A | |
| Target 2 | |
| 2.1 40,000 stakeholders (at least 30% of women) trained in conservation agriculture practices, and adopted them | |
| 2.2 40,000 stakeholders (at least 25% of women) provided with printing and | |

| publications associated with the water saving irrigation practices 2.3 40% (16,000 of households or approx. 80,000 people) of targeted Dekhan farmers have established horticulture greenhouses on 20,000 ha of farms to minimise impacts of droughts on farm production 2.4 500 stakeholders (30% of women) trained in application best practices legal and regulatory framework to support well tested farm-based adaptation measures for replication and upscale | |
|---|--|
| Target 3 3.1 At least 20,000 stakeholders (at least 45% of women) provided with printing and publications associated with the sand stabilization and soil desalinization practices 3.2 20,000 stakeholders (50% of women) provided with the printing and publications associated with the community management scheme for planting and maintenance as community employment scheme for landscape level adaptation 3.3 At least 5 community organizations (at least 2 female groups and village organizations) at khokimiyat and makhalla established Target 4 4.1 At least 2 sets of bulletins issued and covered all tested agronomic and water saving measures summarized and analyzed, and distributed among 40,000 stakeholders (at least 20% of women) | Re Target 3.3: In 2018, 5 community organizations (at least 2 female groups and village organizations) at khokimiyat and makhalla will be established based on the mechanism piloted |

| 4.2. At least 5 lessons learned for climate resilient agricultural and pastoral production systems in ardi lands developed and included into associated publications and web-based disseminated among 40,000 stakeholders (30% of women) 4.3. At least 4 form and psture land demonstration meetings with participation of national, local authorities, media and communities, and associated printing and publications produced and disseminated Target 5 5.1 N/A 5.2 N/A 2019 Target 1 1.1 Effective data reception and transmission from 2 new Doppler water metters and 8 automated meetos fations is in place and encoded by automated hydrometeorological observation network 1.3 Season ahead forecasts and 2 weeks ahead temperature forecasts for effective warnings is practiced 1.4.1 N/A 1.4.2 At least 40% (at least 20% of them are fermiles in a climater region served by science-based extension served by accence-based extension Target 2 | | |
|---|--|--|
| 4.3 At least 4 farm and pasture land demonstration meetings with participation of national, local authorities, media and communities, and associated printing and publications produced and disseminated Target 5 5.1 N/A 5.2 N/A 2019 Target 1 1.1 Effective data reception and transmission from 2 new Doppler water meters and 8 automated meteo stations is in place 1.2 At least 40000 km² of the Karakalpakstan region coverd by automated hydro-meteorological observation network 1.3 Season ahead forecasts and 2 weeks ahead temperature forecasts for effective warnings is practiced 1.4.1 N/A 1.4.2 At least 40% (at least 20% of them are female) of Dekhkan farmers and pastoralist of Karakalpakstan region served by science-based extension Target 2 | 4.2 At least 5 lessons learned for climate resilient agricultural and pastoral production systems in arid lands developed and included into associated publications and web-based disseminated among 40,000 stakeholders (30% of women) | |
| Target 55.1 N/A5.2 N/A2019Target 11.1 Effective data reception and transmission from 2 new Doppler water meters and 8 automated meteo stations is in place1.2 At least 40,000 km² of the Karakalpakstan region covered by automated hydro- meteorological observation network1.3 Season ahead forecasts and 2 weeks ahead temperature forecasts for effective warnings is practiced1.4.1 N/A1.4.2 At least 40% (at least 20% of them are female) of Dekhkan farmers and pastoralists of Karakalpakstan region served by science-based extensionTarget 2 | 4.3 At least 4 farm and pasture land demonstration meetings with participation of national, local authorities, media and communities, and associated printing and publications produced and disseminated | |
| 5.1 N/A 5.2 N/A 2019 Target 1 1.1 Effective data reception and transmission from 2 new Doppler water meters and 8 automated meteo stations is in place 1.2 At least 40,000 km² of the Karakalpakstan region covered by automated hydro- meteorological observation network 1.3 Season ahead forecasts and 2 weeks ahead temperature forecasts for effective warnings is practiced 1.4.1 N/A 1.4.2 At least 40% (at least 20% of them are female) of Dekhkan farmers and pastoralists of Karakalpakstan region served by science-based extension Target 2 | Target 5 | |
| 5.2 N/A 2019 Target 1 1.1 Effective data reception and transmission from 2 new Doppler water meters and 8 automated meteo stations is in place 1.2 At least 40,000 km² of the Karakalpakstan region covered by automated hydrometeorological observation network 1.3 Season ahead forecasts and 2 weeks ahead temperature forecasts for effective warnings is practiced 1.4.1 N/A 1.4.2 At least 40% (at least 20% of them are female) of Dekhkan farmers and pastoralists of Karakalpakstan region served by science-based extension Target 2 | 5.1 N/A | |
| 2019Target I1.1 Effective data reception and transmission from 2 new Doppler water meters and 8 automated meteo stations is in place1.2 At least 40,000 km² of the Karakalpakstan region covered by automated hydro- meteorological observation network1.3 Season ahead forecasts and 2 weeks ahead temperature forecasts for effective warnings is practiced1.4.1 N/A1.4.2 At least 40% (at least 20% of them are female) of Dekhkan farmers and pastoralists of Karakalpakstan region served by science-based extensionTarget 2 | 5.2 N/A | |
| Target 11.1 Effective data reception and transmission from 2 new Doppler water meters and 8 automated meteo stations is in place1.2 At least 40,000 km² of the Karakalpakstan region covered by automated hydro- meteorological observation network1.3 Season ahead forecasts and 2 weeks ahead temperature forecasts for effective warnings is practiced1.4.1 N/A1.4.2 At least 40% (at least 20% of them are female) of Dekhkan farmers and pastoralists of Karakalpakstan region served by science-based extensionTarget 2 | <u>2019</u> | |
| 1.1 Effective data reception and transmission from 2 new Doppler water meters and 8 automated meteo stations is in place 1.2 At least 40,000 km² of the Karakalpakstan region covered by automated hydro- meteorological observation network 1.3 Season ahead forecasts and 2 weeks ahead temperature forecasts for effective warnings is practiced 1.4.1 N/A 1.4.2 At least 40% (at least 20% of them are female) of Dekhkan farmers and pastoralists of Karakalpakstan region served by science-based extension Target 2 | Target 1 | |
| 1.2 At least 40,000 km² of the Karakalpakstan region covered by automated hydrometeorological observation network 1.3 Season ahead forecasts and 2 weeks ahead temperature forecasts for effective warnings is practiced 1.4.1 N/A 1.4.2 At least 40% (at least 20% of them are female) of Dekhkan farmers and pastoralists of Karakalpakstan region served by science-based extension Target 2 | 1.1 Effective data reception and transmission from 2 new Doppler water meters and 8 automated meteo stations is in place | |
| 1.3 Season ahead forecasts and 2 weeks ahead temperature forecasts for effective warnings is practiced 1.4.1 N/A 1.4.2 At least 40% (at least 20% of them are female) of Dekhkan farmers and pastoralists of Karakalpakstan region served by science-based extension Target 2 | 1.2 At least 40,000 km ² of the Karakalpakstan region covered by automated hydro- meteorological observation network | |
| 1.4.1 N/A1.4.2 At least 40% (at least 20% of them are female) of Dekhkan farmers and pastoralists of Karakalpakstan region served by science-based extensionTarget 2 | 1.3 Season ahead forecasts and 2 weeks ahead temperature forecasts for effective warnings is practiced | |
| 1.4.2 At least 40% (at least 20% of them are female) of Dekhkan farmers and pastoralists of Karakalpakstan region served by science-based extension Target 2 | 1.4.1 N/A | |
| Target 2 | 1.4.2 At least 40% (at least 20% of them are female) of Dekhkan farmers and pastoralists of Karakalpakstan region served by science-based extension | |
| | Target 2 | |

| | T | |
|---|----------|---|
| 2.1 At least 40,000 Dekhkan farmers adopted climate resilient conservation agriculture practices (low till, mixed cropping, fodder production, and residue crop soil) | | |
| 2.2 At least 40,000 Dekhan farmers adopted water saving irrigation practices (e.g. land levelling, furrow, drip irrigation systems) at 80,000 ha dekhkan farms to improve farm- level drainage and minimise salinization) | | |
| 2.3 N/A | | |
| 2.4 At least 3 laws/regulations on agricultural practices and water management amended and integrated regulations on the adoption of conservation agriculture and water saving techniques and technologies on the farms | | |
| Target 3 | | |
| 3.1 Over 70,000 ha of arid land of Karakalpakstan covered with saksaul and tamarix plantations to deliver sand stabilization and soil desalinization function | | Re Target 3.3: In 2019, the target will be achieved in full scale |
| 3.2 At least 20,000 people (50% of women) organized in at least 10 cooperatives at the khokimiyat and makhalla levels to participate in sand stabilization plantation scheme | | |
| 3.3 At least 10 community organizations (at least 5 female groups and village organizations) at khokimiyat and makhalla level established and have clear mandates, institutional capacities and skills to manage saksaul and tamarix plantations | | |
| Target 4 | | |
| 4.1 At least 2 sets of bulletins included information about results of inventory of all | | |

| tested agronomic and water saving measures and successful practices mapped out | |
|---|--|
| 4.2 At least 10 of lessons learned covering successful climate resilient agronomic and water saving measures documented in bulletins produced and disseminated among 40,000 stakeholders (30% of women) 4.3 At least 5 farmland demonstration meetings covered by the local and national | |
| media for adaptation advocacy | |
| Target 5 | |
| 5.1 N/A | |
| 5.2 Final evaluation conducted in the end of project, and its results and lessons learned are available | |

4 Updates on key issues and recommendations

The sum-up of the key recommendations on how to strengthen project activities and achieve the expected outputs/outcomes proposed by project stakeholders within the both Inception Workshops (national and subnational) as well as how the project will address them is presented in the table below.

| Recommendations | Step to be undertaken to address |
|---|--|
| To develop and use some additional indicators that can contribute to deeper for evidence-based monitoring as well as codifying the quantifiable impacts, including: | |
| To measure impacts on increase in income or productivity achieved through project activities focused on promoting conservation agriculture practices and water saving practices (Outputs 2.1 and 2.1). This would require a baseline data collection prior to on-the-ground investments, followed by annual data measurement as well as data collection from non-target farmers. | Data collection prior to on-the-ground water saving and agro conservation measures will be undertaken for the farmers involved in those project activities and farmers that will not be involved in. Collected data will serve as a baseline to measure progress and impacts based on the corresponding indicators determined. Comparative analysis will be conducted to formulate well-justified and evidence-based impacts. |
| To conduct analysis of payback period for investments to greenhouse construction and O&M for horticulture activities. | Conduct review of previous relevant experience and demos from completed national and international projects, and economic and financial estimates for greenhouse construction and O&M. Upon establishing greenhouses within the project activities undertake analysis of the payback period of the investments into greenhouses, based on which produce a brief on the corresponding and evidence-based economic, financial, social benefits, and potential for increasing farmer incomes. |
| To consider a possibility of using satellite imagery to quantify lands affected by sand moving to monitor impacts generated through moving sands stabilization to achieved within relevant project activities focused on landscape management (Output 3.1). To conduct a deeper assessment of water balance (water budget) of Amu-Darya river. | As the cost of using satellite imagery is extremely high, lower cost options workable for monitoring of the quantitative impacts related to stabilization of moving sands, e.g. procurement and use of the differential GPS will be elaborated and implemented within the project Output 3.1 Water balance (water budget) analysis of Amu-Darya river will be conducted by national experts within activities planned to achieve the Outcome 4. Required infrastructure (measuring and metering |

TABLE 3 KEY ISSUES/RECOMMENDATIONS AND STEPS TO ADDRESS THEM

| Recommendations | Step to be undertaken to address |
|--|---|
| | equipment) will be procured within activities planned to achieve the Outcome 1. Points to install water meters will be determined with consideration of enabling the analysis. Additionally to the two (2) Doppler discharge meters to be procured and installed at water gauge stations along the main course of Amudarya stream, 8 weirs to get water balance control (water consumption for irrigation) in the targeted and non-targeted project pilot sites (irrigated farming) will be procured and installed. |
| To test relevant pilot/innovative approaches to support resilient livelihoods under drought conditions. | To increase the chances for success, Project Team will test a few "innovative" approaches in partnership with e.g. the Academy of Sciences of Republic of Karakalpakstan, which has a good expertise in applicable innovative practices. For example, use of fortified mineral – glaukonit, which restores the structure of the degraded soils and increases water retention capacity of soil. Hydroponics techniques can be considered for greenhouse applications as this option is much less water-dependent. Background researches (costing, feasibility, sustainability, etc.) will be conducted jointly with the Academy to justify affordability of the proposed innovations. |
| To learn lessons from the completed projects and ensure synergy with the relevant on- going projects focusing on social-economic models application, agro-smart technologies use, increasing energy efficiency and use of renewable energy, testing soft loans/credits and grant options designed for farmers and dekhans (households) to purchase and install drip irrigation equipment, laser leveling to enable efficient use of available water resources. | Exploring the wide spectrum of science- based tools and practices aimed at improving and adapting the existing Drought Early Warning System to Amudarya downstream conditions using modeling tested within the completed and piloting within the on-going projects (Uzhydromet, UNDP, ICARDA, WB, etc.) is already envisaged in the project Output 1.3, and contribute to meeting this recommendation. Moreover, best practices on renewable energy applications, testing soft loans/credits and grant options available for farmers and dekhans (households) to enable efficient use of water resources will be piloted within Outputs 2.1-2.4. |
| To elaborate an option of using underground waters for drip irrigation needs. | Drip irrigation with ground water pumping (pumps driven by solar energy) for |

| Recommendations | Step to be undertaken to address | | | | |
|-----------------|--|--|--|--|--|
| | greenhouse farming will be demonstrated and used for required crop watering at project pilot sites, if proved to be feasible (Outputs 2.1-2.3). | | | | |

Moreover, additional recommendations were provided by Mr. Yusuke Taishi, Regional Technical Specialist – Adaptation, Green Low Emission Climate Resilient Development Strategies, UNDP - Global Environment Facility, UNDP in Bangkok, Thailand based on his mission undertaken to support UNDP CO and project team in preparations and conducting two Inception Workshops at national and sub-national level. The recommendations included (see details in BTOR given in Annex 3):

- Development of additional indicators for monitoring evidence-based, quantifiable impacts
- Additional assessment on water budget in Amu-Darya river
- Testing experimental/innovative approaches to supporting resilient livelihoods under drought conditions.

They have been discussed during the first Project Board meeting and addressed in the corresponding Resolution of the PB meeting (see Minutes of the first Project Board meeting in Annex 4). To implement the recommendations, the required actions/activities were planned within each particular project outcome during development of the AWP and budget for 2015 that has been approved by PB Resolution accordingly.

5 Detailed Annual Work Plan and UNDP Atlas budget for the first year of project implementation

The detailed Annual Work Plan and UNDP Atlas budget for the first year of project implementation are presented below in Tables 4 and 5 accordingly.

Table 4Detailed Annual Work Plan and Budget for 2014

| | United Nations Development Pr Uzbekistan | rogramm | e | | | | | | | | |
|--|---|------------|-----------|--------|-------|--|---------------|-------------|---------|--------------------------|------------------|
| U N D P | Year: 2014 Project Number: 00082613 Project Title: Developing Clim | ate Resili | ence of F | arming | Commu | nities in the Drought P | rone Parts of | ' Uzbekista | n | Award ID: 0000 | 66434 |
| EXPECTED OUTPUTS | S PLANNED ACTIVITIES RESPONSIBLE | | | | | | | | | | |
| And the stine in the structure in the dive | List activity and to and | | TIMEFI | RAME | 1 | PARTY | | | PLANN | NED BUDGET | |
| Ana basenne, indicators including annual targets | List activity results and associated actions | Q1 | Q2 | Q3 | Q4 | (i.e. code of Implementing agency) | Funding | Source | Account | Budget Description | Amount |
| | | | | | | | Fund | Donor | | | budget for Y2014 |
| Output 1 : Climate resilience of farming and pastoral communities in the drought prone parts of Uzbekistan, specifically Karakalpakstan developed | Activity Result 1: Institutional and technical capacity for drought management and early warning developed | | | | | | 62040 | 11602 | 71600 | Travel | \$4,000.00 |
| Baseline 1: | Action: Upgrade observation and monitoring infrastructure | | | | | | 62040 | 11602 | 72100 | Contr. Service - Com. | \$40,000.00 |
| hydrological stations is insufficient to provide adequate coverage for drought monitoring | Doppler water meters, and automatisation of 8 met stations) for effective data | | | | | | 62040 | 11602 | 71300 | Local Consultants | \$15,000.00 |
| 1.2 Lack of data (insufficient coverage) to adequately monitor climate and water supply status | reception and transmission | | | | | | 62040 | 11602 | 71200 | Internat. Consultants | \$20,000.00 |
| 1.3 Warning systems are not linked with water user and farmer groups; and drought early warning is not effectively and timely delivered | Action: Establish multi- module platform for integration of data flow from hydro- meteorological observation network to end users | | Х | х | х | 002031 | Sub-tot | al 1.1 | | | \$79,000.00 |
| 1.4 No extension services for climate change adaptation by farmers in place | Action: Establish drought early warning mechanisms (indicators, gauges, warning | | | | | | 62040 | 11602 | 71200 | Internat. Consultants | \$10,000.00 |
| Indicator 1: | distribution mechanisms etc) to minimise impacts of droughts and make them functional | | | | | | 62040 | 11602 | 71300 | Local Consultants | \$4,000.00 |
| 1.1 # of new automated meteo stations and monitoring equipment for field data collection and transmission 1.2 Coverage of hydro- meteorological observation network on km2 1.2 Lock daime (metho) for demosta | Action: Establish science- based extension services for subsistence dekhan farmers to assist in farm-based climate risk management, including sub-district, community level Climate Field School/Extension (CFS/E) established for direct outreach to farmers and localized training in adaptation practices | | | | 62040 | 11602 | 71600 | Travel | \$2,000.00 |
|---|---|--|--|--------|---------|--------|-----------|--------------|-------------|
| early warning | | | | | Sub-tot | al 1.2 | | | \$16,000.00 |
| 1.4.2 % Dekhkan farmers (including % of female Dekhkan farmers) receiving extension services to introduce farm-based climate risk management measures | | | | | | | TOTAL FOI | R ACTIVITY 1 | \$95,000.00 |
| Target 1: 1.1 8 new meteo stations and monitoring equipment locations at the field identified through expertise and technical assistance provided 1.2 Technical requirements for IT equipment of automated hydro- meteorological observation network developed 1.3 N/A 1.4.1 N/A 1.4.2 N/A Baseline 2: 2.1 Low awareness of dekhkan farmers on adaptation solutions to optimize agricultural production and minimize the adverse impacts of droughts both in short and long term | Activity Result 2: Climate resilient farming practices on subsistence dekhkan farms of Karakalpakstan established Action: Ensure that 40,000 Dekhkan farmers adopted climate resilient conservation agriculture practices (e.g. low till, mixed cropping, fodder production, and residue crop soil) covering by adopted measures 80,000 ha of dekhkan farms) Action: Ensure that 40,000 Dekhan farmers adopted water saving irrigation practices (e.g. land levelling, furrow and drip irrigation systems) adopted at 80,000 ha dekhkan farms to improve farm-level drainage and minimise salinisation) | | | 002031 | 62040 | 11602 | | | |

| 2.2 Low awareness of dekhkan farmers on water saving irrigation practices 2.3 Limited use of horticulture greenhouses as drought mitigation solutions 2.4 Insufficient legal and regulatory framework to support well-tested farm-based adaptation measures Ludinator 2. | sure that 40% of khan farmers horticulture s on 20,000 ha of nimise impacts of farm production sure that legal and ramework to l tested farm-based neasures for and upscale | | | | | | | |
|---|---|---|--------|-------|-------|-----------|--------------|--------|
| mulcator 2: | | | | | | TOTAL FOR | R ACTIVITY 2 | \$0.00 |
| 2.1 # of dekhkan farmers adopted conservation agriculture practices (e.g. low till, mixed cropping, fodder production, and residue crop soil)Activity res level adapta soil conservation im resilience of land2.2 # of dekhkan farmers adopted water saving irrigation practices (e.g. land levelling, furrow and drip irrigation systems) 2.3 # of Dekhans established horticulture greenhouses and # of female lead onesActivity res level adapta soil conservation im resilience of land | sult 3: Landscape tion measures for ation and moisture proved climate f 1,042,094ha of liver sand and soil on function for | | | 62040 | 11602 | | | |
| 2.4 # of legal acts and regulations enacted to support well tested farm- based adaptation measures Target 2: adjacent farm- local saksau plantations b models and landscape re managemen Action: Estr | a of farm and mlands through il and tamarix based on wind comprehensive ehabilitation and t plan ablich community | | 002031 | | | | | |
| 2.1 N/A Action. Esta managemen planting and community scheme for l | t scheme for l maintenance as employment landscare level | | | | | | | |
| 2.3 N/A Action: Esta managemen landscape re managemen community | andscape level ablish cooperative it system for ehabilitation and it to enhance control and | | | | | | | |
| Baseline 3: | | I | | | | TOTAL FOI | R ACTIVITY 3 | \$0.00 |

| 3.1 Insufficient coverage of landscape level adaptation measures (plantations) for sand stabilization and moisture retention | Activity result 4: Knowledge of climate resilient agricultural and pastoral production systems in arid lands generated and widely available | | | | | 62040 | 11602 | 71600 | Travel | \$1,000.00 |
|---|---|---|---|---|--------|-------------|----------|-----------|--------------------------|-------------|
| 3.2 Low involvement of dekhkan farmers and pastoral community in landscape level adaptation measures | Action: Conduct inventory of all tested agronomic and water saving measures to map out successful practices | | | | | 62040 | 11602 | 72100 | Contr. Service - Com. | \$3,000.00 |
| 3.3 Lack of institutional mechanisms for community management of sand stabilizing plantations | Action: Document and disseminate results of analysis and lessons learned for climate resilient agricultural and | х | x | x | 002031 | 62040 | 11602 | 71300 | Local Consultants | \$3,000.00 |
| Indicator 3: | pastoral production systems in arid lands through printed and web-based publications | | | | | 62040 | 11602 | 74200 | Audio/video and print. | \$2,000.00 |
| 3.1 # of ha with saksaul and tamarix plantations to deliver sand stabilization and soil desalinization function | Action: Conduct quarterly farm and pasture land demonstration meetings with participation of national, local | | | | | 62040 | 11602 | 74500 | Miscellaneous | \$1,000.00 |
| 3.2 # of Dekhkan farmer and pastoral community members | authorities, media and communities | | | | | Sub-total 4 | 3 | | | \$10,000.00 |
| involved in landscape level adaptation measures (e.g. saksaul and tamarix planting) through local employment programme | | | | | | | | | | |
| 3.3 # of cooperatives established at Khokimiyat and Makhalla levels | | | | | • | • | | TOTAL FO | R ACTIVITY 4 | \$10,000.00 |
| for community management of sand stabilizing plantations | Activity result 5: Project Management | | | | | 62040 | 11602 | 71200 | Internat. Consultants | \$7,500.00 |
| Target 3: | | х | х | х | 002031 | 62040 | 11602 | 71400 | Contr. Service - Ind. | \$42,013.00 |
| 3.1 N/A | | | | | | 62040 | 11602 | 72500 | Supplies | \$10,350.00 |
| 3.2 N/A | | | | | | 04000 | 00012 | 73500 | Reimbursement Costs | \$5,000.00 |
| | | | | | | Sub-total A | F for PM | cost | | \$59,863.00 |
| | | | | | | Sub-total U | NDP TRA | C for DPC | | \$5,000.00 |
| 3.3. N/A | | | | | | | | TOTAL FO | R ACTIVITY 5 | \$59,863.00 |
| Baseline 4: | | | | | | | | | | |

4.1 Some water saving irrigation and agronomic methods were sporadically demonstrated but farmers continue inefficient and unsustainable practices that increase their vulnerability to drought and climate change risks 4.2 Lessons learned are not being captured for broader sharing to address an aggravation of the food security situation during the droughts and as a result of climate change 4.3 Outreach mechanism, transmission of knowledge is limited in scope (within the scientific community), not well tailored or systematic

Indicator 4:

4.1 # of documented good practices (bulletins) of agronomic and water saving measures
4.2 # of lessons learned bulletins disseminated through printed and web-based media
4.3 # of farm and pasture land demonstration meetings covered by media and attended by national and local authorities

Target 4:

4.1 N/A

4.2 N/A

4.3 At least 1 farm and pasture land demonstration meeting with participation of national, local authorities, media and communities, and associated printing and publications produced and disseminated

Baseline 5:

5.1 No Monitoring and Evaluation system5.2 No evaluation of project output and outcomes

| Indicator 5: 5.1 Monitoring and Evaluation system is in place 5.2 Project outputs and outcomes evaluated at mid and final points of project implementation cycle, and lessons learned codified Target 5: 5.1 Monitoring and Evaluation system developed 5.2 N/A | | | | | |
|---|--|--|--|--|----------------|
| availability of institutional products and services for the conservation and sustainable and equitable use of natural resources | | | | | |
| TOTAL AF | | | | | \$164,863.00 |
| TOTAL UNDP TRAC | | | | | \$5,000.00 |
| TOTAL | | | | | \$169,863.00 |

Table 5UNDP Atlas generated budget for 2014



Annual Work Plan

Project: 00066434

Project Title: DEVELOPING CLIMATE RESILIENCE IN DROUGHT PRONE PARTS

Report Date: 28/5/2014

Year: 2014

| Out | put | Key Autivities | Timetr | ame | Responsible Party | Planned Budget | | | | |
|---------------------|------------------------|--------------------------------|--------|-----|----------------------------|----------------|-------|-------|--------------------------------|------------|
| | | | Start | End | | Fund | Donor | | Budget Decor | Amount US# |
| 00082613 DEVELOPING | CLIMATE RESILIENCE | Climate resil. agricul/pastora | | | UZB-MAIN ADM. OF HYDROMETI | 62040 | AF | 71600 | Travel | 1,000.00 |
| | | | | | UZB-MAIN ADM. OF HYDROMETI | 62040 | AF | 71300 | Local Consultants | 3,000.00 |
| | | | | | UZB-MAIN ADM. OF HYDROMETI | 62040 | AF | 74500 | Miscellaneous Expenses | 1,000.00 |
| | | | | | UZB-MAIN ADM. OF HYDROMETI | 62040 | AF | 72100 | Contractual Services-Companies | 3,000.00 |
| | | | | | UZB-MAIN ADM. OF HYDROMETI | 62040 | AF | 74200 | Audio Visual&Print Prod Costs | 2,000.00 |
| | | Inst & technical cap. develop | | | UZB-MAIN ADM. OF HYDROMET | 62040 | AF | 71600 | Travel | 6,000.00 |
| | | | | | | | | | | 0.00 |
| | | | | | UZB-MAIN ADM. OF HYDROMETI | 62040 | AF | 71200 | International Consultants | 30,000.00 |
| | | | | | UZB-MAIN ADM. OF HYDROMETI | 62040 | AF | 71300 | Local Consultants | 19,000.00 |
| | | | | | UZB-MAIN ADM. OF HYDROMETI | 62040 | AF | 72100 | Contractual Services-Companies | 40,000.00 |
| | | Project Management | | | UZB-MAIN ADM. OF HYDROMETI | 62040 | AF | 72500 | Supplies | 10,350.00 |
| | | | | | UZB-MAIN ADM. OF HYDROMETI | 62040 | AF | 71400 | Contractual Services - Individ | 42,013.00 |
| | | | | | UZB-MAIN ADM. OF HYDROMETI | 04000 | UNDP | 73500 | Reimbursement Costs | 5,000.00 |
| | | | | | UZB-MAIN ADM. OF HYDROMETI | 62040 | AF | 71200 | International Consultants | 7,500.00 |
| | TOTAL 168,863.00 | | | | | | | | | |
| | GRAND TOTAL 189,883.00 | | | | | | | | | |

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6 Updates of project implementation arrangements

The project will be implemented through the National Implementation Modality (NIM), as described in the UNDP Programme and Operations Policies and Procedures (POPP). At the national level, the project will be executed by the Center of Hydro-meteorological Service under the Cabinet of Ministers of the Republic of Uzbekistan (Uzhydromet) as the National Implementing Partner. The same organization through its branch office at the level of the targeted province of Karakalpakistan will execute all sub-national activities. The Uzhydromet will retain overall responsibility for applying AF inputs in order to reach the expected Outcomes/Outputs as defined in this project document. The Uzhydromet will be responsible for the timely delivery of project inputs and outputs, and in this context, for the coordination of all other responsible parties, including other government agencies, regional and local government authorities. Uzhydromet has provided office premises for the project team as well as telephone communication lines, and the required expertise and services of their corresponding staff.

Upon the request of the Government of Uzbekistan, UNDP will serve as the Multilateral Implementing Entity (MIE) for this project. Services that UNDP will provide to the Implementing Partner in support of achieving project Outcomes/Outputs. UNDP's services will be provided by staff in the UNDP Country Office (Tashkent), UNDP-GEF in UNDP Regional Asian-Pacific Center (Bangkok, Thailand), and UNDP Headquarters (New York).

UNDP will provide support to the project manager in order to maximize its reach and impact as well as for the delivery of quality products. Moreover, it will be responsible for administering resources in accordance with the specific objectives defined in the Project Document, and in keeping with its key principles of transparency, competitiveness, efficiency, and economy. The financial management and accountability for the resources allocated, as well as other activities related to the execution of project activities, will be undertaken under the supervision of the UNDP Country Office (UNDP CO) with the UNDP's Regional Technical Specialist on Adaptation, Green Low-Emission Climate Resilient Development Strategies in Bangkok. UNDP will undertake the internal monitoring of the project and of evaluation activities, taking into account from the outset local capacities for administering the project, capacity limitations and requirements, as well as the effectiveness and efficiency of communications between all institutions that are relevant to the project.

Overall guidance will be provided by the Project Board (PB). This will include representation by UNDP as the Senior Supplier and Uzhydromet as the Executive and Senior Beneficiary, including the Inter-Agency Working Groups. The national Inter-Agency Working Group (NIAWG) has been established by the government resolution and is aimed at facilitation and coordination of project implementation and strengthening project owership of the government ministries and agencies. Composition of NIAWG comprises highly qualified and motivated specialists and officials representing the following government ministries and agencies:

- 1. Ministry of Finance
- 2. Ministry of Economy
- 3. Ministry of Agriculture and Water Resources
- 4. State Committee for Nature Protection
- 5. Centre of Hydrometeorological Services under the Cabinet of Ministers of the Republic of Uzbekistan (Uzhydromet)

The total number of NIAWG's members is seven among which five are repersentatives of the line ministries but two others are NIAWG's Secretariate members. NIAWG's mandate and working schedule have been developed and considered by all involved, endorsed by all members of NIAWG during the first Project Board Meeting held on 24 December, 2014 that was followed by official adoption by the Ministry of Finance as per the national procedure set up.

To ensure more efficient involvement and coverage of the targeted local communities vulnerable to climate change impacts, and establish partnership and cooperation with farmers and dekhans in Karakalpakstan as well

as ensure mainstreaming the relevant gender activities, sub-national Inter-Agency Working Group (SNIAWG) has been established as well. SNIAWG is composed of nine representatives of the regional government ministries and agencied of the autonomous Republic of Karakalpakistan.

The Project Board (PB) is established and is responsible for making management decisions for the project, in particular when guidance is required by the Project Manager (PM). It is play a critical role in project monitoring and evaluations by assuring the quality of these processes and associated products, and by using evaluations for improving performance, accountability and learning. The key national and sub-national governmental agencies, appropriate regional and local authorities, local self-government (makhallas and councils of citizens of villages), and independent third-parties such as international or national NGOs can attend the augmented PB meetings as observers as well. The Project Board ensure that required resources are committed. It is also arbitrate on any conflicts within the project and negotiate solutions to any problems with external bodies.



A *Project Implementation Unit* (PIU) is established comprised of core staff including: the Project Manager, Project Administrative and Financial Assistant, National Field Coordinator (will be working in Karakalpakstan) and project Driver. The PIU assists the Uzhydromet in performing its role as the National Implementing Partner. The PM is recruited in accordance with UNDP's regulations to manage actual implementation of the project and will be based in Tashkent. PM is responsible for overall project coordination and implementation, consolidation of work plans and project papers, preparation of quarterly progress reports, reporting to the project supervisory bodies, and supervising the work of the project experts and other project staff. The PM also closely coordinates project activities with relevant government institutions and hold regular consultations with other project stakeholders and partners. Under the direct supervision of the PM, the Administrative Assistant is responsible for administrative and financial issues, and gets support from the existing UNDP administration. Moreover, positions of two thematic Task Managers have been proposed by the National Project Coordinator (Uzhydromet) to support PM and ensure efficient and timely implementation of project

activities and achieving the planned outcomes (see adjusted Project Organizational Structure below and Minutes of PB meeting in Annex 4).

Thematic leadership of the projects' activities

Taking into consideration the wide project activities spectrum (from purely technical to specifically oriented onto water management/water saving technologies, drought early warning and landscape adapation measures), it is resonable to have some thematic Task Managers responsible for different project components additionally to the National Field Coordinator which is the only thematic leader position is envisaged in the project document. Though strategic thematic oversight and guidance of the Outcome 1 (Component 1) is ensured through using of professional and capable experts of Uzhydromet, two Task Managers are key to ensure efficient thematic and managerial contribution and management of activities to be implemented at regional authorities and local communities level to achieve the Outcomes 2 and 3 (Components 2 and 3).

The proposed Task Manager for Component 2 "Climate resilient farming practices establishing for subsistence dekhkan farms of Karakalpakstan" will promote the agronomic, soil and water conservation measures and practices that constitute the conservation agriculture approach aimed at achieving sustainable adaptation benefits under the forecusted scenario of reduced average rainfall and increasing frequency of droughts. The main responsibilities of the Task Manager will include:

- adoption of adopted climate resilient conservation agricultural practices by the targeted farms and their replication by non-target farms and further scaling up the nationwide;
- adoption and use of best irrigation and drainage practices by farmers and dekhans to improve farmlevel drainage and reduce salinization of soils;
- implementation of adaptation measures aimed at promotion of horticulture greenhouses to minimize impacts of droughts on farm and dekhan production;
- development of farm-based adaptation measures, their testing, demonstration and adoption by farmers and dekhans to enable further replication and scaling-up;
- development and adoption of legal and regulatory framework to secure the replication and sclingup of the well-tested farm-based adaptation measures.

The Task Managers for Component 3 **"Landscape level adaptation measures for soil conservation and moisture retention improves climate resilience"** will be responsible for implementation of adaptation measures and approaches aimed at achieving the direct benefits at farmlands and dekhan plots through restoring and improving the landscape functions, integrity and land productivity (moisture retention, less susceptibility to wind erosion, etc.) The main responsibilities of the Task Manager will include:

- design and development of a comprehensive plan on sand stabilization and landscape rehabilitation aimed at improving land productivity and resilience of adjacent farms and pastureland which will secure the participatory process with local land users, representatives of land management institutions and technical parties to facilitate inputs into full landscape rehabilitation plan incorporating both on and off farm areas;
- development of the Community Management Scheme (plantation establishment and maintenance) as a community employment scheme for landscape scale adaptation;
- sstablishing cooperative management arrangements for landscape scale rehabilitation and management to enhance community control and ownership arrangements.

7 Methodologies and approaches that will be applied in the

The project uses scientific-based and result-based approaches to enable M&E procedure and availability of sound evidences of the results achieved. To have a vivid and reliable picture of project interventions, initial data set to serve as an input for baselines, which characterize specific initial conditions of particular objects, will be collected for each thematic component. Data on the status of objects collected within the project implementation cycle will be compared to conduct quantitative evaluation of the progress. The key object status indicators that are liable to monitoring and evaluation are as follows:

- 1. Status of hydrometetological observational network in terms of the rate of automatization and its capacity to deliver information to the end-users. It is planned to establish informational multi modules platform to integrate and disseminate hydro meteorological information and deliver it to the end-users. The modules of this platform are:
 - continuous hydrometeorological data acquisition, monitoring and control module that provides: all available communication facilities, including trunk radio communication; user friendly interface; access to data encoded in accordance with the international standards and regulations (WMO) and raw ones; main daily, monthly and yearly data statistics (averages, max, min, standard deviations, skew coefficients, etc.) widely used in practice as automatically calculated; required data input to the Drought Early Warning System, including calculation drought indices;
 - hydrometeorological data/Drought Early Warning System (DEWS) products exchange module;
 - Regional Messages Commutation Centers, Extension Service Centers and marginal parts of the project's pilot sites (pastures, nomad camps etc.) continuous data exchange module, which will provide exchange with digital, voice and messages/warnings via the most available links/channels of communication.

The present status of this multi-modules platform (baseline) will be compared (module by module) to the status achieved along the project implementation cycle and by the end of project.

2. Extent in which local hydrometeorological services are able to meet the expanding demand, including needs of farmers and dekhans. The existing hydrometeorological and climate service menu will be specified to establish a baseline focusing on current situation with supply and demand of hydrometeorological and climate service products. During the project implementation, this menu will be expanded using existing and newly generated capacities of informational multi-modules platform and Drought Early Earning System (DEWS). Informational multi-modules platform will incentivize in situ data collection, control, processing and storage; provide access to database of all local observational networks that in turn will simulate accelerated information diffusion into local communities. This information could include daily, monthly, yearly and long-term processed meteo and hydrological data, including statistic of data series, short and long-term weather forecasts tailored and formulated the way to meet demand of broader number of clients.

Adapted to downstream conditions of Amudarya river, drought early warning systems (DEWS) will provide the wider spectrum of products required by both decision makers and local communities. Basic version of DEWS, as being based upon hydrological modeling platform, uses 10 days hydrometeorological data with manual input into the system. It is proposed to develop an improved version of DEWS with enhanced capacities enabling use of remote sensing data, drought indices as well as adapted to artificial run-off regime. The products of DEWS being formatted and fitted the way to be clear, informative and timely delivered will allow meeting the broader spectrum of demand.

3. **Readiness of Drought Early Warning System (DEWS) to provide required information and forecast to the end-users.** The powerful core (set of mathematical models to simulate hydrological process that take place in river basins) of DEWS provides water availability forecast tailored **for rivers with natural runoff** with lead time long enough to plan, design and implement the drought mitigation and adaptation proactive measures. Given that project pilots are located in the downstream of Amudarya river, basic version of DEWS must be adapted to the regulated runoff mode and to be improved though development of additional capacities enabling use of remote sensing data, calculation and utilization of drought indices. Basic version of DEWS, as being based upon hydrological modeling platform, uses 10 days hydrometeorological data with manual input into the system. It is proposed to develop an improved version of DEWS with enhanced capacities enabling use of remote sensing data, drought indices as well as adapted to artificial run-off regime. Adapted to downstream conditions of Amudarya river, drought early warning systems (DEWS) will provide the wider spectrum of products required by both decision makers and local communities. So, the extent in which DEWS is getting ready for providing the adequate services for the existing and potential clients can be monitored by each step of system improvements done.

4. Efficiency of proposed approaches and techniques resulted in water saving and soil reclamation. Project will pilot different types of water saving and land reclamation approaches and techniques such as drip irrigation, laser leveling, low tillage as well as their combinations, more economically viable irrigation practices versus the current traditional ones to identify the most efficient and applicable for local agronomic and agro-technical conditions. For monitoring water consumption decrease due to application of each particular technique, corresponding reliable and measurable baseline shall be established. Simple in use, durable and relatively cheap water balance /water discharge controlling devices can be used for this purpose. Weirs, which allow measuring water discharge by water level readings, can be recommended. Weirs installed on the channels delivering water to the targeted and non-targeted farms/dekhans farmlands and plots will provide data input to calculate difference in water consumption, and evaluate efficiency of particular water saving measures or their combinations.

As soon soil fertility is mainly depending on soil acid-alkaline (pH) balance, efficiency of measures aimed at land reclamation can be judged by pH meter readings acquired before, during and after the project interventions. It is planned to conduct parallel measurements at the targeted (with land reclamation measures implemented) and non-targeted farmlands and plots using low capacity data loggers and pH sensors. Applying the mineral glukonit to improve soil strata and its chemical content is one of innovative land reclamation measure is planned for piloting and further analysis to identify the impacts.

5. Efficiency of proposed approaches and techniques to achieve sand stabilization and soil water retention. Approach remains the same: to have in place measuring infrastructure for targeted and non-targeted pilots to compare data of measurement records and make a decision on sand stabilization and soil water retention effects. Sand stabilization effect can be monitored by making ground geodetic successive surveys over the targeted and non-targeted pilots using portable differential GPS. Front of encroaching or fixed sand can be easily tracked by their mapping.

Amount of moisture content in the soil is the measurable characteristics of soil properties. Variation in strata electric conductivity generates an idea on soil moisture fluctuations. Having low capacity measuring infrastructure, which can include water content sensor and data logger, allows tracking improvements of soil properties to document positive impacts on soil water retention capacity that have been achieved thanked to project interventions.

The TORs for key technical experts who will be responsible for application of the proposed methods and approaches as well as documenting and collecting evidences of the measurable results achieved through the corresponding project activities are given below.

Technical TORs for key positions

National Field Coordinator

Functions / Key Outputs Expected

- Responsible for development of the field-related thematic/technical aspects of plans of the project (AWP, APA, etc.);
- Develops draft ToRs for national consultants;
- Responsible for coordination/implementation of activities to be implemented in Karakalpakstan, including support/advice and overseeing work of international/national experts;
- Provides overall leadership to the project experts and act as the projects official field coordinator to governments, local authorities, stakeholders, donors and general public at large in Karakalpakstan;
- Leads the regular meetings of the experts/stakeholders in Karakalpakstan to ensure effective joint planning of activities and monitoring of field-related activities' implementation;
- Meets periodically with representatives of organizations and stakeholder groups involved in the project in Karakalpakstan;
- In consultation with the Project Manager, meets with representatives of donor organizations and UNDP programmes and projects with regard to possible joint activities and resource mobilization;
- Prepares relevant presentations and reports on the project field-related activities for the Project Board meetings and other relevant events;
- Provides support to the PM in preparation of Annual and Quarter Work Plans;
- Provides support to the PM in the preparation of the all required project reporting (UNDP and AF), including Quarterly Project Report (progress against planned activities, update on Risks and Issues, expenditures in UNDP format) and Quarterly Operational Report (Adaptation Fund format); Annual Review Report (UNDP format) and Project Implementation Report (Adaptation Fund format) Annual Work Plan (AWP) and Annual Plan of Activities and Procurement Plan for the project years; and review the Project Briefs;
- Mainstream gender issues in the project field activities;
- Perform other duties related to the scope of work of the National Field Coordinator as required.

Qualifications Requirements

- Bachelor degree in the following areas: environment protection and management science, natural resources management, climate change (adaptation) related science or environment-relevant business and administration. At least 3 years of relevant experience. Working experience in international organizations is an asset. Practical experience in coordination of the field project activities associated with environment protection and corresponding sustainable development;
- Knowledge of and experience in gender mainstreaming is an asset;
- Proven experience in working and collaborating with regional/local governments and communities;
- Initiative and strong leadership skills;
- Result and client-oriented;
- Strong analytical, communication, writing, presentation and communication skills;
- Excellent interpersonal and cross cultural communication skills, ability to work in a team and to work under pressure and with tight deadlines, ethics and honesty;
- Ability to use IT and communication technologies as a tool and resource.

Hydrometeorological Networking Expert

Functions / Key Outputs Expected

- 1. Development the observational hydrometeorological automated network multifunctional platform main concept;
- 2. Development the specification for automated hydrometeorological equipment based on analysis of existing needs and expanding hydrometerological data demand with offer on potential automated hydrometeorological equipment vendors;
- 3. Development the design of the hydrometeorological data exchange contour: Automated hydrometeorological network Regional Centers of Messages Commutation Main Center of Messages Commutation;
- 4. Development the specification of IT equipment to maintain automated hydrometeorological network and data flows;
- 5. Development the principle concept of the continuous hydrometeorological data acquisition, monitor and control system including:
 - a. Interface designed to data display with data correction option available for operators/meteorologists;
 - b. Ensuring the availability of two types of data: coded and row ones;
 - c. Getting main daily, monthly and yearly data statistics automatically calculated (averages, max, min, standard deviations, skew coefficients etc.) widely used in practice;
 - d. Ensuring required data input to the Drought Early Warning System including drought indices calculation.
- 6. Development of Terms of Reference to provide continuous data exchange between Regional Messages Commutation Centers and Extension Service Centers including:
 - a. Exchange with messages/warnings; Provide maximum available links/channels of communication, getting permit for VSAT system use if needed;
 - b. Ensuring communication with marginal part of project's pilot area (pastures, nomad camps etc.);
 - c. Ensuring non-stop operational mode of the data exchange system via widely use of renewable power source (solar panels, accumulators, AC/DC converters).

Qualifications Requirements

• MSc degree in relevant field with at least 5 year experience or BC degree with 10 year experience in designing effective communication protocols for hydrometeorological service, including experience in radio, satellite and mobile/cellular technologies applied to real time monitoring and emergency communications.

Drought Forecast/Warning Expert

Duties and Responsibilities

- Review of existing Drought Early Warning System (DEWS);
- Develop of the main DEWS concept for Amudarya river downstream conditions;
- Collection of all datasets relevant for the development of a DEWS;
- Develop design and implement DEWS for Amudarya river downstream conditions (using available remote sensing data, software and lessons learned);
- Provide continuous linkage between DEWS and automated hydrometerological observation network (AHMN) (ensure data input from AHMN to DEWS);

- Implement a fully integrated DWES which links forecasting models to AHMN data as input and drought forecasts and warnings as output;
- Implement jointly with the hydrometeorological networking expert a drought early warning communication network using different communication links such as telephone trees, SMS and e-mail networks;
- Develop DEWS user guide.

Required Qualifications and Experience

- MSc in Hydrology or Water Resources Engineering with at least 10 year experience in hydrological modelling, water related hazards warning, forecasting systems and data management;
- The candidate should have good understanding of developments in international hydrological forecasting and water related hazards early warning;
- The specialist should have good knowledge of climate modeling and downscaling. He/she should have good knowledge and experience in flood forecasting modeling;
- He/she should be familiar with conventional and modern equipment and techniques for hydrological data collection, including up-to-date knowledge on remote sensing and data transmission technology

Agro-Techniques Expert (conservation agricultural practices)

Functions / Key Outputs Expected

- Review of available relevant national, regional and international materials related to climate resilient conservation agriculture practices;
- Design, planning and implementation water balance monitor and control facility on the piloting irrigated fields to have reliable data to sustain water consumption base line;
- Develop a scheme of water balance data acquisition, monitor and control to sustain water consumption base line;
- Provide comparative analysis of water consumption rate reduction for different type of water saving practices as input for comprehensive cost-benefit evaluation for each water saving practice used;
- Development the recommendations for farmers on water saving practices implementation and improvement of the agricultural productivity including horticulture and green house practices, drip irrigation, furrow and siphon watering and laser leveling;
- Preparation and conduct seminars on national, regional and international resilient conservation agriculture practices (application of land leveling, furrow, siphon and drip irrigation systems) for farmers of the targeted districts taking opportunity to have cost-sharing training (Mashav Programme based training program);
- Preparation the publications and printings materials on applied water saving practices to be disseminated among farmers and other representatives of climate vulnerable communities.

Required Qualifications and Experience

- Master's Degree and 10 year experience in agriculture;
- Experience in development and implementation the water saving technologies to support conservation area management;
- Knowledge and understanding of various water evaluation and planning models for community development.

Agro-Techniques Expert (landscape adaptation)

Functions / Key Outputs Expected

- Review of available relevant national, regional and international materials related to sand stabilization and soil moisture retention agriculture practices;
- Design, planning and implementation management plan to provide sand stabilization, soil desalinization and soil moisture retention with developed monitor and control facilities on the piloting sand encroaching prone areas to sustain sand invasion, soil desalinization and soil moisture retention base lines;
- Develop a scheme of required data acquisition, monitor and control to sustain sand invasion, soil desalinization and soil moisture retention base lines;
- Provide comparative analysis of different options to stabilize sand, reduce soil salinization and save moisture in the soil as input for comprehensive cost-benefit evaluation for each options used;
- Development the recommendations for farmers on best practices to sustain sand invasion, soil desalinization and soil moisture retention;
- Preparation and conduct seminars on national, regional and international agriculture practices aimed to stabilize sand, reduce soil salinization and save moisture in the soil for farmers at targeted districts taking opportunity to have cost-sharing training (Mashav Programme based training program);
- Preparation the publications and printings materials on applied sand stabilization and soil moisture retention agriculture practices to be disseminated among farmers and other representatives of climate change vulnerable communities at targeted districts.

Required Qualifications and Experience

- Master's Degree and 10 year experience in agriculture or forestry;
- Experience in forest ecology/social forestry to support conservation area management (alternative livelihoods, community training and community participation);
- 10 year experience with implementation of similar programs (especially forest restoration using local potential species to sand encroaching stabilization) and/or understanding of ecological criteria for forest restoration;
- Knowledge and understanding of various agro-forestry models for community development;
- Experience with reforestation to sand stabilization, soil desalinization and soil moisture retention is in asset.

Lead Economist

Duties and Responsibilities

- Review all available national agro -socio-economic data sets to be used for assessment of the water saving technologies, sand stabilization, soil desalinization and soil moisture retention agro-economic and socio-economic effects;
- Develop an economics model for the targeted districts for assessment of water saving applications, sand stabilization, soil desalinization and soil moisture retention measures as being based upon cost-benefit analysis;
- Undertake economics studies to support the identification of the most recommended water savings measures for each targeted district on the basis of cost-benefit analysis;
- Undertake a cost-benefit analysis of including reforestation measures into employee guarantee scheme;
- Contribute to all reports.

Required Qualifications and Experience:

- MSc degree in relevant field with at least 10 year experience in socio-economic impact analysis and appraisal of flood impacts, natural resources policies and flood management intervention;
- Experience in natural resources (water resources) management, watershed management, economic evaluation, and payment for environmental services.

Lead Institutional Specialist

Duties and Responsibilities

- Assessment of the institutional arrangements of all organizations (government departments/donor organizations/NGOs) currently involved in water and land use management process to determine of requirements for institutional improvement in terms of ensuring agriculture sector climate change reliance ;
- Undertake institutional capability assessment and mapping to identify existing capacity and identify gaps;
- Develop an institutional capacity building plan to identify requirements and needs to fill out those gaps;
- Design a longer-term Institutional Capacity Development Plan and an Institutional Improvement Plan to strengthen climate change adaptation capacity of farmers in Karakalpakstan;
- Work with the legal specialist to initiate consultations with relevant government, none government, community etc. groups and develop the robust water and land use policy framework and guidelines to address climate change resilience/adaptation keeping back processes incurred by insufficient institutional basis;
- Help to develop and implement a capacity building roadmap for national and regional authorities to integrate climate change resilience issues into national and regional development planning.

Required Qualifications and Experience

- MSc degree in a relevant institutional and public policy discipline or at least 10 year experience in appropriate sphere;
- He/she should have strong communication and analytical skills and be familiar with regulations and policies in Karakalpakstan related to natural resources management, and collaboration with NGO.

Lead Legal/Policy Specialist

Duties and Responsibilities

- Review all existing legislation relating to water management and land use management with specific accent into farming legal framework;
- Undertake initial consultation with all relevant government, none government, community etc. groups;
- Develop the robust water and land use policy framework and guidelines to address climate change resilience/adaptation keeping back processes incurred by insufficient institutional basis and policy framework;
- Develop and implement a capacity building roadmap for national and regional authorities to integrate climate change resilience issues into national and regional development planning.

Required Qualifications and Experience

- A degree in law and 10 year professional experience;
- National and/or international experience in the relevant area of expertise (e.g. participation in policy, legislative or regulatory development);
- In-depth knowledge of Uzbekistan's legislation and policies related to environmental, water and land use management;
- Experience in drafting and/or reviewing national legislation;
- Experience in policy formulation; and experience working in a regulatory agency or agencies.

8 ATLAS risk management log

Below is the ATLAS project Risk Log with updates on actions undertaken and planned by the project to mitigate and/or monitor the risks.

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Annex 1 Minutes of Inception Workshop (national level) held in Tashkent, Uzbekistan

Joint Project of the Government of Uzbekistan, United National Development Programme (UNDP) and Adaptation Fund (AF) *«Developing climate resilience of farming communities in the drought prone parts of Uzbekistan»*

Project Inception Workshop

MINUTES

Date: 22 October 2014, 15:00 - 18:30

Venue: Business Center "Poytakht"

Agenda

- 1. Briefing about the process of developing a project proposal for the Adaptation Fund: adopting the decision on MIA, selection of pilot districts, development of a project proposal jointly with UNDP, and getting the approval for the financing of the project proposal;
- 2. Presentation of the goals and objectives and expected results of the projects financed by the Adaptation Fund. Information about the applied approaches to monitoring and evaluation of project activities;
- 3. Presentation of the Project's goals and objectives, duration, budget and project management principles;
- 4. Introduction to the content of the logical matrix framework: baseline, targets and indicators, planned activities, project outputs and outcomes;
- 5. Discussion of the logical matrix framework to identify if any amendments need to be done.

The detailed agenda of Inception Workshop along with the list of participants are enclosed in Annexes.

Introductory and welcoming remarks:

Professor V.E. Chub, General Director of the Center of Hydrometeorological Services under the Cabinet of Ministers of the Republic of Uzbekistan (Uzhydromet), National Coordinator for the UN Framework Convention on Climate Change, National Designated Authority to the AF personally and on behalf of Uzhydromet welcomed the participants of the Workshop dedicated to the launching of the joint project of the Government of Uzbekistan, UNDP and the Adaptation Fund «Developing climate resilience of farming communities in the drought prone parts of Uzbekistan».

By stressing and drawing the participants' attention to the global nature of climate change and its impact on practically all areas of human activities, he underlined the need and urgency of climate change adaptation measures. He emphasized the fact that Government of Uzbekistan, adhering to the Framework Convention on Climate Change and being committed to certain obligations, had created favorable conditions for the improvement of the legislation in this area and implementing special measures to prevent and adapt to climate change, development and transfer of technologies, education and public awareness on climate change.

Special reference was given to an extremely significant goal to be addressed under the project, namely improving the preparedness of vulnerable communities for the negative consequences and impacts of climate change and the establishment of a monitoring and warning system for such dangerous climate-related phenomenon as drought.

In conclusion, V.E. Chub wished the project a successful implementation, fruitful discussion and successful work for the Workshop's participants. He also expressed confidence that joint efforts

targeted at the achievement of all the project objectives, which fully meet the national priorities, would be efficient and fruitful.

Mr. Stefan Priesner, the UNDP Resident Representative in Uzbekistan, on behalf of UNDP Uzbekistan welcomed the Inception Workshop participants and Mr. V.E. Chub, General Director of Uzhydromet, National Project Coordinator, National Focal Point to the UN Framework Convention on Climate Change and National Designated Authority to the Adaption Fund.

He also noted the successful forum that this workshop provided, including the representatives of the Oliy Majlis (Parliament), key ministries and agencies, non-governmental organizations and mass media.

Mr. Priesner mentioned that the launching of this Project would initiate actions aimed at climate change adaptation funded by quite a significant amount of grant (\$5.4 mln) provided by the Adaptation Fund. The goal of the Project is to increase the resilience to climate change impacts of vulnerable rural communities, especially of those located in the Republic of Karakalpakstan, being largely exposed to the consequences of the Aral Sea crises and the most vulnerable droughts and unceasing aridity of climate. This is where the consequences of acute water deficit caused by reduced water inflow from the upper stream rivers and desertification processes are largely observed.

Scientific communities have acknowledged the fact that climate change is occurring and the main reason for such change is human activity, i.e. main debates are about how intensive climate change would be, and not about that fact itself.

UNDP stands ready to provide the Government of Uzbekistan with its support in implementing climate change response and adaptation measures. The Project will demonstrate inexpensive but efficient examples of best practices aimed at water saving, restoration of the flora at landscape level and employment options suit well for the local communities.

The wide ranging measures proposed are not limited only to water saving measures, plantation of drought resistant crops to stabilize the moving sands at landscape level, but also cover the development of early drought warning system to improve the awareness and contribute to increasing preparedness of the local communities.

He underscored that the inception of the adaptation project coincides with the start of the International Conference related to the Aral Sea crises called by the Government of Uzbekistan and to be hold in Urgench, Khorezm province that is a part of the Aral Sea disaster region.

He pointed out the compliance of the UNDP-implemented initiatives with the Millennium Development Goals in general, and relevance of the Adaptation Project in particular. In conclusion, emphasizing the appropriate balance between economic growth and environment protection, Mr. Priesner noted the significance of this Project in the context the post-2015 sustainable development goals agenda, and expressed his confidence that the project goals and objectives will be achieved through collective efforts. He thanked the representatives of key government ministries and agencies, and all other partner organizations for their cooperation and assistance in the initiation and start-up of the adaptation project.

Mr. Abduvakkos Abdurahmanov, **Head of Environment and Energy Unit, UNDP Uzbekistan**, presented the Workshop Agenda and the participants; he specified that the Workshop should examine the project targets, indicators, outcomes and expected achievements, and propose required changes/amendments, if any(as project proposal had been drafted several years ago) to be in line with the current situation.

Presentation by Mr. Salamat Erejepov, Head of the Environmental Pollution Monitoring Service, Uzhydromet. The presenter briefed the participants about the process of decision-making on MIA, course of joint development of the project proposal for the Adaptation Fund with UNDP, selection of pilot districts, and endorsement of the project document and approval of funding by the Adaptation Fund.

Presentation by Mr. Aleksandr Merkushkin, Project Manager. The presentation included general information on project budget, duration, and approach to project cycle implementation. It also highlighted the process of formulation the expected targets and corresponding indicators and approach applied to selecting the pilot districts in Karakalpakstan. Presenter outlined the project components along with the identification of outputs expected under each project activity within a particular project component, as well as overall outcomes to be achieved. He also presented information about project management structure which had been strengthened by the establishment of the Inter-Agency Working Group (IAWG) to guide and coordinate the project activities.

The content of the logical framework results and indicators (logical matrix) was explained in the context of the monitoring-evaluation-reporting logical chain. The presentation described the key elements of logical framework, and it was stated and justified that none of substantial changes to the logical framework are required at the inception phase. However, due to certain delays occurred in 2014 that were related to establishing a coordination mechanism and get the project approved in compliance with the national procedures set up, the timelines of all project targets planned for 2014-2019 shall be adjusted accordingly. In conclusion, Project Manager offered to the participants some proposals aimed at further improving and clarifying obligations of the IAWG members and their work schedule, as well as presented a draft Resolution of decisions taken during the Inception Workshop.

The presentations were followed by discussion and decision-making by the Inception Workshop participants: Ms. Dilorom Fayzieva, member of the Legislative Chamber of Oliy Majlis (Parliament), member of the Parliament's Committee on International Affairs and Inter-Parliamentary Relations welcomed the participants and congratulated the National Project Coordinator and UNDP senior management with the launch of this Project. She noted that its implementation demonstrates in practice achieving efficient cooperation established between the Government of Uzbekistan and UNDP that contributes to strengthening interactions in development and improving the legislative framework. It is expected that certain proposals will be developed within the project implementation course, and they will be incorporated into the relevant legal acts aimed at enabling the farmers and households to undertake environment protection initiatives. Project demonstrations will then test those in practice. Ms. Fayzieva briefed the participants about joint activities focused on evaluation of the accomplishments under the UNFCCC through meetings with the heads of industrial companies, local administrations and non-governmental organizations in the 4 regions of Uzbekistan that carried out by the members of Oliy Majlis and Uzhydromet. Those activities resulted in some proposals to be introduced into several national legal and normative acts. Finally, she assured that legislative support would be provided whenever is needed.

Mr. Polat Reimov, member of the Legislative Chamber of Oliy Majlis (Parliament), Deputy Head of the Committee on Ecology and Environmental Protection, underlined that the Project has quite ambitious but achievable goals. Project will deal with not only adaptation related issues but a number of corresponding social challenges as well. The selection of the pilot districts based on vulnerability index is linked with climate, environment, and social criteria and is fully reasonable. He wished success to the Project and hoped for its close cooperation with the Committee on Ecology and Environment Protection of the Parliament.

Presentation by Mr. Yusuki Taishi, Regional Technical Advisor, UNDP Regional Asian-Pacific Center in Bangkok. The speaker briefly informed the participants about goals, activities and outcomes expected from projects funded by the Adaptation Fund. He mentioned that he has an extensive experience of coordinating 17 projects funding by the Adaptation Fund, and shared some lessons to be learned for avoiding problems/obstacles that might affect the project implementation and results:

1) Lack of clear understanding of project goals and objectives as per to the Project Document by the national partners and stakeholders. When the Government is approving the project, it becomes a guarantor of project successful and timely implementation. Therefore, understanding of project goals and expected outcomes to be delivered is a basis for sound commitments and full ownership from the national partners' side;

- 2) When project is too flexible in the planning and implementation schedule or is reluctant to any changes/adjustments. Planning is core for efficient project implementation, and it shall be developed in annual basis and up to the end of the project implementation cycle with ensuring a clear vision of annual targets and final outcomes. However, adaptive management tool should be used for timely adjusting to actual realities and changes, if any, to make project efficient and successful in achieving its results but also capturing new and emerging opportunities and scaling-up potential;
- 3) Wide dissemination of information about project achievements is not ensured (example of project implementation in Solomon Islands). PR activity needs to be effectively planned as awareness raising and communication of project achievements and impacts are important components contributing into the project success. This helps also with attracting additional resources.

The speaker emphasized that no amendments can be done regarding the 4 project outcomes stipulated in the endorsed and signed Project Document as per the rules and regulations applied by the Adaptation Fund but adjustments at the level of project outputs within a particular project outcome can be done in compliance with the corresponding procedures and as per those regulations and rules.

Next, (i) reporting requirements, including types of reports, deadlines for submission and responsible persons.(such reports are produced by all states implementing AP projects); (ii) indicators measuring effectiveness of project activities, e.g. four key indicators are used to assess whether the project achieved its outcomes and goal or not.

The presenter then invited the participants to active and constructive discussions.

Mr. Azamat Azizov, the National University of Uzbekistan, suggested that increased preparedness to climate change related impacts by national experts in particular and population in general could be used as project implementation effectiveness evaluation criteria.

Mr. Yusuki Taishi clarified that those indicators are simplified options of project success evaluation and are not perfect. The question is how much resources are needed to assess the preparedness level in undertaking the required adaptation measures? If workshop participants are agreeable that such indicator is required, it can be also used to get more comprehensive and sound assessment.

Ms. Zulfiya Yarullina, the State Nature Protection Committee, pointed out two issues: first one is related to using ambient air as indicator to be measured before and after Project completion to assess restoring the flora at landscape level, and second one regarding the procedure for submission of feedback/proposals to the draft Resolution of decisions of the inception Workshop as well as working arrangements and schedule of meetings of the established Inter-Agency Working Group.

Mr. Aleksandr Merkushkin answered that environmental issues related to adaptation in many cases are indirect, i.e. there is no a direct link between the undertaken adaptation measures and immediate impact on improving the environment situation. However, certain activities can be implemented in this regard, e.g. monitoring of some environmental indicators with ensuring that those indicators are sufficiently informative and measurable. For instance, unstable atmosphere above the Aral Sea results in salt particular drifting across the vast areas, however, this happens extremely unevenly. Using such indicator in one or two spots would not produce reliable and well-justified results, and carrying out a larger-scale monitoring of the atmospheric air, e.g. in the Muynak District's territory within the Project is not realistic. However, this is a good idea to try to assess the atmosphere air quality using the existing meteo stations belonging to Uzhydromet, and compare measurements done before and after implementation of project activities.

As far the procedure for collecting feedback and addressing comments to draft Resolution provided by the members of IAWG members, feedback and comments/proposals shall be confirmed and approved by the senior management of the national agencies that IAWG members are represented.

Mr. Polat Reimov proposed to use indicators that can demonstrate improving in environment situation resulted from the implemented project activities as well as learn the experience and lessons from the

completed or on-going projects implemented/implementing in Karakalpakstan and in other regions of Uzbekistan. For example, one of the projects implemented by the State Committee for Nature Protection has developed several relevant indicators, including those applicable to the Aral Sea region. Project experts could analyze them and adjust to the needs of the adaptation project.

Mr. Tolib Sultanov, Central Asia Regional Environment Center (CAREC), thanked the organizers for their invitation to the Inception Workshop. He praised the spirit of cooperation at the workshop and importance of the project objectives (increasing resilience of vulnerable communities to climate change impacts). He also encouraged joining efforts with other relevant projects (e.g. World Bank Project on Development of Mathematical Models for Water Resources Management in the Aral Sea region which is using economic and social information as input to the development). The speaker drew the attention to the need of greater energy efficiency and wider utilization of renewable energy sources, e.g. project funded by GEF and is being implemented by WB that is focused on water pumping using solar energy. He also mentioned the loans and grants will be offered to farmers willing to test these best practices, purchase and install drip irrigation systems and use laser leveling equipment to ensure efficient use of water resources. Mr. Sultanov brought the example of the Project on Restructuring Agricultural Companies and Agriculture Efficiency Analysis implemented in 8 regions of Uzbekistan. He emphasized that those best practices could be scaled up within the Adaptation Project's pilot activities.

Ms. Rano Baykhanova, Climate Change Specialist, UNDP Environment and Energy Unit thanked the participants for their proposals and stressed that this was the idea to bring together as many national and international partner organizations as possible along with UNDP project colleagues and national partners. Therefore all ideas and proposals provided by the stakeholders and partners are taken and much appreciated. She also clarified that the project team is open to any solutions that can contribute to increasing resilience of vulnerable communities to climate change impacts through implementation of adaptation measures as this will result in reducing or even avoiding social and economic damages can be caused by intensifying aridization and frequent droughts occurred in Karakalpakstan. This region was heavily suffered from the droughts in 2000-2001 and those which occurred in the recent years. Therefore, a search for solutions aimed at minimizing the potential losses of local rural communities might be caused by water shortages and droughts is the highest priority of the project. Best practices demonstrated by and lessons learned from relevant projects such as the Climate Risk Management Project (with pilot Kashkadarya region) and UN Aral Sea Joint Programme implemented in Karakalpakstan.

Ms. Baykhanova particularly mentioned the social aspects of project activities that contribute to sustainable development of the society. She made several references to integrating the best practices tested within other international projects and passed the floor to Ms. Devi Utami, representative of ADB.

Ms. Devi Utami, ADB, informed about experience in formulation of achieved results using specifically designed indicators which are compatible and amendable that was gained within the ADB projects. She further raised a question regarding the project strategy on how to replicate its results in other districts that have not been selected as the pilot ones.

Mr. Aleksandr Merkushkin appreciated all comments and suggestions. He emphasized that during the inception phase there is no need for any changes to be incorporated into the logical matrix framework. This would be relevant as soon project implementation cycle starts, proposed best practices will be tested and shared experience is considered and adjusted to the local environment. Next, sustainable and reliable structure of indicators can be designed with considering the lessons learned from other competed or on-going projects as well as experience and recommendations shared and provided by relevant national agencies. This will be a time to develop an «indicator-goals» and «indicator-product» paradigms which would enable a sound assessment of achieving the goals through results produced.

As the wider replication of results to be achieved, he again emphasized that project implementation strategy is based on the gradual development approach. The primary objective is training and capacity of farmers to make them able to implement in practice the proposed adaptation measures, and being

then key drivers for wider dissemination of the best adaptation practices among larger farming and household communities.

He expressed his readiness to establishing new partnerships as well his openness to all emerging opportunities for greater synergizing with other relevant initiatives.

Mr. Abduvakkos Abdurahmanov took the floor to make brief clarifications to the previous comments by saying that it was not yet time to make any significant changes. Nevertheless, he stressed, the Project Document will be open to any recommendations. Most importantly, a similar Inception Workshop planned in Nukus on 27 October provides an opportunity for learning about views of experts, farmers, Government and the Parliament of Karakalpakstan on the proposed project activities that are particularly focusing on Karakalpakstan. He expressed his confidence that by the next meeting, a valuable backpack of knowledge would be generated and will be available for all the members of the Project Board and IAWG.

Mr. Azamat Azizov noted importance of the fact that one project component particularly covers the knowledge management. For instance within the project "Climate Risk Management in Uzbekistan" and a lot has been done in terms of dissemination of policy and legal products among the local population and communities. This experience could relevant to the new adaptation project t. In general, presently universities' curricula do not sufficiently cover climate change adaptation issues. Project can eliminate those gaps and this would result in significant benefits as contributes to increasing preparedness for future decision-making by young professionals.

Mr. Khasan Mamarasulov, Ministry of Agriculture and Water Resources, mentioned that the project also considers issues of food security which is one of the globally significant challenge. In Karakalpakstan, which is one of the most environmentally and socially vulnerable regions of Uzbekistan, where agriculture is constantly under the pressure of water shortages and land degradation, the situation is aggravated due to climate change impacts. Therefore, urgent adaptation measures are critical and shall be implemented urgently. He underlined that project activities are in line with the highest national priorities related to sustainable development of agriculture as well as recent governmental decisions on implementation of water saving measures. Mr. Mamarasulov also expressed his confidence that project would be able its main outcomes to increase farming and households resilience to climate change impacts in Karakalpakstan. Moreover, livestock farming dealing with the astrakhan sheep breeding in arid and desert areas requires a particular focus from the project side as increasing the wool production is a way to increase their incomes and welfare. Further, he shared his vision of indicators that can measure the project success, and emphasized that though they have been already identified, there is still a room for tuning and improving.

Mr. Polat Reimov pointed out that selection of appropriate and measurable indicators that measure progress in achieving the project results shall go hand to hand with identification of corresponding activities (e.g. use of satellite imagery). He also emphasized importance of learning and consideration experience gained by other projects, including those explicitly concentrating on climate change challenge, but used good indicator for measuring project progress. He suggested also considering diversifying the approaches used for identification of those indicators.

He stressed that Government is constantly undertakes urgent measures to address the risk of droughts in Karakalpakstan, including through reducing cotton and rice cultivations in the 4 districts of Karakalpakstan that are the most vulnerable to adverse impacts of water stress and extreme weather events. Increasing sustainability of large farms and households dealing with livestock production (in arid and desert areas this offers more income generation opportunities than crops cultivation) is at the highest national agenda, and draft Law «On Pasture Farms» in under development to establish a legal framework. During over last 20 years, Uzbekistan has faced serious challenges with pasturelands, and therefore to contribute to this Government initiative, project can consider relevant actions and activities.

Ms. Sayora Tleulova, Women's Committee of Uzbekistan, commented that gender mainstreaming is not visible in the logical matrix framework.

Mr. Aleksandr Merkushkin explained that the presentation covered the key thematic activities and targets. He assured Ms. Tleulova that gender mainstreaming activities are essential part of all project activities/components as this is one of the priority focal areas for all: UNDP, Adaptation Fund and national authorities.

Mr. Abduvakkos Abdurahmanov took the floor to clarify that each project implemented by UNDP has to undergo a gender screening (Projects are ranked from scores 0 to 3). This topic is always integrated in all projects.

Ms. Rano Baykhanova elaborated on the previous speaker's comments by saying that serious consideration of relevant gender aspects is a practice applied by UNDP to development of any project proposal development but implementation of gender related actions is monitored during the whole project cycle. Project achievements are also reported though providing corresponding gender disaggregated data and information and evidence. However, based on the cooperation and partnership with the Women's Committee gender mainstreaming activities can be enhanced.

Mr. Yusuki Taishi followed the idea and mentioned there are gender related screening of project activities and results aimed at documenting progress in achieving and preserving in the extent possible the gender balance in projects implemented by UNDP. If there is any feeling that aspects are not well taken, all proposals for improvements are very welcomed. However, there is no need for reformulating the indicators that are mandatory for reporting purposes (the key 5 or 6 ones) as additional indicators that might expand measuring progress (diapason and spectrum) can be proposed in the extent reasonable.

Mr. Adbukhakim Salakhidinov, Tashkent Institute of Irrigation and Land Reclamation, noted that the Project comes in the right time in the light of intensifying climate change process and its anticipated short and longer term negative consequences. Developing climate-resilient farming and households is a very important endeavor. Project's goals are ambitious but it is the most important that local communities will be trained on how to withstand increasing climate aridization and lack of water resources with minimizing harvest and income generation losses through timely undertaking adaptation measures and activities. It is paramount to search for and to find best practices on both water resources demand and consumption management.

Mr. Azamat Azizov mentioned the rare and ad-hoc application of halophytic agriculture and emphasized a need for paying the greater attention proven experience on decreasing soil salinity can be demonstrated in project pilot districts.

Mr. Abduvakkos Abdurahmanov noted that this suggestion could be examined with the help of agricultural experts during project implementation.

Mr. Aleksandr Merkushkin reminded the participants that though adaptation measures are subject to the long-term results, results of their demonstrations achieved during the project implementation cycle (6-7 years) shall be tangible, whereas halophytes cultivation results can be achieved in in 8-10 years only. Therefore, careful and well-justified selection of targets and additional indicators as well corresponding activities is critical for the project success.

In conclusion, the Chairman of the Inception Workshop meeting **Mr. Abduvakkos Abdurahmanov**, once again, thanked participants and wished them and project team success. He informed that a draft Resolution of decision of Inception Workshop meeting will be prepared and submitted to IAWG members' consideration, and requested all participants to convey the core points discussed within the meeting to their senior management.

Approved by: Stefan Priesner UNDP Resident Representative in Uzbekistan

Approved by:

(signature) (date)

Viktor Chub

General Director of Uzhydromet, National Project Coordinator, Coordinator of project IAWG

| | (signature) | (date) |
|-------------------------------------|-------------|--------|
| Cleared by : | | |
| Abduvakkos Abdurahmanov | | |
| Head of Environment and Energy Unit | | |
| UNDP Uzbekistan | (signature) | (date) |
| Prepared by: | | |
| Aleksandr Merkushkin | | |
| Project Manager | (signature) | (date) |

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"Developing climate resilience of farming communities in the drought prone parts of Uzbekistan" Joint Project of the Government of Uzbekistan, UNDP and the Adaptation Fund Inception Workshop Tentative Agenda

Date and time: 22 October 2014, 14:00-18:30

Venue: Conference Hall "Gold Kyzyl-Kum", Business Center "Poytakht", Sharaf Rashidov Str., 16, Tashkent

- 14:00-14-15 Registration of the participants
- 14:15-14:25 Welcoming remarks:

Mr. Viktor Chub

General Director of Uzhydromet, National Focal Point to UNFCCC, and Government Designated Authority to Adaptation Fund **Mr. Stefan Priesner** Resident Representative UNDP Uzbekistan

- **14:25-14:30** Presentation of the Inception Workshop agenda and introduction of the participants
- 14:30-14:45 Brief information about the project proposal development funded by the Adaptation Fund, including the decision on MIA modality, selection of the pilot sites, development and submissions of project proposal to AF jointly with UNDP and the AF endorsement of the funding for the Project
 14:45-15:15 M&E framework and reporting
- requirements of the Adaptation Fund

Mr. Abduvakkos Abdurahmanov

Head of the Environment and Energy Unit, UNDP Uzbekistan

Mr. Salamat Erejepov

Chief Expert of the Transboundary Monitoring of Environmental Pollution Department, Uzhydromet

Mr. Yusuke Taishi

Regional Technical Specialist – Adaptation, Green Low Emission Climate Resilient Development Strategies, UNDP - Global Environment Facility, UNDP in Bangkok, Thailand

15:15-15:35 Presentation of the overall project goal, objectives, duration, budget, and management approach. Presentation of the first year tentative project work plan.

Mr. Aleksandr Merkushkin

Project Manager

| 15:35-16:00 | Coffee break | | | |
|-------------|---|---|--|--|
| 16:00-16:40 | Presentation of the logframe, including baselines, indicators, targets, activities and actions, and project outputs and outcomes | Mr. Aleksandr Merkushkin Project Manager | | |
| | Discussion of the logframe | | | |
| 16:40-17:00 | Conclusions on adjustments/changes related to thematic indicators/timelines indicated in the logframe, and additions/amendments to project document | Mr. Aleksandr Merkushkin Project Manager | | |
| 17:00-17:20 | Discussion and decision making | | | |
| 17:20-17:30 | Inception Workshop wrap-up and closing | Mr. Abduvakkos Abdurahmanov Head of the Environment and Energy Unit, UNDP Uzbekistan | | |

17:30-18:30 Dinner

| | N | ational ministries and agencies |
|-----|---------------------------------|--|
| 1. | Mr. Viktor Chub | General Director of Uzhydromet, National Focal Point to UNFCCC, and Government Designated Authority to Adaptation Fund |
| 2. | Mr. Mukhammadyusuf Teshabaev | Chair of Committee on Agriculture and Water Resources Issues of the Legislative Chamber of Oliy Majlis (Parliament) of Uzbekistan, and member of the Liberal and Democratic Party of Uzbekistan |
| 3. | Mr. Khaitbay Khaitbaev | Leading Specialist of the Information and Analytical Department, Cabinet of Ministers of the Republic of Uzbekistan |
| 4. | Ms. Dilorom Fayzieva | Member of the Legislative Chamber of Oliy Majlis (Parliament) of Uzbekistan, member of Committee on international Affairs and Inter-Parliament Relations, member of Ecological Movement of Uzbekistan |
| 5. | Mr. Polat Reimov | Member of the Legislative Chamber of Oliy Majlis (Parliament) of Uzbekistan, Deputy Chair of Committee on Environment Protection, and member of the Liberal and Democratic Party of Uzbekistan |
| 6. | Mr. Nazrulislam Bakiev | Attaché of the Ministry of Foreign Affairs |
| 7. | Mr. Bobomurod | Head of Monitoring and Forecast Service of the Ministry of |
| | Kurbonov | the Emergency |
| 8. | Ms. Shokhrikhan | Representative of Ministry of Agriculture and Water |
| | Umarova | Resources |
| 9. | Mr. Jampulot | Chief of Administration on Science of the Ministry of higher |
| | Khudaybergenov | and secondary specialized education of the Republic of |
| 10 | | Uzbekistan |
| 10. | Ms. Ramilya Kamilova | Ministry of Health |
| 11. | Ms. Liliya Isakova | Scientist of the Research Scientific Institute under Ministry of Health |
| 12. | Mr. Adbukhakim | Head of Chair on Environment and Water Resource |
| | Salakhidinov | Management of the Tashkent Irrigation and Melioration Institute |
| 13. | Mr. Eugeniy Botman | Projects Manager of the Republic Scientific Production Centre on Landscape Horticulture and Forestry, Ministry of Agriculture and Water Resources |
| 14. | Mr. Azamat Azizov | Representative of Tashkent National University |
| 15. | Mr. Fazleddin Khikmatov | Representative of Tashkent National University |
| 16. | Ms. Darya Koneva | Officer of the NBT Consulting Company |
| |] | Members of the Project Board |
| 17. | Mr. Ozod Matekubov | Deputy Head of Department of Cotton and Technical Crop Growing, Ministry of Agriculture and Water Resources |
| 18. | Ms. Antonina Kucherova | Chief Economist, Department of Financing of Agriculture and Industrial Complex Ministry of Finance |
| 19 | Ms. Zulfiva Varulina | Chief Expert Main Department of Land Monitoring State |
| 1). | | Committee for Nature Protection |

| 20. | Mr. Salamat Erejepov | Chief Expert of Unit of Transboundary Monitoring of | | | | |
|-----|--------------------------------|---|--|--|--|--|
| | | Environment Polluting, Uzhydromet | | | | |
| 21. | Mr. Sardor Kozubaev | Specialist of the 1 st category, Unit of Agriculture and Water | | | | |
| | | Resources Development, Ministry of Economy | | | | |
| 22. | Ms. Malika Mirjamalova | Secretariat of Project Board and Inter-Agency Committee | | | | |
| 23. | Ms. Nadejda Gavrilenko | Secretariat of Project Board and Inter-Agency Committee | | | | |
| | NGO | | | | | |
| | NGOs | s and non-commercial organizations | | | | |
| 24. | Mr. Oleg Rijichenko | Representative of Trade and Industries Chamber of Uzbekistan | | | | |
| 25. | Ms. Sevara Fayzieva | Representative of Environment Movement of Uzbekistan | | | | |
| 26. | Ms. Sayora Tleuvova | Representative of Women Committee of Uzbekistan | | | | |
| 27. | Ms. Malika Ruzieva | Representative of National association of non-government and | | | | |
| | | non-commercial organization in Uzbekistan | | | | |
| | | International Organizations | | | | |
| 28. | Mr. D. Kuchkarov | Representative of EU Delegation to Uzbekistan | | | | |
| 29. | Ms. Guzal Khodjaeva | Representative of USA Embassy/USAID | | | | |
| 30. | Mr. Tolib Sultanov | Representative of RECCA | | | | |
| 31. | Mr. Devi Utami | Representative of ADB | | | | |
| 32. | Mr. Iskander Buranov | Representative of WB | | | | |
| | UNDP | | | | | |
| 33. | Mr. Stefan Priesner | Resident Representative | | | | |
| 34. | Mr. Saidkasim Sakhipov | Partnership Building Officer | | | | |
| 35. | Mr. Abduvakkos Abdurahmanov | Head of the Environment and Energy Unit (EEU) | | | | |
| 36. | Mr. Yusuke Taishi | Regional Technical Specialist – Adaptation, Green Low | | | | |
| | | Emission Climate Resilient Development Strategies, UNDP - | | | | |
| | | Global Environment Facility, UNDP in Bangkok, Thailand | | | | |
| 37. | Ms. Rano Baykhanova | Climate Change Specialist, EEU | | | | |
| 38. | Mr. Darkhon Abutalipov | Programme Associate, EEU | | | | |
| 39. | Ms. Natalya Agaltseva | Project Manager, UNDP project "Climate Risk Management in Uzbekistan" | | | | |
| 40. | Mr. Ulugbek Islamov | Project Manager, UNDP project "Integrated Water Resources | | | | |
| | | Management and Water Efficiency Plan of the Zarafshan | | | | |
| | | River Basin" | | | | |
| 41. | Mr. Khalilulla | Project Manager, UNDP/GEF project "Mainstreaming | | | | |
| | Sherimbetov | Biodiversity into Uzbekistan's Oil and Gas Policies and | | | | |
| | | Operations" | | | | |
| 42. | Ms. Liliya Zavyalova | Project Manager, UNDP project "Supporting Uzbekistan in | | | | |
| | | Transition to Low-Emission Development Path" | | | | |
| 43. | Ms. Irina Bekmirzaeva | Project Manager, UNDP/GEF project "National Schedule in | | | | |
| | | Biodiversity in Support of the Implementation of the | | | | |
| | | Convention on Biological Diversity Strategic Plan in | | | | |
| | | Uzbekistan in 2011-2020" | | | | |
| 44. | Mr. Tulkin Farmanov | Project Manager, UNDP/GEF project "Reducing Pressures on | | | | |
| | | Natural Resources from Competing Land Use in Non-Irrigated | | | | |
| | | Arid Mountain, Semi-Desert and Desert Landscapes of | | | | |
| | | Uzbekistan" | | | | |

| 45. | Mr. Abror Khodjaev | Project Manager, UNDP/GEF project "Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region – Uzbekistan" | | | | | |
|-----|-----------------------------|--|--|--|--|--|--|
| | Project Team | | | | | | |
| 46. | Mr. Aleksandr Merkushkin | Project Manager | | | | | |
| 47. | Mr. Ulugbek Khudayarov | Country Office Interpreter | | | | | |
| 48. | Mr. Alisher Khashimov | Interpreter | | | | | |
| | | Mass Media Representatives | | | | | |
| 49. | Ms. Sayera Shoeva | UzA | | | | | |
| 50. | Ms. Elvira Ablyakimova | Environment Bulletin | | | | | |
| 51. | Ms. Natalya Shulepina | Sreda.uz | | | | | |
| 52. | Ms. Yevguenia Vanina | IA "Uzreport" | | | | | |
| 53. | Mr. Alisher Teshaev | Newspaper "Narodnoe Slovo" | | | | | |
| 54. | Mr. Dilshod Aliev | Newspaper "Pravda Vostoka" | | | | | |

RESOLUTION

of the Inception Workshop meeting

conducted within the Joint Project of the Government of Uzbekistan, United National Development Programme (UNDP) and Adaptation Fund (AF)

«Developing climate resilience of farming communities in the drought prone parts of Uzbekistan» Joint Project of the Government of Uzbekistan, UNDP and AF

Tashkent, 22 October, 2014

- 1. Noted that Project Manager is entrusted with ensuring agreement and approval of the Resolution on decisions of the Inception Workshop by all members of the Inter-Agency Working Group by 15 November, 2014 as well its inclusion into the project Inception Report to be drafted by 22 November, 2014;
- 2. Noted that Project Manager is responsible for development of the Inception Report with support of the UNDP Country Office by 22 November, 2014; and Report shall include the Work Plan and Budget for 2015 developed with consideration of the current situation and changing of calendar timelines set up for annual targets due to the delay in project implementation start-up due to the passing the national procedures on approval of the grant-based projects funded by the international donor organizations set up by the Government;
- 3. The Project Manager shall be responsible for the preparation and coordination of the work plan and budget for 2015 with the National Project Coordinator (NPC) and the UNDP Resident Representative, as well as for the approval of these documents at the first Project Board meeting (first half of December 2014);
- 4. Proposals related to the work schedule of the Interagency Working Group shall be well noted; the National Implementing Agency (Uzhydromet) shall be responsible for the coordination of the work schedule with the Ministry of Finance of Uzbekistan;
- 5. Project Board members shall provide their comments and proposals on the draft Resolution to be adopted by the Inception Workshop, as well as on the draft Project Inception Phase Report within 10 days after receipt of such;
- 6. Project Board meetings shall be organized at least once a year. The first Project Board meeting shall be held in the first half of December 2014. The exact dates of the meeting shall be communicated later in due course.

| Approved by. | | |
|--|-------------|--------|
| Stefan Priesner | | |
| UNDP Resident Representative in Uzbekistan | | |
| | (signature) | (date) |
| Approved by: | | |
| Viktor Chub | | |
| General Director of Uzhydromet, | | |
| National Project Coordinator, | | |
| Coordinator of project IAWG | | |
| | (signature) | (date) |
| | | |

Cleared by :

Annwayed by

Abduvakkos Abdurahmanov Head of Environment and Energy Unit UNDP Uzbekistan

| (signature) | |
|-------------|--|
|-------------|--|

(date)

Prepared by: Aleksandr Merkushkin Project Manager

(signature) (date)

Annex 2 Minutes of Inception Workshop (sub-national level) held in Nukus, Karakalpakstan

Joint Project of the Government of Uzbekistan, United National Development Programme (UNDP) and Adaptation Fund (AF) *«Developing climate resilience of farming communities in the drought prone parts of Uzbekistan»*

Project Inception Workshop

MINUTES

Date: 27 October, 2014, 11:00 - 14:30

Venue: 50, Garezsizlik Street, Nukus City, building of the Council of Ministers of the Republic of Karakalpakstan, 3rd floor, Small Conference Room

Agenda

- 6. Briefing about the process of developing a project proposal for the Adaptation Fund: adopting the decision on MIA, selection of pilot districts, development of a project proposal jointly with UNDP, and getting approval for financing of the project proposal;
- 7. Presentation of goals and objectives and expected results of the projects financed by the Adaptation Fund. Information about approaches applied to monitoring and evaluation of project activities;
- 8. Presentation of the Project's goals and objectives, duration, budget and project management principles;
- 9. Introduction to the content of project logical framework: targets and indicators, planned activities, project outputs, outcomes and expected impacts;
- 10. Discussion of project logical framework to identify if any amendments need to be done.

The detailed Inception Workshop agenda and list of participants are enclosed in Annexes, respectively.

Welcoming remarks:

Mr. Jenis Embergenov, Deputy Chairman of the Council of Ministers of the Republic of Karakalpakstan, personally and on behalf of the senior leadership of the Republic of Karakalpakstan welcomed the participants of the Workshop dedicated to launching of the joint project of the Government of Uzbekistan, UNDP and the Adaptation Fund «Developing climate resilience of farming communities in the drought prone parts of Uzbekistan».

He underlined that:

- Currently, climate change related problems create a comprehensive and multidisciplinary challenge affecting all key aspects of sustainable environmental, economic and social development;
- Highly increasing global warming observed during recent years has caused serious concerns in the Republic of Karakalpakstan. It creates serious challenges for the region which has arid climate, sensitive delta ecosystems suffering from more frequent droughts, land degradation and desertification.

The Deputy Chairman noted the increasing role and need for a greater adaptation by various groups of populations as well as by sectors of national economy to the occurring and anticipating climate change impacts and climate risks. Expected climate changes ahead may

intensify water scarcity and aggravate the already acute problem of water supply to dehkan and households plots and over 3,000 large farms. Therefore, in spite of the huge potential of natural resources available around the Aral Sea lands, water resource related problem has been and still remains one of the most pressing. Mr. Embergenov thanked the developers of the first adaptation project «Developing climate resilience of farming communities in the drought prone parts of Uzbekistan», Adaptation Fund, UNDP and Uzhydromet for selecting Karakalpakstan as a pilot area to implement this very important and timely project. He assured that the Government of Karakalpakstan stands ready for providing maximal support and assistance to ensure successful implementation of all planned project activities.

In conclusion, Mr. Embergenov wished success and constructive discussion to the Workshop participants, and expressed his confidence that the joint efforts will result in achieving project goal, outcomes and outputs to generate impacts that would meet the adaptation needs of the Republic of Karakalpakstan.

Mr. Bakhriddin Nishonov, First Deputy General Director of Uzhydromet, personally and on behalf of Uzhydromet welcomed the participants of the Workshop dedicated to launching the joint project of the Government of Uzbekistan, UNDP and Adaptation Fund «Developing climate resilience of farming communities in the drought prone parts of Uzbekistan».

He emphasized the readiness of the Government of Karakalpakstan in providing full support during project implementation, and noted practical assistance rendered by the Government of Karakalpakstan during the preparation and organization of the sub-national Inception Workshop.

He further pointed out the fact that Uzbekistan is a Party to the UN Framework Convention on Climate Change and it is being committed to corresponding obligations. In this regard, Government of Uzbekistan had created favorable conditions for improving relevant legal frameworks as well as implementing targeted measures aimed at prevention and adaptation to climate change impacts, development and transfer of green and low-emission technologies, educational and public awareness raising activities focusing on climate change.

By stressing and drawing the participants' attention to the global nature of climate change challenge and its global impact on practically all areas of human activities, he underlined the need and urgency of climate change adaptation measures to be implemented in Karakalpakstan as this is one of the most climate change affected regions in the country.

A particular reference was given to an extremely significant problem to be addressed within the project, namely improving preparedness of vulnerable communities for potential negative consequences of climate change. This also requires establishment of a nationwide monitoring and early warning systems focusing on droughts as dangerous climate-dependent phenomenon causing losses and damages to national economy and development. He also stressed the importance of those project components that include increasing knowledge and awareness of the vulnerable communities on how to deploy water saving technologies in agriculture as well as adaptation measures aimed at improving climate change resilience of large farming and dehkans and households.

In conclusion, Mr. Nishonov wished the project a successful implementation, fruitful discussion and successful work to all participants during the Workshop. He also expressed confidence that joint efforts will result in achieving project goal, outcomes and outputs as well as impacts satisfying the needs of Uzbekistan.

Mr. Polat Reimov, member of the Legislative Chamber of Oliy Majlis (Parliament), Deputy Head of the Committee on Ecology and Environmental Protection thanked the organizers for the invitation to this Workshop and provided opportunity to share his vision on the ways of efficient implementation of this ambitious and undoubtedly very important project. He emphasized that Uzbekistan is successfully fulfilling its obligations undertaken under the UN Framework Convention on Climate Change and that this project is considering as another step towards ensuring the sustainability of the farming in Karakalpakstan within the aggravating climate change impacts such as droughts and increasing climate aridization, in particular, and achieving sustainable development of the country as a whole.

He pointed out that the project objectives had been identified based on the ground works and studies conducted in consultations with vulnerable communities, farmers, including the Council of Farmers in Karakalpakstan, dehkans and households.

In conclusion, he stressed the highest priority given by the Government of Karakalpakstan to the implementation of this project as well as its willingness to providing full support and assistance. He expressed his hope that project goal and outcomes will be successfully achieved.

Mr. Abduvakkos Abdurahmanov, Head of Environment and Energy Unit, UNDP Uzbekistan, welcomed the Inception Workshop's participants on behalf of UNDP Uzbekistan and thanked the Government of Karakalpakstan for its support to start-up of project implementation and organizing the Inception Workshop in the Council of Ministers of Karakalpakstan.

He noted that Government of Karakalpakstan and key ministries and agencies as well as farmers and dehkans are very interested and committed to implement the adaptation project in this region.

Mr. Abdurahmanov further noted that the Inception Workshop in Tashkent City went very well and it gathered a wide forum of representatives from the Oliy Majlis (Parliament), key national ministries and agencies, international organizations, non-governmental organizations and mass media, and once again, emphasized the objectives of the present sub-national Inception Workshop.

He pointed out that this project is unique as it is fully aimed at implementing climate change adaptation measures. Launching of the project will trigger climate change adaptation actions funded Adaptation Fund (significant grant amounted to \$5.4 mln) in Karakalpakstan but generate further the nationwide impacts and increase Uzbekistan's resilience to the global climate change challenge.

He underlined that UNDP stands ready to provide its support to the Government of Karakalpakstan in implementing climate change adaptation and increasing resilience activities.

Mr. Abdurahmanov noted that the inception phase of adaptation project coincides with the start of the International Conference on the Aral Sea crises to be held in Urgench, which again proves importance and relevance of this project for the country.

In conclusion, he emphasized the significance of this project in terms of the country's objectives to make the national farming more resilient in the face of climate change. He expressed his confidence that the identified project goal and outcomes would be achieved through the joint efforts only and thanked the Government of Karakalpakstan, representatives of the key sub-national ministries and agencies and other partner organizations for their willingness to provide their assistance in the implementation of the adaptation project.

Ms. Rano Baykhanova, Climate Change Specialist, Environment and Energy Unit, UNDP Uzbekistan presented the workshop agenda and pointed out that the Workshop should consider if project targets and indicators are still fully relevant (as project proposal had been drafted several years ago), and is there any need to adjust them to the present realities.
Presentation by Mr. Salamat Erejepov, Head of the Environmental Pollution Monitoring Service, Uzhydromet. The presenter briefed the participants about the process of decisionmaking on MIA, course of joint development of the project proposal for the Adaptation Fund with UNDP, selection of pilot districts, and endorsement of the project document and approval of funding by the Adaptation Fund.

Presentation by Mr. Yusuki Taishi, Regional Technical Advisor, UNDP Regional Asian-Pacific Center in Bangkok. The speaker briefly informed the participants about goals, activities and outcomes expected from projects funded by the Adaptation Fund. He mentioned that he has an extensive experience of coordinating 17 projects funding by the Adaptation Fund, and shared some lessons to be learned for avoiding problems/obstacles that might affect the project implementation and results. Lack of clear understanding of project goals and objectives as per to the Project Document by the national partners and stakeholders can affect the whole project implementation cycle. When the Government is approving the project, it becomes a guarantor of project successful and timely implementation. Therefore, understanding of project goals and expected outcomes to be delivered is a basis for sound commitments and full ownership from the national partners' side. When project is too flexible in the planning and implementation schedule or is reluctant to any changes/adjustments. Planning is core for efficient project implementation, and it shall be developed in annual basis and up to the end of the project implementation cycle with ensuring a clear vision of annual targets and final outcomes. However, adaptive management tool should be used for timely adjusting to actual realities and changes, if any, to make project efficient and successful in achieving its results but also capturing new and emerging opportunities and scaling-up potential. Wide dissemination of information about project achievements is not ensured (example of project implementation in Solomon Islands). PR activity needs to be effectively planned as awareness raising and communication of project achievements and impacts are important components contributing into the project success. This helps also with attracting additional resources.

The presenter emphasized that no amendments can be made regarding the identified 4 project components (outcomes), however changing/adjusting of outputs is allowed.

He also talked about the existing approaches to monitoring and evaluation and available relevant tools. Mr. Taishi dwelled on the development of additional indicators that will help to obtain a complete and objective picture of how the project activities are implemented and what impact they might generate.

Presentation by Mr. Aleksandr Merkushkin, Project Manager. The presentation provided general information regarding the project (budget, duration, type of implementation modality). It also highlighted the process of identifying the expected results and indicators and the approach used in selecting the pilot districts. The presenter covered the project components in detail along with the identification of expected outputs per each activity under particular component, and the outcomes to be achieved under the each component. He also presented information about project management structure which had been strengthened by the establishment of the Inter-Agency Working Group to thematically guide, coordinate and overseeing the project activities.

The content of the logical matrix framework results and indicators was explained in the context of the logical monitoring-result-reporting chain. The presenter further outlined the key elements of the logical matrix framework with the preliminary statement that there is no need to make substantial changes to any targets and indicators during the inception phase. However, due to certain delays caused by passing the mandatory national procedure on approval of any grant-based project and some operational issues, some targets planned (in particular for the first and second years of project implementation and few other) shall be reconsidered and adjusted to new more realistic timelines. In conclusion, he requested participants to consider some suggestions on how to strengthening obligations/responsibilities of the IAWG members and its overall working schedule, and presented the draft Resolution of the sub-national Inception Workshop for consideration, discussion and adoption.

Ms. Rano Baykhanova thanked the presenters and invited the participants for discussion.

Mr. Erejep Kubanbayev, Director of the Karakalpak Branch of the Research Institute of Irrigation and Water Problems, made a comment regarding the project title saying that it should have a stronger emphasis on the goal of achieving social rather than climate sustainability.

Mr. Aleksandr Merkushkin replied by saying that achieving climate sustainability will be ensured through the measures aimed at achieving social and economic stability of the communities vulnerable to climate change impacts that affecting them, increased climate change resilience and sustainable development is the key objective of all project activities results.

Mr. Yusuf Kamalov, Head of NGO «Council of the Aral Sea Protection», expressed some concerns about the project management approach: being implemented in Karakalpakstan as the pilot region but managing from Tashkent.

Mr. Aleksandr Merkushkin explained that project management structure includes the established sub-national Inter-Agency Working Group that comprises representatives from the key sub-national relevant ministries and agencies. Project will hire a National Field Coordinator, who will permanently work in Karakalpakstan to ensure liaisons between the Government of Karakalpakstan and the end-users to achieve the project outcomes and benefit from the e impacts to be generated.

Mr. Yusuf Kamalov posed a question, whether the project proposal had passed all the formal national procedures set up for coordination and approval of grant-based projects.

Mr. Aleksandr Merkushkin informed that the Prime-Minister of Uzbekistan had issued a government resolution (#190 dated of 11.06.2014) on appointment of the National Project Coordinator and establishing the Inter-Agency Working Group at the national (central) level; moreover, through this resolution project has been included into the list of projects to be nationally implemented during 2014-2016.

Mr. Turganbay Turdimurotov, Head of the Irrigation Systems Department and GTS of the Lower Amudarya River Basin Management Administration, asked if there are any other water saving technologies that the Project plans to demonstrate and promote additionally to the drip irrigation?

Mr. Aleksandr Merkushkin replied that the project is planning to demonstrate and test a wide range of water efficient and saving technologies, including land laser leveling, daily irrigation regulation and furrow irrigation. Hydroponics is planned to be used for greenhouse development.

Mr. Yusuf Kamalov stated that all these methods are well-known; however farmers do not yet apply them widely, and asked if Mr. Merkushkin knows the reason.

Mr. Aleksandr Merkushkin shared his view that the strong (economically) convincing examples of application of these methods under severe water shortage conditions were not sufficiently demonstrated and their economic, financial and social benefits were not appropriately communicated to the end-users such as farmers, dekhans and households. Project, therefore project activities include piloting and demonstration of best practices with

support in procuring equipment, development of incentives, and improved communication and increasing knowledge sharing to the targeted communities and beyond.

Ms. Rano Baykhanova elaborated on the Mr. Merkushkin's comment by stating that the Project's 4th component is particularly designed for increasing public knowledge and of awareness. Field schools and extension services will be established to provide consultation services on wide ranging issues, including the introduction of water saving technologies.

Mr. Oljabay Shaniyazov, Director of the Special Nukus Forestry Inspection, shared his views on the need to revive the practice of arranging forest shelter belts around agricultural fields. He further stressed the importance of implementing practical measures to restore forests in sandy areas through the plantation of the *saksaul*.

Ms. Rano Baykhanova and Mr. Aleksandr Merkushkin noted the importance of the proposal and pointed out that the corresponding activities, e.g. to be implemented at the landscape level within the project Component 3 (establishing local saksaul and tamarix plantations to deliver sand stabilization and soil desalinization function) confirm their high priority.

Mr. Erejep Kubanbayev pointed out the following concerns and suggestions:

- 1. Due to the lack of fuels and lubricants the farmers face certain difficulties in maintaining greenhouses, therefore a wide introduction of renewable energy sources (solar energy and biogas) is highly appreciated;
- 2. Development of fish production needs to be considered as another measure to increase economic sustainability;
- 3. Establishment of liquor ice farms would increase the farmers' incomes;
- 4. There is a need to develop drip irrigation systems using underground waters;
- 5. Short-term hydro meteorological forecasts need to be communicated to the famers.

Ms. Rano Baykhanova thanked the participants for their valuable proposals and brought some examples of practical application of renewable energy under other projects implemented in Karakalpakstan. She further noted that the lessons from and experience gained within the other completed and on-going projects will be would be learned and used in respect of the proposed aspects and cooperation and synergy with the on-going projects to be established and maintained.

Mr. Aleksandr Merkushkin, in addition to **Ms. Baykhanova's** comments, stated that Uzhydromet produces both the short-term and long-term hydrological forecasts based on specific mathematical models of stream flows. Those tools are very helpful for establishment of the early warning system for droughts which would serve the end-users in the project pilot districts, and number of such beneficiaries is gradually increasing.

In conclusion, **Mr. Abduvakkos Abdurahmanov**, once again, thanked participants and wished them and project team success. He informed that a draft Resolution of decision of Inception Workshop meeting will be prepared and submitted to the Inter-Agency Working Group members' consideration, and requested all participants to convey the core points discussed within the meeting to their senior management.

| Approved by: | | |
|--|-------------|--------|
| Stefan Priesner | | |
| UNDP Resident Representative in Uzbekistan | | |
| - | (signature) | (date) |
| Approved by: | | |
| Bakhriddin Nishonov | | |
| First Deputy General Director | | |
| Uzhydromet | (signature) | (date) |

| Cleared by: | | |
|--|-------------|--------|
| Abduvakkos Abdurahmanov | | |
| Head of the UNDP Environment and Energy Unit | (signature) | (date) |
| UNDP Uzbekistan | - | |
| | | |
| Prepared by: | | |
| Aleksandr Merkushkin | | |
| Project Manager | (signature) | (date) |
| | | |

"Developing climate resilience of farming communities in the drought prone parts of Uzbekistan" Joint Project of the Government of Uzbekistan, UNDP and the Adaptation Fund Inception Workshop Tentative Agenda

Date: 27 October 2014 **Venue:** 50, Garezsizlik Street, Nukus (Council of Ministers building, 3rd floor, Small Conference Room)

| 10:45-11:00 | Registration |
|-------------|--------------------|
| 11:00-11:10 | Welcoming remarks: |

Mr. Jenis Embergenov Deputy Chairman of the Council of Ministers of the Republic of Karakalpakstan

Mr. Bakhriddin Nishonov First Deputy General Director of Uzhydromet

Mr. Polat Reimov

Member of Legislative Chamber of Oliy Majlis (Parliament)

Mr. Abduvakkos Abdurahmanov

Head of the Environment and Energy Unit, UNDP CO

11:10-11:15 Presentation of the Inception Workshop agenda and introduction of the participants

11:15-11:25 Brief information about the project proposal development funded by the Adaptation Fund, including the decision on MIA modality, selection of the pilot sites, development and submissions of project proposal to AF jointly with UNDP and the AF endorsement of the funding for the Project

11:25-11:40 Goals and expected result of the projects financed by the Adaptation Fund. Information about the applied approached to monitoring and evaluation of project activities.

Mr. Rano Baykhanova,

Climate Change Specialist of the Environment and Energy Unit UNDP CO

Mr. Salamat Erejepov Chief Expert of the Transboundary Monitoring of Environmental Pollution Department, Uzhydromet

Mr. Yusuki Taishi Regional Technical Specialist, the UNDP Regional Asian-Pacific Center in Bangkok, Thailand

| 11:40-12:00 | Presentation of the Project goals and objectives, duration, budget and project management principles. | Mr. Aleksandr Merkushkin Project Manager |
|-------------|---|---|
| 12:00-12:15 | | Coffee Break |
| 12:15-12:25 | Presentation of the logframe, including baselines, indicators, targets, activities and actions, and project outputs and outcomes. | Mr. Aleksandr Merkushkin Project Manager |
| | Discussion of the Logical Framework | |
| 12:25-12:35 | Conclusions on adjustments/changes related to thematic indicators/timelines indicated in the logframe, and additions/amendments to project document | Mr. Aleksandr Merkushkin Project Manager |
| 12:35-12:45 | Proposal to establish a project coordination group in Karakalpakstan: members and schedule. | Mr. Aleksandr Merkushkin, Project Manager |
| 12:45-13:00 | Discussion and decision making. | |
| 13:00-13:15 | Conclusions and closing of the Inception Workshop. | <i>Mr. Abduvakkos Abdurahmanov</i> <i>Head of the Environment and Energy Unit,</i> <i>UNDP CO</i> |
| 13:15-14:30 | Lunch | |

| Representatives of Partner Organizations, Ministries and Agencies of the Republic of Karakalpakstan | | |
|--|---------------------------------|---|
| 55. | Mr. Jenis Embergenov | Chairman of the Council of Ministers of |
| | | Karakalpakstan |
| 56. | Mr. Bakhriddin Nishonov | First Deputy General Director of Uzhydromet |
| 57. | Mr. Polat Reimov | Member of Legislative Chamber of Oliy Majlis |
| | | (Parliament) |
| 58. | Mr. Murat Jumanov | Rector of the State University of Karakalpakstan |
| 59. | Mr. Makhmud Sadikov | Ministry of Finance of Karakalpakstan |
| 60. | Mr. K. Nabatov | Ministry of Economy of Karakalpakstan |
| 61. | Mr. Rashid Matkurbanov | Ministry of Public Education of Karakalpakstan |
| 62. | Mr. Sabir Yedinbaev | Ministry of Agriculture and Water Resources of Karakalpakstan |
| 63. | Mr. Murat Kurbaniyozov | Head of Unit on Development of farming, Ministry of Agriculture and Water Resources of Karakalpakstan |
| 64. | Mr. Alpisbay Jumanazarov | State Committee for nature Protection of Karakalpakstan |
| 65. | Mr. Daniyar Khodjiyev | Ministry of Healthcare of Karakalpakstan |
| 66. | Mr. Abat Seytnazarov | Hydro-reclamation Expedition of Karakalpakstan |
| 67. | Mr. Oljabay Shaniyazov | Director of the Nukus Special Forestry Inspection |
| 68. | Mr. R. Turganbaev | Nukus Branch of Agrarian University |
| 69. | Mr. Uzaqbay Ismailov | Nukus Branch of Agrarian University |
| 70. | Mrs. Aysulu Jumanazarova | Nukus Branch of Agrarian University |
| 71. | Mr. Baymurat Kurbaniyazov | Nukus Branch of Agrarian University |
| 72. | Mr. Saidulla Genjemuratov | Nukus Branch of Agrarian University |
| 73. | Mr. Markabay Jelepov | Karakalpak Pedagogical Institute |
| 74. | Mr. Barliqbay Prenov | Karakalpak Pedagogical Institute |
| 75. | Mr. Makset Nurjanov | Agriculture and Water Resources Secretariat under Council of Ministers of Karakalpakstan |
| 76. | Mr. Turganbay Turdimurotov | Head of the Irrigation Systems Department and GTS of the Lower Amudarya River Basin Management Administration |
| 77. | Mr. Kurbamnyaz Reymov | Forestry Department of Karakalpakstan |
| 78. | Mr. Rustem Aybergenov | Council of Farmers of Karakalpakstan |
| 79. | Mrs. Nursulu Dauletova | Council of Farmers of Karakalpakstan |
| 80. | Mr. Izzet Aymbetov | Karakalpak Branch of Academy of Science of Uzbekistan |
| 81. | Mr. Yusuf Kamalov | Karakalpak Branch of Academy of Science of Uzbekistan |
| 82. | Mr. Erejep Kubanbayev | Director of the Karakalpak Branch of the Research Institute of Irrigation and Water Problems |
| | Project Interagency Wor | rking Group members at National Level |
| 83. | Mr. Salamat Erejepov | Chief specialist of Uzhydromet Unit for |
| | | transboundary environment pollution monitoring |
| Proj | ect Interagency Working Group n | nembers at sub-national level |

List of participants of the Inception Workshop in Nukus

| 47 | Mr. Aleksandr Merkushkin | Project Manager | |
|------|-------------------------------------|---|--|
| 15 | UNDP/AF Project Implementation Team | | |
| 46 | Ms. Kano Baykhanova | Energy Unit, UNDP CO | |
| 45 | Mr. Abduvakkos Abdurahmanov | Head of the Environment and Energy Unit, UNDP CO | |
| 44 | Mr. Yusuki Taishi | Regional Technical Specialist, UN Regional Asian Pacific Center in Bangkok, Thailand | |
| UNDP | | | |
| | | the Aral Sea Crises» | |
| - | | Joint Program «Sustaining Livelihoods Affected by | |
| 43 | Mr. Kamal Khamidov | Monitoring and Evaluation specialist of the UN | |
| 42 | Mr. Bakhadur Paluaniyazov | Coordinator of the UN Joint Program «Sustaining Livelihoods Affected by the Aral Sea Crises» | |
| | Internatio | onal Organizations | |
| | | in Karakalpakstan | |
| 41 | Mr. Reimbergen Keniametov | Regional Department of Environmental Movement | |
| 40 | Mr. Sarsenbay Puletov | Trade Industrial Chamber of Karakalpakstan | |
| | NGOs Representatives | | |
| | | supporting entrepreneurs and farmers of Uzbekistan | |
| 39 | Mr. Azat Tileumuratov | Director of the Karakalpak Department of Center | |
| 50. | | Management Administration | |
| 38 | Mr. Davlet Tolibayev | Deputy Head of the Lower Amudarya River Rasin | |
| 37 | Mr. Daylethay Urazimbetoy | Deputy Minister of Economy of Karakalpakstan | |
| 36. | Mr. Buranbay Ibragimov | Acting Chairman of State Nature Protection | |
| 55. | | Karakalpakstan | |
| 25 | Mr. Kohavain Shagilay | of Jokargu Kengash (to be defined) | |
| 34. | Mr. Toktasin Bekmuratov | Specialist on agricultural and environmental matters | |
| 33. | Mr. Sarsenbay Seytnazarov | Chairman of Farmers Council | |
| 32. | Mr. Aybosin Kdirniyazov | Karakalpakstan | |
| 22 | | Karakalpakstan | |
| | | Secretariat under the Council of Ministers of | |
| 31. | Mr. Murat Mukhanov | Head of Agriculture and Water Resources | |
| | | Resources of the Republic of Karakalpakstan | |
| | | Acting Minister of Agriculture and Water | |
| 30. | Mr. Sabir Khodjametov | Coordinator of sub-national Interagency Working | |
| 20 | | | |

RESOLUTION

of the Inception Workshop meeting

conducted within the Joint Project of the Government of Uzbekistan, United National Development Programme (UNDP) and Adaptation Fund (AF) «Developing climate resilience of farming communities in the drought prone parts of Uzbekistan» Joint Project of the Government of Uzbekistan, UNDP and AF

Nukus, 27 October, 2014

- 1. Noted that Project Manager is entrusted with ensuring agreement and approval of the Resolution on decisions of the Inception Workshop by all members of the Inter-Agency Working Group by 15 November, 2014 as well its inclusion into the project Inception Report to be drafted by 22 November, 2014;
- 2. Noted that Project Manager is responsible for development of the Inception Report with support of the UNDP Country Office by 22 November, 2014; and Report shall include the Work Plan and Budget for 2015 developed with consideration of the current situation and changing of calendar timelines set up for annual targets due to the delay in project implementation start-up due to the passing the national procedures on approval of the grant-based projects funded by the international donor organizations set up by the Government;
- 3. The Project Manager shall be responsible for the preparation and coordination of the work plan and budget for 2015 with the National Project Coordinator (NPC) and the UNDP Resident Representative, as well as for the approval of these documents at the first Project Board meeting (first half of December 2014);
- 4. Proposals related to the work schedule of the Interagency Working Group shall be well noted; the National Implementing Agency (Uzhydromet) shall be responsible for the coordination of the work schedule with the Ministry of Finance of Uzbekistan;
- 5. Project Board members shall provide their comments and proposals on the draft Resolution to be adopted by the Inception Workshop, as well as on the draft Project Inception Phase Report within 10 days after receipt of such;
- 6. Project Board meetings shall be organized at least once a year. The first Project Board meeting shall be held in the first half of December 2014. The exact dates of the meeting shall be communicated later in due course.

| Approved by: | | |
|---|-------------|--------|
| Stefan Priesner | | |
| UNDP Resident Representative in Uzbekistan | (signature) | (date) |
| Approved by: | | |
| Bakhriddin Nishonov | | |
| First Deputy General Director | | |
| Uzhydromet | (signature) | (date) |
| Cleared by: | | |
| Abduvakkos Abdurahmanov | | |
| Head of the UNDP Environment and Energy Unit | (signature) | (date) |
| UNDP Uzbekistan | | |
| Prepared by: | | |
| Aleksandr Merkushkin | | |
| Project Manager | (signature) | (date) |
| Annex 3 Back To Office Report of Mission to Uzbek | istan | |



United Nations Development Programme Asia Pacific Regional Center in Bangkok (APRC)

BACK TO OFFICE REPORT (BTOR) Uzbekistan

Submitted by: Yusuke Taishi Date Submitted: 08/11/2014

| 1. Practice Area: UNDP/BDP/EEG | |
|---|--|
| 2. Service Line: Climate Change Adaptation | |
| 3. Mission Period (incl. of travel days): 19-29 October 2014 | |
| 4. Type of Service/Mission | 5. Client(s) |
| Implementation support for the Adaptation Fund project | UNDP Uzbekistan; Uzhydromet |
| 6. Purpose of Mission | 7. Documents, Materials, Resources from Mission. |
| Attend the Inception Workshop for the Adaptation Fund project in Tashkent and Nukus | N/A |
| 8. Mission Member(s) (include consultants if any) | 9. Annexes |
| Yusuke Taishi, Tel: +66 81 9493997 (<u>yusuke.taishi@undp.org</u>) | Mission schedule Presentation at the Inception Workshop (English version) |

Brief Summary of the Mission:

The Government of Uzbekistan organized an Inception Workshop for the Adaptation Fund project titled "**Developing climate resilience of farming communities in the drought prone parts of Uzbekistan**." The UNDP-GEF staff facilitated an internal inception meeting (20-22 October) with UNDP CO staff and the National Project Manager. The national external inception workshop was organized on 22 October in Tashkent followed by the regional inception workshop on 27 October. A discussion was also held with the UNDP CO on future resource mobilization prospects for climate change adaptation progamming in Uzbekistan.

Key findings/agreements

External Inception Workshop

Both at the national and regional workshops, a strong commitment and appreciation from the Government for the project were expressed. An agreement was also obtained with regards to the Project Outputs and M&E indicators.

Internal Inception Workshop

A total of 1.5 days was dedicated for Internal Inception Workshop with the Project Manager and UNDP Programme Officer covering issues like reporting requirements (PPR), disbursement schedule, AF requirements for adaptive management, roles and responsibilities of the Project Team, UNDP CO and RCU. (NB: Internally, there was a discussion on the possibility of combining Output 3.2 and 3.3, both addressing the capacity building of cooperatives for sustainable landscape management. However, a merger of these Outputs will likely result in a more than 10% budget deviation from the Project Document, so I will advise that these two Outputs to be retained)

Other important considerations for the AF project

1. Additional indicators for monitoring evidence-based, quantifiable impacts

The need for additional indicators – those that do not necessarily bear official reporting requirement to the AF Board, but that would produce critical information for policy change, scale-up, and evidencebased impact – was discussed at length. It was agreed that the Project Team will propose 2-3 potential indicators and explore the possibility of setting aside additional resources for data collection. The following options have been discussed:

- Impact on increase in income or productivity from Output 2.1 and 2.2 activities (conservation agriculture practices and water saving practices). This would require a baseline data collection prior to on-the-ground investments, followed by annual data measurement as well as data collection from non-target farmers.
- Analysis on Return on Investments from the greenhouse investments for horticulture. Although an empirical analysis from previous projects was presented in the project document, it would still be important to verify and compare data from different interventions as the general understanding about cost-effective options for building resilience is still limited.
- Impact on landscape management on sand movement (Output 3.1). The possibility of using satellite imagery to quantify sand movement was discussed, but the costs could be prohibitively high. The Project Team will identify a low-cost option for monitoring the quantitative impact of this Output.

Obtaining evidence-based, quantifiable impact from various adaptation options is important because demonstrability of such information will positively influence the likelihood of mobilizing additional resources from SCCF and GCF.

2. Additional assessment on water budget in Amu-Darya river

Internally it was tentatively agreed that Outcome 4 will include a water budget analysis of Amu-Darya river. It appeared that a lack of proper understanding about the water withdrawal and inflow of the Amu-Darya river is one of the key barriers for effective policy making and adaptation planning. While Outcome 1 will put in place the necessary infrastructure for this kind of analysis, currently it is not envisaged that the project activities will include such an analysis. Moreover, the locations at which water meters are positioned in the project are not necessarily determined with the view to enable such an analysis.

3. Testing experimental/innovative approaches to supporting resilient livelihoods under drought conditions.

While the project activities have been designed based on tested approaches from past initiatives, which increases the chances of success, the project activities can test a few "innovative" approaches. For example, hydroponics may offer an alternative source of income that is much less water-dependent. Thus, it is suggested that the Project Team carries out some background research (costing, feasibility, sustainability, etc) on a few additional approaches to resilient livelihoods.

Other issues discussed

1. AF requirements on Direct Project Costs

The importance of the compliance with the <u>BOM guidance</u> on charging DPC in GEF/AF-financed projects was reiterated. In light of decreasing TRAC resources to finance staffing within COs, the RTA suggested that the *nature* of work of existing UNDP Programme Officers be reviewed. This is because UNDP POs often spend time on implementation related activities in support of project-financed staff, and such work can be taken over by recruiting an additional project-financed staff.

2. Additional resource mobilization prospect for adaptation programming

Currently realistic funding mobilization options for Uzbekistan is SCCF and bilateral sources. The availability of SCCF resources is unpredictable and grossly undersupplied compared with demands, so Government expectations need to be managed properly. Nonetheless, it is important for UNDP to be prepared to respond quickly when an opportunity arises to mobilize SCCF. To this end, UNDP needs to have received an invitation from the GEF OFP for support in this regard (this needs not be an official letter, but an email correspondence would be sufficient at this stage). Moreover, the SCCF council prefers to finance projects that demonstrate a potential for transformational impact and that are highly strategic. In this regard, if the recent international conference on the Aral Sea disaster results in a large-scale development programme, an SCCF project can potentially be designed by integrating CCA considerations into it.

At the same time, opportunities for mobilizing bilateral resources, through "top-up" financing for the existing AF project, rather than establishing a new project, should continue to be explored at both the country and regional level.

| Follow-up Action Matrix | | |
|---|---------|-------------------------------------|
| Actions to be taken | By Whom | Expected Completion Date |
| Finalizing the 2015 AWP and milestone setting for PPR | UNDP CO | December 2014 |
| Recruitment of a PR Specialist and Regional Coordinator | UNDP CO | Before 2 nd quarter 2015 |

| Discussion on the three items under "Other important considerations for the AF project" | UNDP CO, Project staff and YusukeTaishi | Early 2015 |
|--|--|------------|
| Submission of the first PPR to the AF Board | 14 February 2015 | |
| 13. Distribution List (BTOR sent to): | | |

UNDP APRC (Gordon Johnson), UNDP Regional Centre in Istanbul (Martin Krause), UNDP Uzbekistan (Abduvakkos Abdurahmanov, Rano Baykhanova), UNDP HQ (Pradeep Kurukulasurya)

ANNEX I – Mission Schedule

TENTATIVE AGENDA

of mission to Uzbekistan by Mr. Yusuke Taishi, Regional Technical Specialist – Adaptation, Green Low Emission Climate Resilient Development Strategies, UNDP - Global Environment Facility, UNDP in Bangkok, Thailand

Tashkent and Nukus, 20-28 October, 2014

| Time | Meeting/Participants | Venue/Location | |
|------------------|--|---|--|
| Monday, 20 Octob | ber, 2014 | | |
| 01:40 | Arrival from Bangkok, Thailand by flight TK 370 and transfer from airport to Dedeman Silk Road Hotel | Tashkent airport – Dedeman Hotel 1, Amir Temur avenue | |
| 40.00.44.00 | Responsible: Mr. Aleksandr Merkusnkin, Project Manager | | |
| 13:00-14:00 | | | |
| 14:00-17:00 | Introductory meeting with Mr. Aleksandr Merkushkin, Project Manager, and Ms. Rano Baykhanova, Climate Change Specialist, EEU | Uzhydroment 72, 1 st passage of Bodomzor Yuli | |
| | Responsible: Mr. Aleksandr Merkushkin, Project Manager | str. | |
| Tuesday, 21 Octo | Tuesday, 21 October, 2014 | | |
| 10:00 – 10:30 | Briefing meeting with Mr. Abduvakkos Abdurahmanov, Head of Environment and Energy Unit | UNDP Country Office 41/3, Mirabadskaya str., | |
| | Accompanied by Ms. Rano Baykhanova, Climate Change Specialist, EEU | lashkent | |
| | Responsible: Ms. Rano Baykhanova, Climate Change Specialist, EEU | | |
| | Internal inception meeting | UNDP Country Office | |
| 10:40-12:30 | Participants: Ms. Rano Baykhanova, Climate Change Specialist, EEU, UNDP, and Mr. Aleksandr Merkushkin, Project Manager | 41/3, Mirabadskaya str., Tashkent | |
| | Responsible: Ms. Rano Baykhanova, Climate Change Specialist, EEU | | |

| 12:30 – 13:30 | Lunch | |
|-------------------|---|--|
| | Internal inception meeting | |
| 14:00 – 17:00 | Participants: Ms. Rano Baykhanova, Climate Change Specialist, EEU, UNDP, and Mr. Aleksandr Merkushkin, Project Manager | Uzhydroment 72, 1 st passage of Bodomzor Yuli str. |
| | Responsible: Mr. Aleksandr Merkushkin, Project Manager | |
| Wednesday, 22 O | ctober, 2014 | |
| | Internal inception meeting | Uzhydroment |
| 10:00 – 12:30 | Participants: Ms. Rano Baykhanova, Climate Change Specialist, EEU, UNDP, and Mr. Aleksandr Merkushkin, Project Manager | 72, 1 st passage of Bodomzor Yuli str., and Business Center Povtakht 16 Sharaf Rashidov |
| | Responsible: Mr. Aleksandr Merkushkin, Project Manager | str. |
| 12:30 – 13:30 | Lunch | |
| 14:00 – 18:30 | Participation in Inception Workshop of the UNDP/AF and Government of Uzbekistan project "Developing climate resilience of farming communities in the drought prone parts of Uzbekistan" in Tashkent | Business Center "Poytakht" 16, Sharaf Rashidov str. |
| | Responsible: Mr. Aleksandr Merkushkin, Project Manager | |
| Thursday, 23 Octo | ober, 2014 | |
| | Wrap-up of Inception Workshop in Tashkent: findings and results, and discussion of next steps, including development of Inception Report | Uzhvdroment |
| 10:00 – 12:30 | Participants: and Ms. Rano Baykhanova, Climate Change Specialist, EEU, and Mr. Aleksandr Merkushkin, Project Manager | 72, 1 st passage of Bodomzor Yuli str. |
| | Responsible: Mr. Aleksandr Merkushkin, Project Manager | |
| 13:00 – 14:00 | Lunch | |

| 15:00 – 16:00 | Debriefing meeting with Mr. Abduvakkos Abdurahmanov, Head of Environment and Energy Unit (EEU) <i>Responsible: Ms. Rano Baykhanova, Climate Change Specialist, EEU</i> | UNDP Country Office 41/3, Mirabadskaya str., Tashkent | |
|----------------------------|---|--|--|
| 17:45 – 20:45 | Departure from Tashkent and arrival to Nukus, and transfer to hotel Responsible: Mr. Aleksandr Merkushkin, Project Manager | Dedeman Hotel – domestic flights airport in Tashkent – Nukus airport - hotel | |
| Friday, 24 October, 2014 | | | |
| 10:00 - 11:00 | Meeting with Mr. Bakhadur Paluaniyazov, Area Coordinator and key team of the "UN Aral Sea Programme" <i>Responsible: Mr. Aleksandr Merkushkin, Project Manager</i> | UN Aral Sea Programme 56, Ernazar Alakoz, Nukus | |
| 11:30 – 12:30 | Meeting with Mr. Aybosyn Kdyrniyazov, Head of Hydrometeorological Department of the Republic of Karakalpakstan <i>Responsible: Mr. Aleksandr Merkushkin, Project Manager</i> | Hydrometeorological Department of Karakalpakstan 3, Ashhabadskaya str., Nukus | |
| 13:00 – 14:00 | Lunch | | |
| 14:30 – 15:30 | Meeting in the Ministry of Agriculture and Water Resources Responsible: Mr. Aleksandr Merkushkin, Project Manager | Ministry of Agriculture and Water Resources in Karakalpakstan 25, Turan str. Nukus | |
| 16:00 – 17:00 | Meeting with Mr. Sh. Seitnazarov, Chair of Kengash (Council) of Farmers in Karakalpakstan Responsible: Mr. Aleksandr Merkushkin, Project Manager | Kengash (Council) of Farmers in Karakalpakstan 63, Dosnazarov, Nukus | |
| Saturday, 25 October, 2014 | | | |
| 09:00 | Departure from Nukus to Kegeli district, project site Responsible: Mr. Aleksandr Merkushkin, Project Manager | | |
| 09:00-18:00 | Visit to project site in Kegeli district, and meeting with local administration, self-government and local communities | Karakalpakstan Kegeli district | |

| | Accompanied by Ms. Rano Baykhanova, Climate Change Specialist, EEU and Mr. Aleksandr Merkushkin, Project Manager, and interpreter | | |
|------------------|---|---|--|
| | Lunch on the road | | |
| | Responsible: Mr. Aleksandr Merkushkin, Project Manager | | |
| 18.00 | Return to Nukus | | |
| 10.00 | Responsible: Mr. Aleksandr Merkushkin, Project Manager | | |
| Sunday, 26 Octob | per 2014 | | |
| 08:30 | Departure from Nukus to Kanlykul district, project site | | |
| | Responsible: Mr. Aleksandr Merkushkin, Project Manager | | |
| | Visit to project site in Kanlykul district, and meeting with local administration, self-government and local communities | | |
| 08:30-18:00 | Accompanied by Ms. Rano Baykhanova, Climate Change Specialist, EEU and Mr. Aleksandr Merkushkin, Project Manager, and interpreter | Karakalpakstan Kanlykul district | |
| | Lunch on the road | | |
| | Responsible: Mr. Aleksandr Merkushkin, Project Manager | | |
| 18.00 | Return to Nukus | | |
| 10.00 | Responsible: Mr. Aleksandr Merkushkin, Project Manager | | |
| Monday, 27 Octob | per 2014 | | |
| | Participation in Inception workshop in Nukus | | |
| 10:00 – 13:00 | Participants from UNDP: Ms. Rano Baykhanova, Climate Change Specialist, EEU, and Mr. Aleksandr Merkushkin, Project Manager | Council of Ministers of Karakalpakstan | |
| | Responsible: Mr. Aleksandr Merkushkin, Project Manager | | |
| 13:00 - 14:00 | Lunch | | |

| 14:30 – 17:00 | Wrap-up of Inception Workshop in Nukus: findings and results, and discussion of next steps, including development of Inception Report | |
|---------------------------|--|--|
| | Participants: and Ms. Rano Baykhanova, Climate Change Specialist, EEU, and Mr. Aleksandr Merkushkin, Project Manager | Hotel in Nukus |
| | Responsible: Mr. Aleksandr Merkushkin, Project Manager | |
| 18:20 – 22:00 | Transfer to Nukus airport and arrival to Tashkent, and transfer to Dedeman Hotel Responsible: Mr. Aleksandr Merkushkin, Project Manager | Nukus airport – domestic flights airport in Tashkent – Dedeman Hotel |
| Tuesday, 28 October, 2014 | | |
| 06:30 | Transfer from Dedeman Hotel to Tashkent airport and departure to Bangkok, Thailand by flight TK 369 | |
| | Responsible: Mr. Aleksandr Merkushkin, Project Manager | |

Annex 4 Minutes of the First Project Board meeting

AGENDA

of the First Meeting of Project Board of the Joint Project of the Government of Uzbekistan (Uzhydromet), United National Development Programme (UNDP) and Adaptation Fund (AF) «Developing climate resilience of farming communities in the drought prone parts of Uzbekistan»

Date and time:24 December 2014, 15:00-16:30Place:Conference Room in Uzhydromet, 1st Drive Bodomzor Yuli Str., Tashkent, Uzbekistan

| 14.45 - 15.00 | Registration of participants |
|---------------|--|
| | PB meeting Chairperson, Mr. Viktor Chub |
| 15:00 - 15:20 | Welcoming speeches by: Mr. Viktor Chub, General Director of Uzhydromet, National Project Coordinator, and Coordinator of the Project Inter-Agency Working Group Mr. Farid Garakhanov, UNDP Deputy Resident Representative in Uzbekistan |
| 15:20 - 15:30 | Presentation of participants and PB meeting agenda |
| 15:30 - 16:00 | Information about project results achieved in 2014, and activities planned for and targets to be achieved in 2015: results achieved in 2014; activities planned for and targets to be achieved in 2015. <i>Presenter</i>: Aleksandr Merkushkin, Project Manager |
| 16:00 - 16:20 | Discussion and decisions made by the Board on the following: project results achieved in 2014; main project activities planned for 2015; coordination and approval of working schedule of established Inter- Agency Working Group. |
| 16:20 - 16:30 | Conclusions and closing speeches by : Mr. Farid Garakhanov, UNDP Deputy Resident Representative in Uzbekistan Mr. Viktor Chub, General Director of Uzhydromet, National Project Coordinator, and Coordinator of the Project Inter-Agency Working Group |
| | |

COURSE OF THE PROJECT BOARD MEETING

I. Opening

Mr. Viktor Chub, General Director of Uzhydromet, National Project, and Coordinator of the Project Inter-Agency Working Group (IAWG), welcomed the participants (list of participants is enclosed) and briefed them on the meeting's agenda.

Mr. Farid Garakhanov, UNDP Deputy Resident Representative in Uzbekistan, welcomed the participants and noted the great significance of the Adaptation Project for UNDP and the country. Currently, there are 12 adaptation projects implemented by UNDP the worldwide, including the three are being implemented in the CIS region: Georgia, Turkmenistan, and Uzbekistan. Adaptation project in Uzbekistan should become a good practice for other states. Climate change problem is as old as the world itself. Drinking and irrigation water deficiency as well as land degradation became aggravated under the conditions of economic development, accelerated industrialization and demographic growth. The Project's proposed adaptation measures will allow preparing local communities to resist increasing climate risks and climate change negative impacts as well as facilitating sustainable development of agricultural production.

II. Presentation of Project results achieved in 2014, and activities planned to achieve targets set up for 2015

Mr. Aleksandr Merkushkin presented the key project results achieved in 2014:

- Uzhydromet nominated as the national partner implementing agency, and Mr. Viktor Chub, General Director of Uzhydromet and Designated National Authority to Adaptation Fund appointed as the National Project Coordinator for the Adaptation Project by the government resolution;
- The national level Inter-Agency Working Group (IAWG) established and comprises the representatives of key national ministries and agencies (Ministry of Finance, Ministry of Economy, State Committee for Nature Protection, Ministry of Agriculture and Water Resources and Uzhydromet);
- Project Manager hired;
- The sub-national level Inter-Agency Working Group established in the Republic of Karakalpakstan;
- Drafts of working schedule of both national and sub-national Inter-Agency Working Groups developed in coordination with their members;
- Project office premises provided by Uzhydromet, office furniture procured for project offices in Tashkent and Nukus, and repairing works in Tashkent office accomplished;
- Budget revision conducted in 2014 and approved by the UNDP CO and Regional Technical Advisor;
- Detailed Annual Plan of Activities for 2015 developed.

Project Manager also presented the activities planned for January-May 2015 (as the end of annual project implementation cycle of Adaptation Fund, namely May 2014 – May 2015):

Activities planned within project Component 1:

- Identifying location, configuration and specification of 8 hydro meteorological stations (AHMS) to be automated;
- Identifying needs in water balance controlling facilities (weirs) to conduct water balance metering in targeted sites of pilot districts to establish the baseline;

- Determining specifications of IT equipment for automated hydrometerological network in Karakalpalstan, and tender-based procurement of the equipment;
- Identifying needs in IT equipment to support Extension Centers, IT designing equipment configuration, developing equipment specifications, and procuring the IT equipment

Activities planned within project Component 4:

• Participating in training for GEF LDCF, SCCF and AF Project Teams in the UNDP Regional Center for Asia and Pacific in Bangkok, Thailand

Activities planned within project management component:

- Purchasing IT equipment for the project offices in Tashkent and Nukus;
- Hiring an Administrative-Financial Assistant and National Field Coordinator as members of the core project staff.

He also presented the activities planned for the remaining period of June-December 2015 (based on the annual project implementation cycle of UNDP, namely January-December, 2015):

Activities planned within project Component 1:

- Procuring equipment for 8 existing hydrometeorology stations (AHMS), including two Doppler flow meters to automate them;
- Developing technical requirements and specifications for IT equipment for AHMS network, and procuring the equipment;
- Developing the drought Early Warning System;
- Developing a concept on establishing Field School/Extension Centers to provide relevant consulting services to farmers and dekhans

Activities planned within project Component 2:

- Procuring 7 sets of equipment for land laser leveling to achieve efficient water resources use and management;
- Procuring 12 sets of greenhouse equipment along with drip irrigation systems;
- Developing and disseminating information materials and knowledge products on water saving and climate change resilient best practices;
- Conducting seminars and trainings with involving national and international experts specialized in water saving technologies and introduction of climate-resilient best practices;
- Conducting analysis of existing legal frameworks to enable best and proven adaptation measures

Activities planned within project Component 3:

- Providing technical support in development of:
 - Approach to registering and documenting the moving sands stabilization based on ground imagery survey using the differential GPS, and procuring four GPS devices;
 - Management Plan for measures aimed at moving sands stabilization and soil salinity reduction.
- Developing an employment scheme for implementation of adaptation measures at the landscape level;

• Conducting seminars/trainings on introduction of cooperative management scheme to implement the landscape restoration measures (dissemination of publications)

Activities planned within project Component 4:

- Arranging two farmland demonstration meetings in pilot districts to inform about results of achieving climate resilience of farming communities, with involvement of local authorities, target communities and mass media
- Participating in trainings arranging regionally for adaptation project managers as well as trainings on SOP conducting by UNDP Country Office

III. Discussion

Mr. Viktor Chub proposed to the Project Board participants examining the suggested working schedule of the Inter-Agency Working Group and further noted that:

- core project staff needs to be hired as soon as possible;
- hiring of a procurement specialist is reasonable due the substantial amount of various type equipment to be procured within the project cycle;
- it is appropriate that permanent thematic team leader position for each component will considered and adopted as project includes 4 thematic components, and each one has very ambitious outcomes, which achievement requires permanent and professional expertise and oversight;
- it would be more rationale to automate the 10 existing meteo stations than only 8 as it is initially planned and indicated in Annual Work Plan and Budget for 2015, if this meets the funds allocated to this activity. Karakalpakstan observation network is built on 10 existing weather stations, and their automatization will increase coverage by the observation network and result in much improved and more comprehensive monitoring of region's climate status as well as greater impacts and benefits, which the whole population of this region will enjoy.

Mr. Aleksandr Merkushkin addressed Mr. V.E. Chub's remarks. Core project staff members' hiring process has been initiated, job announcement for the position of Administrative and Financial Assistance and National Field Coordinator has been widely advertised. Procurement specialist, undoubtedly, would be useful to manage all procurement cases. This new position will be considered thoroughly and discussed with the UNDP Country Office with strict observing the corresponding Adaptation Fund's rules and requirements. The same relates to the thematic team leader(s) who will undertake the functions indicated above to contribute to efficient implementation of relevant project activities. As far the automation of the 10 existing meteo stations in Karakalpakstan, the conducted estimates have proved that the current budget can be sufficient for automation of all 10 ones.

Mr. Farid Garakhanov was wonder why only 8 out of 10 existing meteo stations were initially envisaged for automation during development of the project proposal stage.

Mr. Aleksandr Merkushkin informed that initially more complex satellite and radio communication system was considered as required for the full-fledged operation of the equipment. However, later on it became obvious that the proposed equipment will be quite expensive as its monthly operation and maintenance cost is in the range of \$670. Uzhydromet will not be able to cover those O&M costs for 8 meteo stations beyond completion of the project implementation cycle. Currently, another lower cost option is available and applicable, and moreover it allows automatization of 10 meteo stations using the money saved.

Mr. Farid Garakhanov noted that the Project has been revised recently during its inception phase. If certain aspects need to undergo further revision, deeper and targeted researches and analysis shall be conducted to formulate sound and well-grounded justifications.

Mr. Aleksandr Merkushkin added that during the inception phase consultations were held with the project Regional Technical Adviser, Mr. Yusuki Taishi, who strongly suggested to assess a) impact on increase in income or productivity from Output 2.1 and 2.2 activities (conservation agriculture practices and water saving practices) to collect baseline data prior to on-the-ground investments, followed by annual data measurement as well as data collection from non-target farmers; and b) impact on landscape management on sand movement (Output 3.1) though possibility of using satellite imagery to quantify sand movement was discussed but the costs could be prohibitively high; project team shall identify a low-cost option for monitoring the quantitative impact of this Output.

Mr. Farid Garakhanov was wonder did project Regional Technical Adviser provide any proposals and recommendations on the above indicated?

Mr. Aleksandr Merkushkin clarified that Mr. Taishi's mission report includes relevant proposals and recommendations.

Ms. Zulfiya Yarullina suggested elaborating more and finalizing then the draft working schedule of Inter-Agency Working Groups as it shall include a specific description of tasks to be undertaken at national and sub-national levels. Next, she mentioned that planning for 2015 includes activities on water resources metering and water supply analysis in the targeted land fields, however, those activities are a very lengthy and labor intensive, and therefore would be the Project able to accomplish them by the deadlines set up?

Mr. Aleksandr Merkushkin informed that project will cooperate with the Council of Farmers in Karakalpakstan for identifying the key pilot sites where water saving technologies can be appropriately demonstrated. Water supply to the selected sites is planned to be regulated by spillways. They are not sophisticated systems and allow identifying the quantity of supplied irrigation water. Laser leveling and introduction of drip irrigation will be widely introduced as well.

Ms. Antonina Kucherova asked about the terms will be applied for providing farmers with land laser leveling equipment. Will the equipment be provided free of charge?

Mr. Aleksandr Merkushkin explained that project will implement this activity in close partnership with the Council of Farmers in Karakalpakstan. Currently 15 farmers have expressed their desire to deploy those innovative technologies at their farmlands. Land laser leveling equipment will be handed over to farmers free of charge.

Ms. Natalya Agaltseva shared the practical experience in use of land laser leveling equipment gained within UNDP project «Climate Risks Management in Uzbekistan». The equipment procured by the project has been handed over through the Council of Farmers in Kashakadarya to 12 farms with the particular terms and conditions that equipment holders shall share it with the other neighboring farms. To involve farmers into the project activities and inspire the in application of water saving technologies, seminars and trainings focused on land laser leveling practice have been organized, and recommendations on practical use of this equipment were developed and shared. Her project stands ready for further sharing corresponding experience and recommendations with the adaptation project to support and contribute to replication land laser leveling practice in Karakalpakstan.

Mr. Aleksandr Merkushkin mentioned that project is aimed at demonstration of economic benefits of using water efficient technologies in Uzbekistan. It counts on support of all members

of the Inter-Agency Working Groups as well as representatives of relevant ministries and agencies.

Ms. Shakrikhon Umarova pointed out that actually agriculture sector is experiencing certain difficulties with availability of the required specialized equipment and technologies. Adaptation project is very interesting one and would be useful for this sector. The Ministry of Agriculture and Water Resources guarantees full support to ensure the project successful implementation and achieving the expected results/benefits.

Mr. Viktor Chub thanked the meeting participants for fruitful discussion and suggested to start discussing the draft Resolution.

Ms. Zulfiya Yarullina asked whether IAWG functions include ensuring timely reporting about the project activities.

Mr. Aleksandr Merkushkin replied that there are certain requirements to project reporting requirements regulated by a number of international and national rules and regulations. However, IAWG is tasked with ensuring oversight of project implementation and achievement of expected outcomes, goal and impacts.

IV. Closing

Mr. Farid Garakhanov, in conclusion, said that this Project is indeed extremely interesting and important for this region. Project Manager has to carefully consider all proposals and remarks and address them through planning and implementation of project activities. He expressed confidence for project ability to report some achievement by mid-year 2015. He considered the present Project Board meeting as a good starting point for establishing efficient coordination, cooperation and partnership required for the joint work.

Mr. Viktor Chub thanked all participants for active participation in the discussion and encouraged all in active cooperation.

Mr. Aleksandr Merkushkin thanked the PB participants and IAWG members for their suggestions, proposals and support.

| Prepared by: | | |
|--|-----------|------|
| Aleksandr Merkushkin | | |
| Project Manager | signature | date |
| Approved by: | | |
| Abduvakkos Abdurahmanov | | |
| Head of the UNDP Environment and Energy Unit | | |
| UNDP Uzbekistan | signature | date |
| Approved by: | | |
| Viktor Chub | | |
| General Director of Uzhydromet, | | |
| National Project Coordinator, | signature | date |
| Coordinator of IAWG | C | |
| Approved by: | | |
| Farid Garakhanov | | |
| Deputy Resident Representative | signature | date |
| UNDP Uzbekistan | C | |

LIST

of participants of the first meeting of Project Board of the Joint Project of the Government of Uzbekistan (Uzhydromet), United National Development Programme (UNDP) and Adaptation Fund (AF) «Developing climate resilience of farming communities in the drought prone parts of Uzbekistan»

Date and time: 24 December 2014, 15:00-16:30

Place: Conference Room in Uzhydromet, 1st Drive Bodomzor Yuli Str., Tashkent, Uzbekistan

| PB Members | | | |
|------------|--|--|--|
| 1. | Mr. Viktor Chub | 1 st Drive 72 Bodomzor Yoli Str, | |
| | General Director of Uzhydromet, | Tashkent 100052 | |
| | National Project Coordinator, | Tel.: 2336113 | |
| | Coordinator of IAWG | Fax: 2332025 | |
| | | uzhymet@meteo.uz | |
| 2. | Mr. Farid Garakhanov | 41/3 Mirabad str. Tashkent 100029, | |
| | Deputy Resident Representative | Tel.:1203450 | |
| | UNDP Uzbekistan | farid.garakhanov@undp.org | |
| | IAWG Member | ís | |
| 3. | Mr. Odil Usarov | 45a Uzbekistan ave., Tashkent 100003 | |
| | Leading specialist of agriculture and water | agro@mineconomy.uz | |
| | resources development, Ministry of Economy | | |
| 4. | Ms. Antonina Kucherova | 5, Mustakillik str., Tashkent 100008 | |
| | Chief Economist for agro-industrial complex | Tel.: 2391424 | |
| | financing, Ministry of Finance | Fax: 2445643 | |
| 5. | Mr. Ozod Matyoqubov | 4, A. Navoi str., Tashkent 100004 | |
| | Deputy Head of Cotton and Technical Crops | Fax: 2442397 | |
| | Production, Ministry of Agriculture and | | |
| | Water Resources | | |
| 6. | Ms. Shakrikhon Umarova | 4, A. Navoi str., Tashkent 100004 | |
| | Researcher of Department on Cotton and | Fax: 2442397 | |
| | Technical Crops Production, Ministry of | | |
| | Agriculture and Water Resources | | |
| 7. | Mr. Salamat Erejepov | 1 st Drive 72 Bodomzor Yoli Str, | |
| | Deputy Head of the Uzhydromet Environment | Tashkent 100052 | |
| | Pollution Monitoring Service | Tel.: 2358513 | |
| | | Fax: 2332025 | |
| 8. | Ms. Zulfiya Yarullina | 5, Mustakillik str., Tashkent 100159 | |
| | Chief Specialist of the Land and Water | Tel.: 2394823 | |
| | Control Service, State Committee for Nature | | |
| | Protection | | |
| | UNDP | | |
| 9. | UNDP | | |
| | Mr. Anvar Meliboev | 41/3 Mirabad str., Tashkent 100029, | |
| | Mr. Anvar Meliboev Partnership and Communications Specialist | 41/3 Mirabad str., Tashkent 100029, 41/3, | |
| | Mr. Anvar Meliboev Partnership and Communications Specialist | 41/3 Mirabad str., Tashkent 100029, 41/3, Тел.:1203450 | |
| 10 | Mr. Anvar Meliboev Partnership and Communications Specialist | 41/3 Mirabad str., Tashkent 100029, 41/3, Тел.:1203450 <u>anvar.meliboev@undp.org</u> | |
| 10. | Mr. Anvar Meliboev Partnership and Communications Specialist Ms. Dilnora Khakimova | 41/3 Mirabad str., Tashkent 100029, 41/3, Тел.:1203450 anvar.meliboev@undp.org 41/3 Mirabad str., Tashkent 100029, Tal.:1202450 | |
| 10. | Mr. Anvar Meliboev Partnership and Communications Specialist Ms. Dilnora Khakimova Program Assistant | 41/3 Mirabad str., Tashkent 100029, 41/3, Тел.:1203450 anvar.meliboev@undp.org 41/3 Mirabad str., Tashkent 100029, Tel.:1203450 | |

| 11. | Mr. Aleksandr Merkushkin | 1 st Drive 72 Bodomzor Yoli Str, |
|------------------|---|---|
| | Project Manager | Tashkent 100052 |
| | | Tel.: 2358513 |
| | | aleksandr.merkushkin@undp.org |
| IAWG Secretariat | | |
| 12. | Ms. Malika Mirdjamalova | 72, Maksumova str., Tashkent |
| | Secretariat of the Project Inter-Agency | 100052, |
| | Working Group | Tel: 2336113 |
| 13. | Ms. Nadezhda Gavrilenko | 72, Maksumova str., Tashkent 100052 |
| | Secretariat of the Project Inter-Agency | Tel: 2336113 |
| | Working Group | |

RESOLUTION

of the first Project Board Meeting (PB) of the Joint Project of the Government of Uzbekistan (Uzhydromet), United National Development Programme (UNDP) and Adaptation Fund (AF) «Developing climate resilience of farming communities in the drought prone parts of Uzbekistan»

24 December, 2014

- 1. Noted the project results achieved in 2014;
- 2. Approved the annual targets and key activities planned for and to be achieved in 2015, and assigned the project to develop the corresponding Annual Work Plan and Budget (AWP 2015) and Annual Plan of Actions (APA 2015);
- 3. Agreed the proposed draft working schedule of Inter-Agency Working Groups with considering the improvements/additions proposed during the meeting; and recommended the draft submission for approval by the Government, namely the Ministry of Finance as per the regulations set up;
- 4. Assigned the project with preparing the draft Minutes of the Project Board meeting and Resolution of the Project Board by January 12, 2015 and submitting them to all members of the Project Board members;
- 5. Members of the Project Board requested to send their comments within 10 days after receiving the draft Minutes and Resolution of the Project Board meeting;
- 6. Taken into account that the next meeting of the Project Board shall be tentatively scheduled for November 2015. The exact date shall be communicated to the members of the Project Board.

Approved by: Farid Garakhanov Deputy Resident Representative UNDP Uzbekistan

General Director of Uzhydromet, National Project Coordinator, signature date

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date

Approved by: Abduvakkos Abdurahmanov Head of the UNDP Environment and Energy Unit UNDP Uzbekistan

Prepared by: Aleksandr Merkushkin Project Manager

Coordinator of IAWG

Approved by: Viktor Chub

signature

signature date