



UN MULTI-PARTNER HUMAN SECURITY TRUST FUND  
FOR THE ARAL SEA REGION IN UZBEKISTAN

Terms of Reference

2018

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## EXECUTIVE SUMMARY

The Aral Sea was the fourth largest lake in the world until the 1960s. The drying of the Aral Sea, a man-made disaster long in the making, is not only an environmental problem but especially a catastrophe for communities and people living on its former shores. The Aral Sea disaster resulted in land degradation and desertification, shortage of drinking water, malnutrition, deteriorating health and high poverty rates of the affected population. The socio-economic and environmental consequences are further complicated by the speed of negative changes taking effect.

Uzbekistan has put forward an ambitious goal to become an upper middle-income country by 2030 while also reducing the level of vulnerabilities of people. The Government of Uzbekistan has consistently worked to address the negative consequences of the Aral Sea catastrophe and to maintain the ecological balance in the Aral Sea basin. In his speech, at the 72nd session of the UN General Assembly in New York, the President of the Republic of Uzbekistan, Shavkat Mirziyoyev, once again drew attention to this acute environmental challenge, and underlined that the Aral Sea problem requires the joint efforts of all Central Asian countries.

The 2030 Development Agenda puts a strong emphasis on “leaving no one behind”, and on focusing first on populations lagging furthest in development. During his visit in June 2017, UN Secretary-General Antonio Guterres stated that the Aral Sea crisis “is probably the biggest ecological catastrophe of our time. And it demonstrates that humankind can destroy the planet.”

This UN Multi-Partner Human Security Trust Fund for the Aral Sea region in Uzbekistan (MPHSTF), under the aegis of the UN, serves as a unique unified platform for international development cooperation and the mobilization of donor resources to implement integrated measures. The 2016-2020 UNDAF for Uzbekistan contains two key thematic areas that directly correspond to the needs of the people of the Aral Sea region. The MPHSTF contributes to the UNDAF through the following five outcomes:

- Outcome 1:** The stress on local communities due to the deteriorating environmental situation reduced.
- Outcome 2:** The employment and income generation opportunities for local communities increased.
- Outcome 3:** Local community access to affordable and healthy food and clean drinking water secured.
- Outcome 4:** The overall health of the local population improved and healthy lifestyle promoted.
- Outcome 5:** The living conditions of local populations improved, with particular focus on vulnerable groups such as women, children and youth.

The Fund brings together the expertise of a diverse network of stakeholders, including international financial institutions and donor organizations, the Government of Uzbekistan, regional and local authorities, UN agencies, and community-based

organizations. The MPHSTF will go beyond short-term fixes and will advance comprehensive solutions that are innovative, foster technology exchange through South-South cooperation, actively include the affected communities, and are preventive rather than reactive in their nature. Thus, the MPHSTF and its projects complement and continue the efforts of the Government aimed at solving the problems of the Aral Sea region by applying a programmatic approach that supports development cooperation in a strategic, transparent and impartial fashion in line with global best practices.

## I. Human Security Context

### 1.1. Situation analysis

The problems of the Aral Sea arose in the 1960s on an alarming scale as a result of extreme regulation of the Syrdarya and the Amudarya, the major transboundary rivers of the region. During this period, the region's needs of water increased from 60 to 120 cubic km per year, 90% of which was used for irrigation.

Significant population growth, the scale of urbanization and intensive development of lands, construction of large hydrotechnical and irrigation facilities on the water-streams of the Aral Sea basin, without regards to the environmental consequences, were the main factors of the Aral Sea's drying out.

In the Central Asia region, unresolved trans-boundary water and energy discussions cause tensions between upstream countries reliant on hydropower, and downstream countries dependent on reliable water flow for agriculture. This array of transboundary challenges makes regional cooperation especially important. The drying out of the Aral Sea has caused a complex set of environmental, socio-economic and demographic problems of a global nature in the Aral Sea region.

#### 1.1.1. Environmental situation

The Aral Sea region was considered one with a wide variety of flora and fauna. The Aral Sea served as a climate-regulating basin and used to mitigate the sharp weather fluctuations throughout the region, which had a favorable effect on the living conditions of the population, agricultural production and the ecological situation. The air masses reaching the region during winter warmed up, and in summer cooled down over the sea.

**Intensification of the desertification process in the vast territory.** The vast areas of salt fields formed on the dried-up part of the sea turning into a new desert "Aralkum" with an area of more than 5.5 million hectares, covering the territories of Uzbekistan and Kazakhstan. Annually more than 75 million tons of dust and poisonous salts ascend from the Aral Sea. Dust trails coming up from the bottom of the Aral Sea reach 400 km in length and 40 km in width.

**Pollution and salinization of water and land resources.** The level of water salinity in the Aral Sea has increased by more than 13-25 times and exceeds the average level of mineralization of oceans by 7-11 times. As a result of salt dispersion during dust storms, the mineralization of irrigation water and groundwater increased, and the quality of land has sharply decreased. This led to a dramatic decrease in crop yields.

**Depletion of the gene pool of flora and fauna.** As a result of the drying out of the Aral Sea, 60 species of wild animals and plants vanished and the number of endangered species increased. Eleven species of fish, including rare species such as Aral spike and Aral salmon totally vanished, and 13 species of commercial fish decreased with severe consequences for fishery businesses.

**Change of the Aral Sea region climate and landscape.** A direct consequence of the Sea's drying out was the dramatic climate change, felt not only in Central Asia, but also

in other regions. The number of days with temperature over 40 degrees has doubled in the Aral Sea region since the early 1960s.

### *1.1.2. Demographic situation*

The demographic situation in the region is characterized by a decrease in the birth rate and an increase in mortality, which has led to a slowdown in population growth. Rural settlements with a population of less than 1,000 people make up 73.8%. The scale of external labor migration puts Karakalpakstan in the lead in the country (from 5 to 10% of the employed population in each surveyed district), the bulk of which are seasonal workers. At the same time, more than half of migrants are young people who return to their homeland with infectious diseases acquired in recipient countries, while others return with degraded professional skills and diminished traditional socio-psychological habits (loss of professional knowledge, destruction of family values, acquisition of alien habits and lifestyles, etc.). The high level of migration of the population due to the deterioration of living conditions might lead to catastrophic consequences associated with the irretrievable disappearance of culture, traditions, spiritual and historical heritage of the regions' people.

### *1.1.3. Water, health and sanitation*

The most acute issue is the access of the population to high-quality drinking water. More than half of the population of the Aral Sea region, especially inhabitants of rural settlements, use insufficiently purified and highly mineralized water. Rural areas have no centralized hot water supply (99.3%), while non-centralized systems do not function in all the households (27.5%).

Pollution of water and a large volume of dust and salt coming up from the bottom of the dried Aral Sea play a decisive role in high rates of deceases, general and infant mortality, as well as high rates of somatic diseases: anemia, kidney disease, gastrointestinal disturbances, an increase in the level of respiratory diseases, blood diseases, cholelithiasis, cardiovascular and oncological diseases.

Over the last decade, the infant mortality rate in the Republic of Karakalpakstan has exceeded the same indicators for the Republic of Uzbekistan by 13%, maternal mortality by 17% on average. The death rate from tuberculosis in the Republic of Karakalpakstan remains the highest in the country (19.4 cases per 100,000 population) and almost three times higher than the average for Uzbekistan.

The incidence of acute intestinal infections in Karakalpakstan over the past decade was 188 per 100,000 population, which is 1.4 times higher than the average for the Republic of Uzbekistan. In the structure of respiratory apparatus, chronic bronchitis is 2.5-3 times higher than the average for the country.

Children are exposed to strong and rapidly negative impact, which poses a particular danger to the gene pool of the population of the Aral Sea region, and, consequently, the consequences will be irreversible. The content of dioxin in the blood of a pregnant women and the milk of nursing mothers in Karakalpakstan is 5 times higher than in Europe.

#### *1.1.4. Socio-economic situation*

Agriculture dominates the structure of the economy, while the share of industry and services in the economy lags far behind the average republican indicators. The employment in the agricultural sector of the region makes up 33% of the total employment.

In the past, the Aral Sea was one of the richest fishing grounds in the world: the annual catch of fish in the reservoirs of the Aral Sea was 30-35 thousand tons. More than 80 percent of the inhabitants of the Aral Sea coast were engaged in the extraction, processing and transportation of fish and fish products. The loss of the fishing and transport potential of the sea resulted in non-functioning of such industries as fish processing and ship repair, tens of thousands of people became unemployed.

The survey results revealed that despite the measures taken, the region was ranked last in terms of its economic potential, agricultural production, and retail commodity turnover and penultimate in terms of its production of consumer goods. Thus, the total per capita income in Karakalpakstan is 1.4 times lower than the average for Uzbekistan. Karakalpakstan is ranked 12<sup>th</sup> among 14 regions of the country by volume of products and services indicators, the number of small businesses, and exports per capita, which features the level of entrepreneurship development.

All the surveyed areas are classified as territories with a relatively tense situation in the labor market. The unemployment rate in some areas reaches more than 10% (4.9% in the country), and youth unemployment averages 12.5%. The level of entrepreneurial activity remains low due to unfavorable climatic conditions.

Ensuring food security in the RK has its own specific features related to the state of land and water resources, environmental challenges, the level of socio-economic development, access to transport, and the capacity of food markets. In general, for 60% of the households, the affordability of food products is low.

There are problems associated with the lack of sustainable provision of electricity and fuel in the surveyed districts. The specificities of these districts require the development of alternative energy sources – solar and wind energy facilities.

The banking and financial institutions do not fully meet the needs of the rural areas in providing agro-machinery leasing services; new modern insurance services are not developed; and the rural population is not sufficiently provided with bank terminals. The transport system is of strategic importance among other components of production infrastructure. In some territories the RK has a relatively well developed railroads and automobile roads, but local access roads are either lacking or insufficiently maintained.

Access to preschool institutions is 30%, and in some districts – up to 20%. In 32% of settlements there are no such institutions at all. Particularly alarming is the lack of preschools in certain localities of the Shumanay (58.8%), Karauzyak (38.6%), and Kegeyli (36.6%) districts of the RK. There are no fundamental issues with regard to basic/general education schools, lyceums and colleges, and the coverage is fully ensured.

A summary report of the socio-economic survey of the needs of the population in the Aral Sea region is attached as Annex 1 to this document.

## **1.2. Measures taken by the Government of the Republic of Uzbekistan**

The initiatives of the Government of Uzbekistan to mitigate the consequences of the Aral Sea environmental crisis and the social and economic development of the Aral Sea region are part of its priority measures identified within the framework of the first "Strategy for Action in the Five Priority Areas of Uzbekistan's Development in 2017-2021".

In this context, the currently implemented State Programme "Complex of measures to mitigate the consequences of the Aral catastrophe, restoration and socio-economic development of the Aral Sea region for 2015-2018" should be mentioned. Projects and activities for a total amount of about USD 4,3bn within the framework of this Programme are planned to be implemented.

In 2016, several UN agencies in the Republic of Uzbekistan supported the Government's initiative and launched a Joint Program "Building the resilience of communities affected by the Aral Sea disaster through the Multi-Partner Human Security Trust Fund for the Aral Sea region", one of the main objectives is the establishment of the MPHSTF.

The adoption of another State Program on Development of the Aral Sea Region for 2017-2021 (PP-2731 as of January 18, 2017), with a total budget of over UZS 8422bn is the logical continuation of measures on mitigation of the negative consequences of the catastrophe.

The analysis of the measures taken and socio-economic policy pursued in the Aral Sea region indicate that the Government considers the implementation of the following fundamentally important measures as priority ones:

- 1) Measures on improvement of the management system, economical and rational use of water resources in the region.
- 2) Measures on creation of favorable conditions for reproduction and preservation of the gene pool and health of the population living in the environmental risk areas.
- 3) Measures on expansion of employment and generation of income sources aimed at improving the level and quality of life of the population of the Aral Sea region.
- 4) Measures on restoration of the ecosystem and biodiversity, conservation and protection of flora and fauna.

The Government of the Republic of Uzbekistan prioritizes objectives of mitigating the negative consequences of the Aral catastrophe and ensuring human security by stabilizing the ecological, social and economic systems of the Aral Sea region while addressing the Aral Sea catastrophe.

In this context, the initiative of the Government of the Republic of Uzbekistan to establish the Multi-Partner Human Security Trust Fund for the Aral Sea Region, which has received the UN support, is designed to be an effective mechanism for consolidating and coordinating the efforts of all development partners on a single platform.



### **1.3. Donors efforts**

The Aral Sea region has received substantial donor attention and financial support since the mid-1990s. Overall, 336 projects were implemented in the Aral Sea region by IFIs, multilateral and bilateral donor organizations with a total budget of \$3,048.7 million (loans: \$2,540.8 million, grants: \$507.9 million). These efforts had limited impact due to inadequate coordination of aid flows, duplication of activities, low degree of government ownership and the unsustainability of the results.

Projects focused on the following areas: agriculture, education, healthcare, infrastructure, water supply, social sector, natural resource management, rehabilitation of environment, income generation, poverty reduction, governance, area-based development.

UN agencies mostly focused on improving the living standards through healthcare services improvement, poverty reduction, innovation in agriculture, governance and environmental protection. World Bank and ADB credits and grants financed the infrastructure rehabilitation projects with more focus on water supply, irrigation, road construction, energy as well as assistance in the fields of education and health. The EU is providing funding for a project in the healthcare sector with the focus to improve mother and child health services, while MSF is helping address TB-related health issues in the region. GIZ, TIKa and MASHAV are implementing and planning to implement projects in the areas of agriculture, supported by capacity-building activities.

While donor aid has made notable contributions to improving the living standards of the population, certain gaps still exist in coordination of aid flows coming to the region. Lack of reliable, qualitative, and quantitative analysis of the previous interventions is one of the factors, which make it more complicated to raise donor assistance.

The effectiveness and impact of government and donor projects could also be strengthened through (i) more focus on evidence-based analysis through participatory approach to target the most vulnerable; (ii) work on value-added through an integrated approach to the regional development, and (iii) joint work on long-term regional strategic planning based on comprehensive analysis of the situation in the region.

### **1.4. Challenges and lessons learned from past interventions**

Experience of the UN Joint Programme “Sustaining livelihoods affected by the Aral Sea disaster” is highly relevant. As the first UN Joint Programme in Uzbekistan, it brought together five UN agencies working under one umbrella and demonstrated the benefits of an integrated response to a multi-faceted problem instead of the traditional stand-alone interventions. The project demonstrated the value of coordination, integrated planning, but also consolidating the implementation at the field level with one coordinating entity. While a number of different interventions have taken place and considerable assistance rendered to the population of the Aral Sea region in Uzbekistan by development partners, results have been less than anticipated because of some key challenges. Various problems of cooperation between the stakeholders have been identified that prevent further development of constructive dialogue, effective mobilization and use of the resources of technical and financial assistance by bilateral and multilateral partners. Among them, the following challenges can be noted:

- Problems associated with the identification of relevant and effective projects based on proper assessment of needs of local populations;
- Lack of a unified development strategy and coordinated assistance to the Aral Sea region;
- Lack of an inter-sectoral, integrated approach that can target multiple human insecurities at the same time;
- Problems of coordination between development partners and executing agencies that provide development assistance to the Aral Sea region;
- Weak administration of development projects;
- Low level of monitoring and performance evaluation system.

The presence of these and other problems has created obstacles for the effective use of limited assistance resources and joint initiatives among donors.

## II. New Approaches to Address the Consequences of the Aral Sea Disaster

The 2030 Agenda for Sustainable Development with its 17 Sustainable Development Goals reaffirmed the importance of multi-dimensional approaches to poverty that go beyond economic measures of deprivations. In particular, the 2030 Agenda puts the emphasis on communities that have not benefited from development progress and have been “left behind”. National-level policy change is recognized as a necessary, but not a sufficient condition to improve the living conditions of these populations groups.

### 2.1. The Concept of Human Security

In Karakalpakstan, the drying of the Aral Sea, a man-made disaster long in the making, is not only an environmental problem but a catastrophe for communities and people living on its shores. It is a human centered calamity. The environmental disaster has led to decreased livelihoods opportunities due to land degradation and water shortages as well as the disappearance of the fishing industry. It has also led to poor health and food insecurity by limiting access to quality drinking water and sanitation, both insecurities having been exacerbated by low incomes. The more limited livelihood opportunities gave rise to other negative externalities in people’s everyday lives.

In such an environment of inter-related complex challenges faced by individuals and communities, adopting traditional sector-specific or vulnerable group-tailored approaches is not sufficient. A more comprehensive and holistic approach is required that will address the root causes of the risks and challenges affecting the individuals and communities. The approach should be able to create positive linkages between multiple sectors (i.e. economic, social, political, health, environmental, etc.) and address the complex and interlinked challenges in a holistic way. The approach should also reflect the strengths and aspirations of the local communities. At the same time, all levels and partners need to be involved: interventions from the bottom up that build resilience of communities by empowering them should be synchronized with macro-level policies, improvements of governance institutions, and adoption of practices and regulations that protect vulnerable populations against threats they face.

In order to operationalize human security into programmes and policies, four key principles need to be applied, both to the process and outcome of programmes and policies. Within a protection and empowerment framework, human security promotes people-centered, comprehensive, context-specific, and prevention-oriented measures that seek to reduce the likelihood of crisis, help overcome the obstacles to development and promote human rights for all. The four key principles each have a rationale:

1) *People-centered* – The concept is decidedly human-centered as it considers people and communities as both the object and the subject of interventions to improve their survival, livelihood and dignity. All analysis of problems need to depart from the perspective of people experiencing them and all solutions need to build in the risks to their lives, their insecurities as well as their capacities.

2) *Comprehensive* - By understanding how a particular threat can negatively affect other insecurities, and how freedoms (from fear, from want and from indignity) are universal and interdependent, the concept calls for responses that are comprehensive, multi-sectoral and collaborative. This ensures coherence, eliminates duplication and advances integrated solutions that give rise to more effective and tangible improvements in the daily lives of people.

3) *Context-specific* - Recognizing that the causes and manifestations of threats vary considerably within and across countries, and at different points in time, human security advances solutions that are embedded in local realities and are based on the actual needs, vulnerabilities and capacities of Governments and people.

4) *Prevention-oriented* - Looking at the root causes of a particular threat, human security identifies the structural (external or internal), as well as the behavioral changes that are needed to help mitigate the impact, and, where possible, prevent the occurrence of current and future threats.

This is critically important for the areas affected by the Aral Sea disaster where a large number of partners are involved. Moreover, by properly identifying the root causes and developing effective collective measures to address them, human security approach helps all partners to better prioritize and coordinate their interventions.

Thus, mitigating the consequences of the Aral Sea disaster in Karakalpakstan and tackling some of the root causes of existing human security challenges require an integrated and multi-sectorial approach. UN agencies, "Delivering as One", capitalizing on their specialized knowledge and complementary expertise in the areas of health, education, livelihoods, local governance, family planning, women and youth, tourism and culture could provide a firm basis for designing, implementing and monitoring integrated programs in the region with the direct participation of beneficiaries and in close cooperation with the Government and other development partners.

The human security approach, in practical implementation will focus precisely on these points.

## **2.2. Establishment of the MPHSTF**

The establishment of a UN Multi-Partner Human Security Trust Fund for the Aral Sea region in Uzbekistan is an attempt to shine a light on many insecurities of the affected population, especially women and open a new level of dialogue on the need for comprehensive, people centered (as opposed to purely infrastructure-centered) solutions that builds on people's own needs, capacities as well as risks.

The MPHSTF, using the human security approach, will program for the long term by targeted vulnerabilities that put populations at risk. It identifies and supports practical and strategic interventions that build resilience.

It is important that the proposed priority directions and interventions within the programmatic framework of the MPHSTF are closely inter-linked and are in line with the United Nations Development Assistance Framework for Uzbekistan (UNDAF) for 2016-2020, which in turn is based on the concept of socially-oriented development of the country, adopted by the government with the purpose of "building an open democratic

legal state with a steadily developing economy." Thus, the emphasis on human-centered development is in line with the Sustainable Development Goals (SDGs) adopted by the UN General Assembly in September 2015.

### 2.3. Theory of Change

The MPHSTF initiative aims to be transformative, evidence- and human-rights based, and inclusive in its goal of catalyzing and strengthening a multi-sectoral and people-centered response to end one of the world's biggest man-made environmental disasters. There is a need to pursue multiple objectives: employment generation, natural resource management, improved social services in health and education, empowerment of women and girls, including the support to women in difficult conditions, good governance through participatory planning and implementation.

The Fund seeks to significantly contribute to building the resilience of communities affected by the Aral Sea disaster through ensuring effective governance and coordination of specific interventions of all development partners. In order to achieve the socio-economic transformation required to build the resilience of population, development co-benefits are also to be generated.

The Theory of Change has identified six clusters of inter-related problems (see full problem tree analysis in the Annex 2):

**Environmental insecurity** associated with the consequences of the Aral Sea crisis, the deterioration of the conditions and the quality of land and water resources, air basin, water supply. The underlying causes are toxic dust from the dried seabed, high levels of soil salinity, and poor and irregular water supply. These factors have a direct impact on the health and welfare of the population.

**Economic insecurity**, characterized by limited formal employment possibilities, and a lack of other income-generating opportunities of the agriculture-oriented region and the resulting imbalance in the food consumption structure. Moreover, the low level of investments in infrastructure and private sector development, as well as the low levels of knowledge and skills negatively contribute to this situation.

**Food insecurity**, characterized by a poor selection of basic foodstuff due to the poor land quality, the deteriorating state of the irrigated lands and water resources, and the lack of safe drinking water. Moreover, unsuitable agricultural practices, poor transportation infrastructure, and high import prices are underlying causes.

**Health insecurity**, characterized by malnutrition, an unsafe environment due to dust storms and shortages of safe drinking water, lack of access to high-quality health services, and insufficient supply of pharmaceuticals. The lack of qualified physicians, high cost of medicine, the isolation of the population, lack of awareness on health behavior negatively impact the health of population, especially women and girls.

**Social insecurity**, characterized by poor living conditions, and the lack of municipal services, and inadequate housing, which affect the wellbeing of households and disproportionately affects women and children. Low quality and distance of education facilities and the high cost of construction present further challenges.

**Ineffectiveness of donor assistance**, uncoordinated efforts cause duplication of assistance, while the insufficient prioritization of the Aral Sea region by donors leads to very limited contributions. The situation is further exacerbated by the lack of an overall strategy and the lack of consolidated database of development interventions.

Most of these challenges are exacerbated by the structural issues, including weak institutions and low capacity (in terms of lacking institutional performance, adaptability and inter-agency collaboration), low population density in the region, and the further degradation of the environmental situation triggered by the Aral Sea disaster.

## 2.4. Proposed programmatic solutions

The MPHSTF will focus more on the programmatic approach than on stand-alone projects in order to strengthen the interconnection and reduce transaction costs, allowing the government and partners at different levels to work in a coordinated and committed manner.

### 2.4.1. Purpose of the MPHSTF

In line with the Busan development effectiveness principles on local ownership, a focus on results, partnership of development partners, and transparency of aid, the mission of the MPHSTF is to make positive contribution in the area of development coordination, including through the following:

- Development and implementation of the **unified strategy** for development assistance to the Aral Sea region in cooperation with development partners based on the needs assessment of the region (demand) and the capacity of the donors (supply), which is expected to increase coherence;
- Intensification and raising the **regional and international dialogue** between donors and the Government of Uzbekistan on addressing the Aral Sea issues to a qualitatively new level, promoting the interest and attention of development partners to the Aral Sea problem;
- **Mobilization and increasing of funds** under the integrated, yet flexible arrangement, as well as **strengthening the coordination** of activities among the UN agencies;
- Introduction of effective project selection and approval procedures that will channel donor contributions within an **integrated and coherent framework**, depending on their own resources and financial potential. This will allow donors with limited financial potential to participate in the implementation of large projects through a co-financing scheme. Certain donors may be engaged in the fund's outcome areas, even if their own Strategy does not embrace the problems of the Aral Sea region;
- Ensure the **transparency of financial transactions** and increase the confidence of development partners in relation to partner organizations in the Republic of Uzbekistan;
- Build the **capacity of national organizations** in developing quality project proposals and implementing development initiatives in accordance with international standards;

- Conduct regular **monitoring, evaluation and reporting** on the MPHSTF activities as well as projects in accordance with international and national requirements and legislation.

#### 2.4.2. *Expected Outcomes and Outputs*

The United Nations agencies in Uzbekistan have agreed with the Government on an UNDAF that centers on eight Outcomes. The UNDAF's thematic areas are closely linked to the development priorities of Uzbekistan reflected in the government programs and strategies, with particular attention to socially and economically vulnerable groups and further elimination of disparities.

The MPHSTF will make a particular contribution to three UNDAF Outcomes:

**UNDAF Outcome 1:** Equitable and sustainable economic growth through productive employment, improvement of environment for business, entrepreneurship and innovations expanded for all.

**UNDAF Outcome 4:** By 2020, all people benefit from quality, equitable and accessible health services throughout their life course.

**UNDAF Outcome 6:** Rural population benefit from sustainable management of natural resources and resilience to disasters and climate change.

Specifically, the MPHSTF aims at building the resilience of communities affected by the Aral Sea disaster in line with SDG 3 (target 3.4, 3.8, 3.C), SDG 8 (targets 8.2, 8.4, 8.5), and SDG 11 (target 11.2, 11.5, 11.A). The above is expected to be accomplished through the following five outcomes of the MPHSTF:

**Outcome 1: The stress on local communities due to the deteriorating environmental situation reduced.**

**Outcome 2: The employment and income generation opportunities for local communities increased.**

**Outcome 3: Local community access to affordable and healthy food and clean drinking water secured.**

**Outcome 4: The overall health of the local population improved and healthy lifestyle promoted.**

**Outcome 5: The living conditions of local populations improved, with particular focus on vulnerable groups such as women, children and youth.**

Finally, in line with its mission, the MPHSTF will be devoted to interventions that are based on the vulnerabilities and insecurities of people of the region; that are integrated and necessitate coordination between donors and levels; that show results because they are context specific; and are sustainable and long term. The main prioritized directions have been defined and MPHSTF Results Framework has been developed (see Annex 3).

### 2.4.3. Eligibility of Projects

Addressing the multiple and accumulated insecurities of vulnerable populations affected by the drying up of the Aral Sea requires a people-centered approach involving communities themselves as stakeholders and agents of change. It also requires an integrated, holistic approach that addresses the causes and consequences of different threats to people's livelihoods, survival and dignity.

There is a need to pursue multiple objectives: employment generation, natural resource management, improved social services in health and education, good governance through participatory planning and implementation, with particular focus on economic empowerment of women and ensuring gender equality. The region can become a testing ground for the implementation of innovative local initiatives and innovative projects to address the most difficult social and economic problems (integrated drinking water supply management system, the latest technologies for resource conservation, development of water infrastructure and alternative energy sources, advanced information technologies in education, healthcare, agriculture, ecology, etc.).

#### **Four key criteria for the selection of project proposals for funding:**

The Government of Uzbekistan, within the framework of programmes on development of the Aral Sea region, is allocating large amounts of resources to this region. The activities within the MPHSTF will complement these efforts of the Government. The contributions to the MPHSTF will be mainly in the form of grants, i.e. they will represent limited resources. Hence, it is necessary to efficiently utilize the MPHSTF resources, and to leverage additional funding.

The MPHSTF funds will be directed towards developing and piloting new and innovative methods of solving problems, and the piloting of economic and business projects. Successful pilot projects will be presented to the Government, the donor's community and the business sector for further replication, not only within the Aral Sea region but also in other regions.

To be considered by the Fund, interventions need to meet the following criteria:

#### People-centered:

- Based on an assessment of the needs, capacities and insecurities of people as well as the risks of the region;
- Designed, implemented and evaluated with the help of the communities, building on people's own aspirations and capabilities
- Involving and mobilizing communities for problem identification, planning, implementation and evaluation and ensuring participation.
- Promote equal opportunities for men and women and ensure mainstreaming gender equality in proposed activities.

#### Context-specific:

- Designed based on the conditions of the Aral Sea region and on knowledge of the situation of communities targeted



- Differentiated consideration of the needs of the population at the level of each aul, kishlak, makhalla, rural areas, based on environmental factors, population distribution and transport accessibility
- Developed on the basis of community development plans for targeted localities.
- Ensuring sustainability (water, air, soil, remoteness) and support the mitigation of adverse effects

#### Integrated solutions:

- Based on the MPHSTF Theory of Change and not prepared in isolation
- Strategic and multidimensional, so that interventions target several insecurities at the same time
- Concentrating all interventions in the same area/with the same community, piloting around specific geographic area
- Implementing interventions through consortiums and partnerships of providers from different sectors and with different specializations in order to link interventions across different insecurity areas

#### Innovative:

- Focusing on technology transfer and the piloting of new approaches
- Investing in ICTs and research and development opportunities for the region
- Developing new public-private partnerships, including with the government, to ensure protection and empowerment for the long term

### III. Institutional aspects of the MPHSTF

#### 3.1. Governance arrangements

The MPHSTF region is established by Participating UN Organizations (PUNOs) that take full programmatic and financial accountability over the funds transferred to them.

The MPHSTF governance arrangements (see Figure 1) provide for an efficient and effective decision-making and oversight framework, ensuring streamlined allocation processes and clear lines of accountability. The governance arrangements are built on and informed by the principles of inclusiveness, transparency, accountability, and consensus-based decisions.

The MPHSTF is governed by a Steering Committee and supported by a Technical Secretariat. Dialogue with key representatives of other donors, government organizations, and civil society networks will be held by the Steering Committee periodically to foster cooperation and a shared vision.

**Steering Committee.** The Steering Committee has overall responsibility for the Aral Sea MPHSTF. It is responsible for leadership, strategic direction, and decisions on eligibility, allocation and other managerial and oversight aspects. It is co-chaired by the High-Level Government representative and the UN Resident Coordinator in Uzbekistan and consists of 2 representatives of donors (on rotational bases) contributing to the MPHSTF, 2 civil society members (on rotational bases), 5 Participating UN Organizations, and 2 national government representatives. The Administrative Agent and Secretariat will be ex-officio members of the Steering Committee.

The SC meets semi-annually and decides by consensus. Detailed terms of references for the Steering Committee are included in the Operational Guide of the MPHSTF. The full functions of the Steering Committee are detailed in the Steering Committee Terms of References in the Annex 4.

**Advisory Committee.** At a later stage the Steering Committee might consider the establishment of an Advisory Committee, which would serve as an information-sharing forum once the number of donors and Participating UN Organisations becomes so large, that their inclusion in the Steering Committee would no longer be feasible.

**Technical Secretariat.** In order to ensure good programming the MPHSTF will be supported by the Technical Secretariat. The Technical Secretariat provides technical, operational and administrative support to the MPHSTF Steering Committee and works under its overall guidance. The Technical Secretariat supports the entire programming cycle of the MPHSTF with a workplan and budget reviewed annually by the Steering Committee.

The Technical Secretariat also provides advice and quality control over the MPHSTF implementation and coordinates the meetings. It facilitates collaboration and communication between the Government of Uzbekistan, Participating UN Organizations, contributing donors and the co-chairs of the MPHSTF. It develops and implements a resource mobilization strategy to attract investments from other donors.

A key role of the Technical Secretariat is to review the submission of projects/proposals to the Steering Committee. The Technical Secretariat will be responsible for reporting on the implementation of funded projects. Detailed terms of references for the Technical Secretariat are included in the Operational Guide of the MPHSTF. The full functions of the Technical Secretariat are detailed in the Technical Secretariat Terms of References in the Annex 5.

**Administrative Agent.** The MPHSTF will be administered by the Multi-Partner Trust Fund Office acting as the Administrative Agent (AA). The MPTF Office administers over 100 UN common funding instruments (<http://mptf.undp.org>). The AA will be entitled to allocate an administrative fee of one percent (1%) of the amount contributed by each donor, to meet the costs of performing the AA's standard functions as described in the MOU concluded between AA and Participating UN agencies following UNDG standard formats.

The MPTF Office is responsible for Fund design and set-up, maintenance of the Fund account, receipt of donor contributions, and disbursement of funds upon instructions from the Steering Committee, and provision of periodic consolidated reports. Subject to the availability of funds, the Administrative Agent shall normally make each disbursement to the Participating UN Organization within three to five business days after receipt of the Fund Transfer Request.

In addition, the UN MPTF Office through its GATEWAY (<http://mptf.undp.org/>) offers a web-based service portal, which provides real-time financial data generated directly from its accounting system. It provides all partners and the general public with the ability to track information on contributions, transfers and expenditures. Further details on the function of the Administrative Agent are available on the MPTFO website.

**Participating UN Organizations.** MPHSTF implementation is the responsibility of the Participating UN Organizations. The organizations, after signing a Memorandum of Understanding with the Administrative Agent, can receive resources from the MPHSTF. Each Participating UN Organization is programmatically and financially responsible for MPHSTF resources received in accordance with its own regulations, rules, policies and procedures. Participating UN Organizations develop project/programme proposals, and report on implementation and financial performance to the Steering Committee through the Technical Secretariat and the Administrative Agent as indicated in the MOU. The Participating UN Organizations shall have operating capacity for the prompt implementation of projects/programmes approved by the Steering Committee.

**Contributors.** The MPHSTF is funded through contributions of the Government, bi-lateral or multi-lateral donors, and International Financial Institutions. The active participation of the Government in the formation of the fund is a signal intended to attract more potential donors to the fund, and to increase the importance of the Aral disaster problem internationally. Also, the Government can encourage the participation of the private business in the formation of the fund's resources by providing tax or other privileges to private enterprises.

Acceptance of funds from the private sector will be guided by the criteria stipulated in the UN system-wide guidelines on cooperation between the UN and the Business Community

((the UN Secretary General's guidelines: [UN Secretary General's guidelineshttp://www.un.org/partners/business/otherpages/guide.htm](http://www.un.org/partners/business/otherpages/guide.htm)).

Non-earmarked contributions are encouraged. Such approach will enable timely decision making on funding the most priority projects / programs within the framework of the MPHSTF. In this case, bureaucratic procedures within the framework of the fund will be minimized.

However, if the non-earmarked contributions are not possible, earmarked contributions can be made. According to the UNDG rules, earmarking of donor contributions should be done at the Fund outcome level (not a particular agency or output).

The contributions to the MPHSTF will be deposited in US dollars. Additional contributions may be accepted only in fully convertible currency. Such contributions will be deposited into the bank account designated by the Administrative Agent. The value of a contribution payment, if made in other than US dollars, will be determined by applying the UN operational rate of exchange in effect on the date of payment.

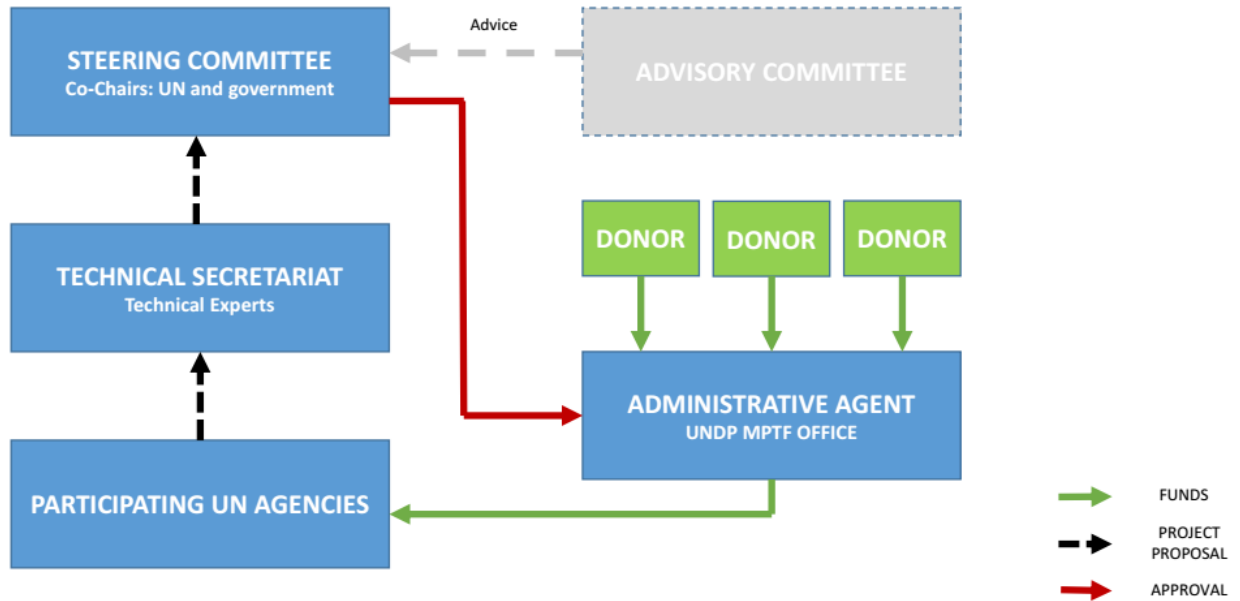
### **The role of the Government and UN in operational aspects of the MPHSTF**

The role of the Government of the Republic of Uzbekistan in supporting effective operation of the MPHSTF will be creation of favorable institutional, legal and financial environment.

The UN within its mandate, available resources and experience will support the MPHSTF in preparation of financial, legal and operational documents according to international standards. The UN will also assist the Government in its interaction with donors, international financial institutions, thus facilitating the mobilization of resources within the framework of the MPHSTF strategy.

Apart from that, the UN through its agencies, will assist in strengthening the capacity of various national partners, involving them in the process of developing, implementing and monitoring projects / programs.

**Figure 1. Fund Governance and Financial Architecture**



### 3.2. Project Approval Cycle



The MPHSTF will allocate funds to Participating UN Organizations based on their proposals. The Participating UN Organizations will be invited to submit proposals to the Secretariat upon issuance of a Call for Proposal.

The Steering Committee, with the support of the Technical Secretariat and Administrative Agent, will prepare a standard proposal form to be used by all Participating UN Organizations when submitting proposals to the MPHSTF.

The Technical Secretariat will review the proposals submitted by Participating UN Organizations to ensure that all the required information is included in the standard proposal. The Secretariat will present the findings of its Technical Appraisal of Proposals to the Steering Committee, along with all relevant project documentation.

At its regular meetings, the Steering Committee will render a decision on funding allocations to each Proposal, considering the findings of the Technical Secretariat appraisal. The Steering Committee shall

have access to all information it deems relevant in making its decision. If the Steering Committee rejects a project or if it requests further study or review it shall communicate its decision or request to the Technical Secretariat to take the appropriate follow up action.

Upon approval of a proposal the Steering Committee will advise the Administrative Agent to disburse the authorized amount to the Participating UN Organizations. The request to transfer funds will be signed by the Co-Chairs of the Steering Committee and must include

all relevant documentation to enable a disbursement. The Administrative Agent will disburse the authorized amounts to Participating UN Organizations within five business days of receiving all the required documentation and instructions from the Steering Committee.

**Flow of funds.** As indicated above, the resources will be held by the Administrative Agent in a dedicated fund account. The funds in this account will be transferred to Participating UN Organizations by the Administrative Agent based on instructions from the Steering Committee. Implementing agencies, represented by UN agencies participating in the activities of the MPHSTF will have to open ledger accounts to receive these funds.

The PUNOs upon receipt of a confirmation of funds transfer into their ledger accounts, will transfer these funds into the accounts of the implementing agencies (government agencies, NGOs, etc.) that will actually implement projects/programs within the framework of a unified strategy on the ground.

It should be noted that there is a minimum threshold of US \$ 100 thousand per transaction.

Indirect costs of the Participating Organizations recovered through programme support costs will be 7%. All other costs incurred by each Participating UN Organization in carrying out the activities for which it is responsible under the Fund will be recovered as direct costs.

**Parallel funding mechanisms.** At the same time, there might be cases when the donor expresses readiness to finance projects independently, but in line with the MPHSTF strategy. In this case, the contributions will be sent directly by such donor to the fund implementers informing and coordinating with the Steering Committee the alignment of such allocations with this Terms of Reference, relevant national and local government priorities.

The development strategy can also include projects or programmes to be financed by loans of international and national financial institutions.

Legal and procedural aspects of the activities of the MPHSTF will be developed in accordance with and meet the requirements of the current legislation of the Republic of Uzbekistan, and in accordance with the requirements and practices of the UNDG and UN MPTF Office.

The MPHSTF will be formally established upon signature of Memorandum of Understanding between the UN MPTF Office and the Participating UN Organizations designating the UNDP's MPTF Office as the Administrative Agent. The MPHSTF starts its operational activities upon signature of a funding agreement between at least one donor and the Administrative Agent.

Based on economic rational, it is necessary to emphasize the fact that the threshold for establishing any multi-partner trust fund is \$5 million per year for the entire operational period (minimum 5 years).

### **3.3. Risk management strategy**

The objective of a risk management strategy is to facilitate the achievement of MPHSTF-related objectives considering the risks in the context in which it operates. Based on risks identified, the Technical Secretariat will develop a risk management strategy with the following main objectives: accelerate MPHSTF implementation and increase its impact, ensure that the MPHSTF's interventions meet the "Do no harm" principles, verify that resources are used for foreseen purposes and improve risk management capacity of national partners.

The risk management strategy will:

- Develop shared understanding of risks faced by the MPHSTF;
- Identify roots and causes of the risks;
- Establish the MPHSTF's policies regarding identified risks;
- Determine risk treatment through measures of mitigation or adaptation;
- Establish information strategies and common messages about the risks.

Every programme approved by the MPHSTF shall comply with the risk management strategy. The adherence to this strategy will be one of the selection criteria during the process of programme review. The MPHSTF risk management strategy is however not a replacement for programme risk evaluation/management. Further details are contained in the Annex 6.

### **3.4. Monitoring, evaluation and reporting**

#### **3.4.1. *Monitoring and evaluation***

Monitoring and evaluation of the Fund will be carried out in accordance with the national context, a results-based management method will be applied, with overall coordination by the UN system. The continuous monitoring and evaluation will be done by the Participating UN Organizations and overseen by the Technical Secretariat.

The monitoring and evaluation system for the MPHSTF will serve two functions: first, periodic assessment of project/programme implementation and performance of activities (M&E of Project Performance), and second, evaluation of their results in terms of relevance, effectiveness and impact (M&E of Project Impact).

The Technical Secretariat advises the Participating UN Organizations on appropriate performance indicators and data gathering, consolidates the information received from the Participating UN Organizations into a central results-based management system. This system gathers performance data at the level of outcomes and outputs, linking program-related and financial result indicators to enable the evaluation of both efficiency and effectiveness of the MPHSTF.

The Technical Secretariat will monitor and evaluate the implementation of projects/programmes against the programmatic framework of the MPHSTF, consolidate all reporting submitted by PUNOs, and send consolidated reports to the Steering Committee.

An overall mid-term and final independent evaluation will also be commissioned by the Steering Committee to assess the overall performance of the MPHSTF, its design,

management and overall performance against the objectives. This evaluation may provide specific recommendations to the Steering Committee to guide any revision of the Theory of Change, the Governance Arrangement and Programming Cycle if deemed necessary.

Detailed description of the M&E system is included in the Operational Guide of the MPHSTF.

#### *3.4.2. Audit*

The AA and Participating UN Organizations will be audited in accordance with their own Financial Regulations and Rules and, in accordance with the Framework for Joint Internal Audits of UN Joint Activities which has been agreed to by the Internal Audit Services of Participating UN Organizations and endorsed by the UNDG in 2014.

#### *3.4.3. Reporting*

The responsibilities related to reporting are detailed in the Memorandum of Understanding. All Participating UN Organizations will prepare annual and final reports on activities and expenditures according to a common format designed for the MPTF. Ad hoc periodic reports may also be requested by the Steering Committee when required.

**Narrative report.** The Participating UN Organizations will submit the following programme reports to the Technical Secretariat for consolidation and further transmission to the Steering Committee, and the Administrative Agent:

- a) Annual narrative reports for each programme to be provided no more than three months (March 31st) after the end of the calendar year;
- b) Final narrative reports after the end of activities contained in the program-related approved document, including the final year of such activities, to be submitted no more than four months (April 30th) in the following year after the operational closure of the programme.

Annual and final reports should demonstrate results based on evidence. Annual and final narrative reports should compare actual results against estimated results in terms of outputs and outcomes and explain the reasons of higher or lower performance. The final narrative report will also include the analysis of how the outputs and outcomes have contributed to the MPHSTF's impact.

**Financial Report.** The Participating UN Organizations will present the following financial statements and reports for each programme to the Administrative Agent:

- a) Annual financial statements and reports by December 31st, regarding resources released by the MPHSTF to them; these shall be provided no more than four months (April 30th) after the ending of the calendar year;
- b) Final certified financial statements and financial reports after the completion of activities contained in the program-related approved document, including the final year of such activities, to be submitted no more than six months (June 30th) in the following year after the operational and financial closure of the MPHSTF.

Based on these reports, the Technical Secretariat will prepare annual consolidated narrative and financial reports, which will be submitted by May 31 to each MPHSTF contributor and to the Steering Committee. The Final consolidated report will be provided



no later than six months (30 June) after the end of the calendar year in which the operational closure of the MPHSTF occurs.

#### **3.4.4. Accountability and transparency**

These clauses are detailed in the legal instruments that will govern the MPHSTF: the MOU.

**Accountability.** All Participating UN Organizations will provide implementation services in accordance with their own financial regulations, rules, policies and procedures.

For each programme/project approved for funding, each Participating UN Organization will provide the Administrative Agent with annual and final financial reports and financial statements prepared in accordance with their accounting and reporting procedures, as stated in the legal agreements signed with the Administrative Agent.

The Administrative Agent and the Participating UN Organizations will be audited in line with the MOU's audit provisions, 2014 Framework on Joint Internal Audit of UN Joint Activities and according to their own financial rules and regulations.

**Transparency and public disclosure.** The Administrative Agent will develop a dedicated web page on the MPTF Office GATEWAY to ensure appropriate transparency and accountability. In line with the UN's commitment towards public disclosure of its operational activities the MPHSTF web-page will contain real-time information on summaries of SC decisions, contributor commitments and deposits, transfers to the Participating UN Organizations, approved programmes and programmes awaiting approval, funding levels, annual financial and progress reports, and external evaluations, as appropriate.

Each Participating UN Organization will take appropriate measures to publicize the Aral Sea MPHSTF and to give due credit to other Participating UN Organizations. All related publicity material, official notices, reports and publications, provided to the press or Fund beneficiaries, will acknowledge the role of the host Government, donors, Participating UN Organizations, the AA, and any other relevant entities. In particular, the AA will include and ensure due recognition of the role of each Participating UN Organization and partners in all external communications related to the Joint Fund.

Whenever possible and to the extent that it does not jeopardize the privileges and immunities of UN Organizations, the UN Organizations will promote donor visibility on information, project materials and at project sites in accordance with their respective regulations, rules, policies and procedures.

### **3.5. Amendments, duration and termination**

The Steering Committee can modify, by mutual agreement, any of the provisions of these ToR in writing or establish complementary agreements.

The MPHSTF will have an initial duration of 5 years, from 12 November 2018 to 31 December 2023. The Steering Committee has the authority to modify the MPHSTF's duration. The Administrative Agent has the authority to proceed with the closure of the MPHSTF by mutual agreement.

Any remaining balance in the MPHSTF's account after its closure will be used for a purpose mutually agreed by the Steering Committee and the Contributors, or it will be reimbursed to the Contributor(s) in proportion to their contribution to the MPHSTF.

**SUMMARY REPORT**

**on**

**A SOCIO-ECONOMIC SURVEY OF THE NEEDS OF THE POPULATION IN THE ARAL  
SEA REGION**

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## INTRODUCTION

**Relevance.** Resolving the socio-economic problems of the territories affected by a major environment disaster caused by the Aral Sea drying remains one of the priorities for the Government of Uzbekistan and the international community. In this regard, it is important to identify the actual needs of the population through direct dialogue in the fields so that to take particular additional measures to address those needs.

**The goal of the survey** is to identify the key factors affecting the living standards and security of the population in the region of the ecological disaster.

**The objectives of the survey** are to identify the systemic problems and their origins that affect the security of the population as well as to develop the proposals for mobilizing resources to address the needs of the households residing in areas of the environmental crisis.

**The methodology** is based on conducting a social survey of the households and interviewing of focus groups. The survey was conducted in eight selected districts of the Republic of Karakalpakstan covering 116 mahallyas and 1600 households. Eight focus groups were organized in each region that covered 1600 respondents representing the local authorities and civil society.

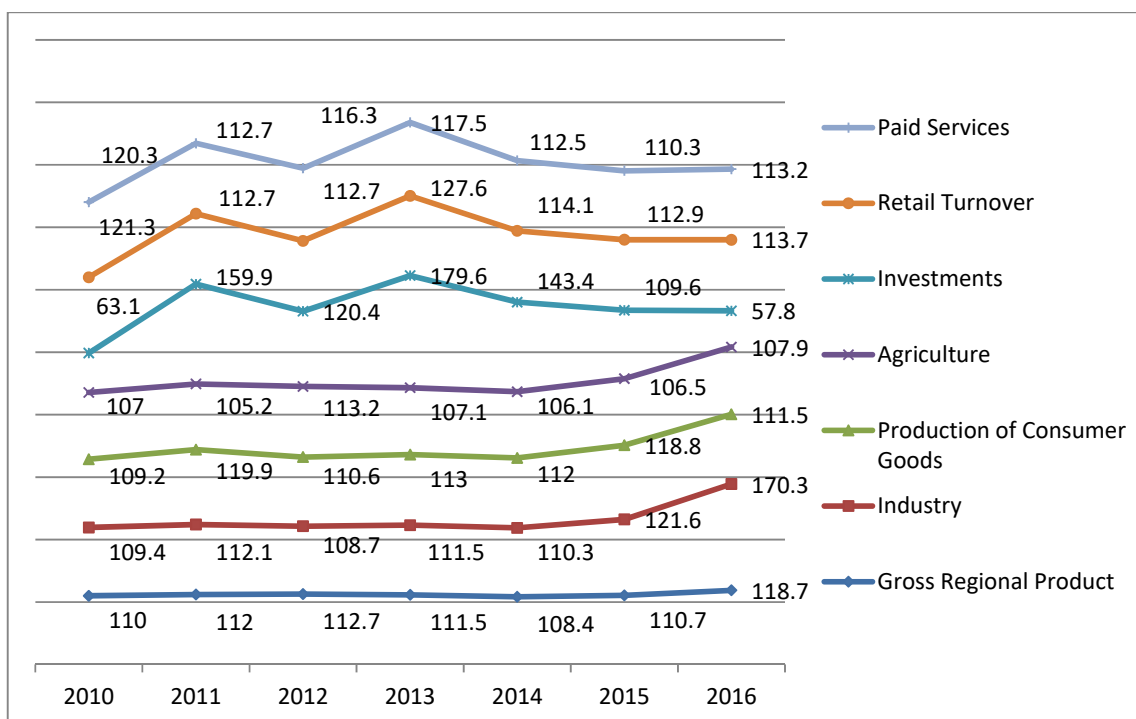
**The survey outcomes** are of practical importance for the elaboration of additional measures for the socio-economic development of the surveyed areas, as well as for the preparation of the rationale and establishment of a multi-partner trust fund and attraction of donors.

### I. GENERAL CHARACTERISTICS OF THE REGION

**The structure of economy.** The Republic of Karakalpakstan, in terms of its area, ranks first among the regions of the country. More than 80% of its territory is occupied by desert dunes. The vast territory with a low population density and the direct vicinity of the Aral Sea affect the sustainable development of the region.

During 2010-2016 the gross regional product of the Republic of Karakalpakstan has increased 2.7 times (the share of GRP in the country's GDP is 3.3%). The GRP growth (over 10%) achieved in recent years is primarily related to the development of industry (the commissioning of the largest enterprises, such as the Kungrad Soda Plant and the Ustyurt Gas Chemical Complex). As a result, the share of industry in the structure of the economy increased from 14.6% in 2010 to 25.7% in 2016, while the share of agriculture decreased from 22.0% to 14.8%. Nevertheless, without taking into account these two large enterprises, the agriculture still occupies an important place in the structure of the economy, and the shares of industry and services sectors are inferior in comparison with the average for the country.

In spite of the measures being taken, the economic potential of the Republic of Karakalpakstan is significantly lower than that in the other regions of the country (according to 2016 data, Karakalpakstan is number 10 in terms of industrial production (per capita), the last – in terms of agriculture, GRP, and retail turnovers, and number 13 – in terms of production of consumer goods.



**Figure. The dynamics of the macro-economic indicators of the Republic of Karakalpakstan (growth rates comparing to the previous period, %)<sup>1</sup>**

**Employment and labor market.** The employment issues in the Republic of Karakalpakstan are the most acute relative to the other regions. Ensuring employment of the population is ranked as the first one among the potential social risks identified during the survey.

There is a downward trend in employment – from 64.7% in 2000 to 61.0% in 2016. About 35.0% of the total number of employees is occupied in the informal sector, while the threshold level for this is 30.0%. In the structure of employment, the share of employment in the agricultural sector decreases, although the main part of the workforce is still involved in this sector (28.0%). The largest increase in employment falls on the service sector.

Currently, the unemployment rate in the region is relatively high (5.4% versus 4.9% in the country, according to the Ministry of Employment of the Republic of Karakalpakstan and the Republic of Uzbekistan respectively). All the surveyed areas are classified as areas with a relatively tense situation in the labor market, where the unemployment rate varies from 5.8% to 10.4%, and youth unemployment is 12.5%.

Taking into account all the above, it is necessary to increase the effectiveness of the measures taken to create new jobs. Considering the natural, economic and ecological conditions of the region, along with traditional forms, non-standard forms of employment should be developed here.

**Incomes and expenses of the households.** In terms of real incomes per capita, the Republic of Karakalpakstan lags behind the national average by almost 1.4 times and ranks 12<sup>th</sup> among the regions. According to the results of the survey, 54.5% of incomes are generated from entrepreneurial activities, including 40.4% generated from private

<sup>1</sup> Source: the calculations are made on the basis of the data provided by the Department of Statistics of the Republic of Karakalpakstan.

small holdings. As evaluated by the focus groups, 10-15% of the households live at the account of labor migrants' remittances.

The incomes of the population affect the consumption of the families. Food products prevail in the consumption structure (60.6 % after saving and mandatory payments), followed by non-food products (20.0%) and services (19.4%). The current irrational consumption structure is largely explained by the culture of the rural population that traditionally consumes less non-food products and services. Besides, it is common for the rural areas that the supply of non-food products and services is unavailable.

**Entrepreneurship.** The contribution of small business to GRP comprised 65.0% in 2016 versus 67.5% in 2006. In terms of the level of small business development the Republic of Karakalpakstan ranks 12<sup>th</sup> among the country's regions.

The objective regional factors hampering the sustainable development of entrepreneurship include: the transport remoteness of settlements and low population density, low potential of the mineral resource base of rural areas, poor quality of land and water resources, as well as unpreparedness and low initiative of the rural population.

According to the results of the survey, only 25.9% of the respondents prefer to do business (versus 49.5% in the country in general). Based on the local initiatives, it is advisable to develop a targeted program of business organization at the level of local communities (auls and kishlaks) (30%), expand access to soft loans (29.5%), and provide trainings and re-trainings (17.1%).

It is recommended to create small rural cooperatives, develop cooperation with large enterprises and home production, collect and process medicinal plants, develop handicrafts and services at home.

**Food security.** Ensuring food security in the Republic of Karakalpakstan has its own specific features affected by the local environmental situation, poor quality of land and water resources, access to transport and the capacity of the food market.

According to the balance calculations, the level of provision with the main food products of own production is: for bread and bakery products - 33.2%, for meat and meat products - 75.0%, for milk and milk products - 81.0%, for fruit and berries - 65%. The imported products include sugar, vegetable oil, flour and confectionery.

The food products accessibility index calculated on the basis of the population earnings is relatively low, which affects the structure of rational nutrition. The nutritional adequacy ratio is relatively low on meat (71.0%), milk and dairy products (80%), eggs (87%), potatoes (86%), and fruits (57%). This picture demonstrates the irrationality of nutrition and, above all, the insufficient consumption of proteins and vitamins.

**Industrial infrastructure.** The level of road development is more than 4.0 times behind the average for the country. This is explained by the vast area low population density.

According to the survey, 43.2% of the population is not satisfied, and 24.3% is partially satisfied with the transport infrastructure facilities operations. The key reasons for dissatisfaction include low quality of the local automobile roads, which need to be repaired (72.4%) and insufficient number of transport routes (16.3%).

In view of the needs of the population, it is necessary to address, as a matter of priority, the local roads issue and optimize the passenger operations taking into account the remoteness and inaccessibility of rural areas.

Large industrial infrastructure facilities, such as gas pipelines and electricity networks, operate in a relatively satisfactory manner.

**Market infrastructure and local budget.** The market infrastructure facilities in general correspond to the available social and economic potential. According to the survey, 54.5% of the population is satisfied, 30.8% is partially dissatisfied, and 14.8% is fully dissatisfied with the services of banking and financial institutions. The main reasons for dissatisfaction include high loan interest rates (27.3%), bureaucracy (14.9%), lack of cash and unavailability of plastic card payment terminals (26.4%). The local needs in leasing of agricultural machinery, in modern insurance services, as well as in the market infrastructure facilities are not fully satisfied.

The Government of the country pays special attention to the integrated development of the regions through the strengthening of the financial base of local budgets. The budget of the Republic of Karakalpakstan is subsidized. Among 14 districts, only Kungrad and Muynak district budgets have no subventions. In order to increase the revenue base of the local budgets and reduce subventions, besides improving the economic capacity of the territories, it is necessary to implement a number of additional measures aimed at institutional transformation and consistent decentralization of inter-budgetary relations.

## II. DEMOGRAPHIC SITUATION

As of the beginning of 2017 the population of the Republic of Karakalpakstan comprised 1.82 mln. people or 5.7% of the country's population. In recent years, the region has experienced a decline in population growth (1.5% of annual population growth, compared to 1.7% in the country in general). The birth rate in 2016 was 22.0 ppm (versus 22.8 ppm in the Republic of Uzbekistan). In the surveyed districts there is a downtrend in birth rate and an uptrend in mortality.

The maternal mortality in 2012-2016 declined from 20.2 to 17.3 per 100,000 births, while infant mortality remained almost unchanged.

Despite a downtrend in population migration (from 23,000 in 2012 to 14,400 in 2016) to foreign countries, this indicator is the highest among the country's regions. In terms of labor migration the Republic of Karakalpakstan is also one of the first in the country. According to the survey, in average, 19.8% of households have a family member working abroad.

The processes of urbanization are slow in the region. For instance, in 2016 the share of urban population comprised 49.0% (versus 51.0% in the Republic of Uzbekistan). The share of urban population in Karauzyak district is only 29.9%, in Kanlykul district – 24.4%, in Nukus district – 21.0%, and in Shumanay district – 26.2%. Low urbanization negatively affects the sustainability of the socio-economic development of rural areas.

An important feature of the Republic of Karakalpakstan is the existing population settlement pattern: the region's dominating form of settlement is a rural settlement with a population of up to 1000 people (the share of such settlements in Karakalpakstan is 73.8% against 47.8% in the Republic of Uzbekistan).

17.4% of the rural population resides in small rural settlements (versus 4.7% in Uzbekistan in general). At this, the share of settlements with a population of less than 1,000 people in Kegeyli district reaches 96.7%, in Karauzyak district – 95.0%, in Shumanay district – 93.5%, and in Chimbay district – 92.0%. This specific feature shall be taken into account when ensuring the safety and security of the population and, in particular, when optimizing the placement of social infrastructure facilities.

The trends in demographic behavior have an impact on the composition and the structure of the households. According to the results of the survey, the share of children under 16 is 26.6%, the share of people of working age is 61.8%, and the share of



pensioners is 7.6%. This data generally coincides with the official statistics. A small difference in the age composition of the population of the Republic of Karakalpakstan from the national average is observed for pensioners (7.6% and 9.5% respectively) and children under 16 (26.6% and 28.4%, respectively).

The structure of the households in Karakalpakstan and the country as a whole is somewhat different. In particular, the households with 3-5 members make up 54.8% and 47.6%, respectively; single-family households account for 67.1% and 59.5%; the households with migrants comprise 19.8% and 15.6%; and the households having people with disabilities make up 9.8% and 9.1% respectively. The peculiarities of the composition and the structure of the households in the surveyed districts shall serve as a reference point in determining the action strategy for targeted social protection and demand-making for goods and services.

### **III. DEVELOPMENT OF AGRICULTURE AND ITS PRIORITY DIRECTIONS**

The development of agriculture in the Republic of Karakalpakstan has a number of features related to the need to adapt the production structure to the environmental situation, degraded land and water resources and climate change. At the beginning of 2017, the irrigated area in the Republic of Karakalpakstan comprised 509.6 thousand hectares with a total land area of 16.7 million hectares.

During 2010-2016, the volume of agricultural production increased 1.9 times. The agriculture development dynamics is unsustainable (average annual growth rate is 107.0%). There is a tendency for a decrease in the share of livestock (from 53.2% to 51.7%) and an increase in the share of crop production (from 46.8% to 48.3%). The dynamics of production of basic agricultural products (cereals, rice, vegetables, fruits, meat, milk, eggs, etc.) is positive.

The survey has identified the potential for plant cultivation by the households (rice and legumes, potatoes, vegetables and melons, grapes and fruits). However, the gap between the surveyed districts in terms of household production of certain types of products is quite high. For instance, the gap per household between the districts is: for rice production – 2.6 times, for legumes – 11.5 times, for potatoes – 1.7 times, for vegetables – 9.2 times, and for melons – 5.1 times.

A similar differentiation was found in livestock production (livestock number, meat, milk, eggs). In terms of the availability of cattle, sheep and goats, horses and rabbits, the districts have a certain potential. The gap in their availability per 100 households is as follows: for cattle – 3.4 times, for sheep and goats – 4.5 times, for poultry – 1.5 times.

The condition of land and water resources has a negative impact on the effective use of the available crop and livestock potential. Half of the irrigated land is of low quality. In 2016, 73.4% of irrigated lands had a different degree of salinity, including 30.7% of low salinity, 35.7% of medium salinity, and 7.0% of high salinity. A high level of salinity is typical for Muynak (96.0%), Chimbay and Nukus districts (more than 80.0%).

The level of groundwater in irrigated areas remains high, its depth is 1-1.5 meters (10.9%); 1.5-2.0 meters (64,0%) and 2.0-3.0 meters (14,0%). These waters have a high level of mineralization.

The dynamics of the actual water consumption exceeds the established norms of irrigation, which indicates the inadequacy of measures aimed at water use rationalization.

In view of the existing systemic problems, the key priorities for the development of agriculture should provide for cardinal changes in the crop structure based on a

differentiated approach to each district and each farm and taking into account the natural, climatic and environmental conditions, as well as the transition to innovative water use technologies and improving the quality of land capacity.

#### IV. SOCIAL INFRASTRUCTURE

**Access to education.** The evaluation of the access to the education system has revealed that certain problems exist in terms of children coverage with pre-school educational institutions. In the surveyed districts the coverage of children by preschool institutions is identical to the national average (32.7%). However, in Shumanay and Muynak districts the access to pre-school institutions remains relatively low (16.7% and 29.1% respectively)

The main reasons for non-enrollment in kindergartens are: lack of demand (51.7%) and unavailability of the institution in the district (31.9%). The unavailability of kindergartens in certain settlements of Shumanay (58.8%), Karauzyak (38.6%) and Kegeyli (36.6%) districts are of particular concern.

In view of the existing problems it is advisable to develop a kindergarten dislocation chart in each district. The chart shall be based on the district geographic position and the forming demand and followed by the implementation of the roadmap.

With regard to general education schools, lyceums and colleges, there are no systemic access, and the coverage of children is fully ensured. Individual reasons for non-attendance are mainly related to short-term illness (68.8%), as well as to travel and food expenses (9.3%). These reasons are typical for the surveyed areas.

**Access to the healthcare system.** The results of the survey confirmed that in view of the negative consequences of the Aral Sea crisis, there is a need to take effective measures to ensure that the healthcare system is accessible for the population. According to the survey, one third of the households regularly attend healthcare institutions, including family clinics (34.8%), rural medical centers (SVP) (29.9%), hospitals (27.1%), and private clinics (1.8%). The main reasons for non-attendance of health facilities are the absence of such need (89.1%) and the remoteness of the institutions (2.6%).

In view of the existing problems (low quality of emergency medical care, inexperience of doctors, insufficient provision of medical equipment, remoteness of medical institutions, and lack of narrow specialists) and their corresponding reasons, it is advisable to apply a differentiated approach while developing proposals for improving quality and expanding access to medical services for each district.

**Access to public services.** The main reasons for dissatisfaction with the housing conditions are the issues related to allocation of land for construction (46.7%) and high cost of construction materials (40.0%). The latter has to do with additional transportation costs due to the remoteness of the rural settlements. The residential construction in rural areas has specific features associated with climate and ecology, which require the development of regional construction norms and a design system adapted to the local conditions.

The most relevant issue is the population access to quality drinking water. According to the survey, dissatisfaction in this sphere is 33.9%. The main reasons are irregular water supply (26.9%), poor water quality (37.8%), and long distance to the water source (19.0%). 60% of respondents in the surveyed areas noted the lack of water supply. The mentioned issues shall become important directions for managerial decisions aimed at

securing the people's access to drinking water as the most necessary and socially significant resource.

In rural areas, in fact, there is no centralized hot water supply (99.3%), while decentralized supply is available only in certain households (27.5%).

Dissatisfaction of the population with the access to gas and fuel supply is associated with irregular gas supply and unstable delivery of liquefied gas cylinders. The population, in general, prefers liquefied gas in cylinders due to its ecological compatibility and transportability.

According to the survey, 79.1% of the households do not have a separate room for bathing and washing. This issue shall be addressed at the stage of construction or reconstruction.

**Social security of the population.** In Karakalpakstan, the level of poverty is the highest in the country (27.0%). According to mahalla leaders, the level of poverty in the fields is slightly lower (20.3%). However, the poverty level is relatively high in such depressed areas as Takhtakupyr (26.2%), Muynak (22.9%), Kanlykul (23.0%) and Chimbay (22.1%), which requires a differentiated approach in applying the instruments of social protection to the most vulnerable segments of the population.

In this regard, targeted programs adapted to the district conditions shall be developed with the involvement of not only the government structures, but also the representatives of business and civil society.

## V. EDUCATION SYSTEM

**Pre-school education.** In spite of positive changes in provision of the population with pre-school education services, the region is facing with a number of systemic problems. The level of dissatisfaction with the pre-school education in Karakalpakstan is one of the highest in the country and comprises 40.3% in Karakalpakstan in general and 52.3% - in the surveyed districts. The main reasons for dissatisfaction are unavailability of pre-school institutions (51.9%), remoteness from the settlements (16.0%), and insufficient material and technical resources (6.9%). Lack of educators with higher education, the need to establish a staff position of pediatrician, the need for sports development and low salaries shall be also addressed as systemic problems.

Since the level of dissatisfaction with pre-school education is different and varies from 26.0% to 58.5% in the surveyed districts, a differentiated approach shall be applied when reconstructing the existing and constructing new facilities. Such approach shall take into account the needs of the population, the natural, climatic and ecological conditions, as well as the specifics of the population's settlement.

**General secondary education.** In 2017 the 11-year compulsory education system has been restored. According to the survey, at present 13.1% of the population are dissatisfied with general secondary education and 22.3% are partially satisfied.

The reasons for such dissatisfaction lie in the poor education quality (41.5%), insufficient supply of educational means (13.8%), remoteness from settlements (8.1%), and lack of qualified staff (4.1%). Gradual transition to a new form of education, preparation of school places, supplying the schools with modern equipment to inform the educational process are the priority tasks in this area. Moreover, it is crucial to raise the prestige of the profession of teacher, to organize free meals for students in the depressed districts, and to address the issue of school shuttles.

**Specialized secondary and vocational education.** Due to the transition to 11-year education, the number of lyceums and colleges in the republic has significantly decreased. The remaining lyceums and colleges will be mainly assigned to universities and large enterprises and company.

The level of dissatisfaction in the field of specialized secondary and vocational education is 12.7% and is explained by poor education quality (48.0%) and remoteness from the settlements (46.0%). The distance between the settlements and the educational institutions may reach 10-15 km.

The prospect for the development of this type of education largely depends on the quality of the teaching personnel, increasing the prestige of education, reforming the management system, expanding direct cooperation with profile enterprises and companies, creating favorable conditions for transportation of pupils from remote and hard-to-access areas, addressing the issue of school meals and some other factors.

## VI. HEALTHCARE SYSTEM

There are 38 inpatient and 141 outpatient clinics rendering medical services to the population of Karakalpakstan. Strengthening primary healthcare facilities (SSVP and district polyclinics) contributed to a 1.7-fold decrease in hospitalization during 1991-2017, while the number of visits of the polyclinic institutions increased in 2.1 times.

However, quality and accessibility of primary healthcare facilities are far from perfect, especially in rural areas.

Each fifth respondent (20.2%) evaluates his/her health as excellent; 62.6% answered their health is good, 12.4% believe their health is satisfactory, and 4.7% of respondents marked their health as poor.

According to the survey, the main causes of mortality are cardiovascular diseases. The second place belongs to respiratory system diseases. According to official data, tuberculosis incidence in Karakalpakstan in general is twice as high as the national average. In Muynak, Karauzyak and Takhtakupyr districts, the incidence of tuberculosis is two times higher than the average for the Republic of Karakalpakstan. 17.8% of respondents expressed their dissatisfaction with the quality of the services provided. The main reasons for dissatisfaction are low qualifications of doctors (31.9%), poor provision of emergency care (14.0%), and remoteness of medical institutions (22.5%). It shall be noted that the service radius of the district healthcare associations in the surveyed areas varies and on average ranges from 30 to 50 km.

Thus, the key systemic problems that need to be addressed effectively are: remoteness of the healthcare facilities from the settlements, low qualification and lack of motivation among primary care physicians, low level of remuneration, low level of medical literacy, insufficient provision of modern medical equipment for primary healthcare facilities, lack of financial resources (which requires establishment of a special fund), etc.

The reforms in the healthcare system related to the optimization of the SVP network, the organization of rural family clinics, the extension of the work schedule of outpatient clinics to 12 hours, the improvement of the effectiveness of the patronage service, and the cardinal changes in the system of training and retraining of the staff fully correspond to the needs of the population.

## **VII. ECOLOGIC SITUATION**

Despite the actively implemented measures to stabilize the environmental situation in the Aral Sea area, some systemic problems still remain unsolved. To address them, the countries of Central Asia region need to develop and implement a unified environmental policy.

According to the results of the survey, the main causes of environmental pollution are salt dust storms from the dried bottom of the Aral Sea, solid waste, pesticides and emissions from large enterprises. In turn, these processes lead to soil salinization and crop loss, as well as to deterioration of the quality of drinking water. Household waste is also a source of risk for the population.

The reforms in the healthcare system, the organization of rural clinics, the extension of the outpatient clinics to 12 hours, the improvement of the effectiveness of the patronage service, and the cardinal changes in the system of training and retraining of the staff.

According to the survey, 46.9% of the respondents are not satisfied with the environment situation, which is a real threat to the life of the population. The level of dissatisfaction with ecology reaches 53.2% in Muynak, 64.3% in Takhtakupyr, and 48.6% in Nukus districts.

The reasons for such high dissatisfaction with the state of environmental protection are soil salinity (70.6%), air pollution (18.7%), water pollution (9.5%), and drought (6.7%). The residents of Muynak district suffer most from water (17.3%) and air (23.5%) pollution and drought (12.3%).

In order to improve the environmental situation, it is advisable to carry out systematic work on environmental education (19.6%), install modern equipment for water treatment (15.3%), and recycle industrial waste on the ground.

In general, the main factors of ensuring environmental security are resolving complex strategic tasks for sustainable provision of drinking water as well as increasing yields by improving the land and water potential.

## **VIII. GENDER ASPECTS OF EMPLOYMENT**

Particular actions are being implemented in Uzbekistan to increase the social activity of women, ensure their employment, strengthen family relations, and protect motherhood and childhood. According to the survey, the share of economically active women was 48.1%. Women, generally, work as teachers, doctors, educators (in kindergartens), are occupied in trade and agriculture. In business, women are engaged in trade, sewing business, service sector, and production of confectionery. The only restriction for women's activity is the lack of jobs.

The accessibility of higher education for girls depends on such factors as the distance between the institution and the place of residence, affordability of paying a contract and gender stereotypes in the family. The high cost of the contract is the main reason why the girls do not enter universities.

In the surveyed districts, a shortage of teachers in Russian and English, music, physics, chemistry, doctors and psychologists was observed.

The lack of jobs remains the main reason for the high unemployment rate among girls. Women make up about 1.0% among the labor migrants leaving for Russia and Kazakhstan. Mainly, these are women aged 30-40.

To increase the economic activity of women on the ground, it is recommended that they actively engage in entrepreneurial activities, participate in a permanent system of education, including enrollment in higher education institutions.

## IX. SOCIAL RISKS AND SECURITY

The rating and the level of potential social risks are determined on the basis of a differentiated assessment of the households' satisfaction with the access and quality of social services by key components. The ranking of weight indicators made it possible to identify the social problems and risks at the level of individual components of the welfare of the population in the Republic of Karakalpakstan as a whole and district-wise.

According to the results of the survey, employment occupies **the first place** in the rating of the social risks of high tension (49.8% dissatisfaction). The main reasons for this risk are the lack of permanent jobs (76.2%) and low pay (21.6%).

**The second position** in the rating of risks is taken by the ecological situation (46.9%). The main reasons for this situation are soil salinity (70.6%), air pollution (12.7%), water pollution (9.5%), and drought (6.7%).

**Number three** in the rating is dissatisfaction with the state of the transport infrastructure (43.2%). The main reason for this risk is the need for major overhaul of the local mahalla roads (79.4%).

**The fourth place** among the potential risks of high tension is the population dissatisfaction with the provision of medications (41.3%). The situation worsens due to the remoteness of pharmacies (57.5%) and the high cost of medicines (37.6%).

**The fifth place** in the rating is occupied by pre-school education services (40.3%). The main reasons for dissatisfaction are the lack of institutions for children's preschool education (53.3%), their remoteness from the settlements (16.5%), high fees (6.7%), and the lack of appropriate conditions (material and technical base, etc.) (7.1%).

**The sixth position** is dissatisfaction with the provision of drinking water (33.9%). The main causes of this risk are poor (salty) water (42.6%), irregular water supply (30.4%), and large distance to water sources (21.4%).

**The seventh place** in the rating is occupied by consumer services (30.9%). The main reason for dissatisfaction is the large distance to the facilities (96.0%).

In the context of the districts, the first three places are occupied by Takhtakupyr (10.80 points), Kanlykul (12.05) and Chimbay (12.61) districts.

## X. CONCLUSIONS

The results of the survey of the households and focus groups with the participation of representatives of government and non-government structures testify to the presence of particular potential social risks and threats to the life of the population of the Aral Sea region. These risks belong to the following areas:

- Economic security, which is affected by such risks as low socio-economic potential of the agriculture-oriented region, insufficient income level of the population and the resulting imbalance in the food consumption structure, high unemployment rate and weak business activity, as well as dissatisfaction of the population with the condition of industrial infrastructure and, above all, with the condition of the local automobile roads;

- Food security arising from the de-grouped structure of the crop areas, deteriorating state of the irrigated lands and water resources, insufficient adaptation of the agricultural production to the consequences of the ecological crisis, and high level of food imports;
- Demographic security, which is affected by poor quality of life, increasing mortality and declining birth rate, low level of urbanization, large outflow of the population to other regions and foreign countries, and high levels of external migration;
- Social security, which is associated with insufficient targeted support to the poor, high level of dissatisfaction with the quality and access to education, healthcare, housing and communal services. The main social risks here are the provision of quality drinking water and the need to strengthen targeted social protection for low-income layers of the population;
- Environmental security associated with the consequences of the Aral Sea crisis, the deterioration of the condition and the quality of land and water resources, air basin, water supply. These factors have a direct impact on the health and welfare of the population;
- Financial security arising from insufficient revenues of the local budgets that do not ensure integrated and balanced development of the Republic of Karakalpakstan and its regions, high level of centralization of allocated financial resources for the needs of the population, low level of business climate and investment attractiveness due to transport and geographic location and environmental factors.

In general, according to the assessment of potential social risks, the Republic of Karakalpakstan ranks second among the regions of the country. According to the results of the survey in 8 surveyed areas, the potential social risks of high tension (where dissatisfaction level is over 30%) are arrayed in the following order: #1) employment, #2) ecology, #3) transport infrastructure, #4) medicines, #5) pre-school education, and #6) drinking water. At the level of each district, the social risks are lined up in a slightly different order, but the prevailing risks for most of them are tension in the labor market and unemployment, unfavorable ecological situation, and provision of quality drinking water.

## **XI. RECOMMENDATIONS**

Based on the identified needs and demands of the population and the factors that affect the safety and security of its life activities, we propose a system of measures, which is largely built up on the local initiatives.

### **In the field of economic security:**

- consistent improvement of the districts' economy structure owing to the advanced development of small industrial enterprises and service sector;
- implementation of district factors applicable to the budget employees' wages in the depressed rural areas;
- expansion of benefits and preferences for the Aral Sea region in order to create favorable conditions for attracting domestic and foreign investors;
- along with traditional employment forms, expansion of non-standard forms of employment such as outworking, establishment of branches and workshops of large enterprises, family business, liberalization of informal employment;
- promotion of entrepreneurship through the system of continuous training, mobilization of the rural areas' capacity by development of rural cooperatives, collection and primary processing of agricultural raw materials, medicinal plants, development of innovative livestock complexes, etc.;

- strengthening the material and technical base of the local authorities to enable them to quickly address the issues of repairs and maintenance of the local roads;
- increasing the revenue base and reducing subventions through empowering the local authorities and decentralizing the local budgets.

**In the field of food security:**

- ensuring sustainable development of agriculture with a focus on expanding the production of food crops adapted to the environmental conditions and land and water resources (with simultaneous reduction of cotton production);
- establishing a well-developed scientific and experimental regional base in the areas of specialization;
- wide introduction of new innovative technologies and achievements in water use and land quality improvement.

**In the field of demographic security:**

- development of a long-term population settlement pattern that takes into account the trends in desertification processes, the adverse impacts of climate and ecology change, and the region's socio-economic development strategy;
- development of urbanization processes and foundation of new townships and urban settlements as examples of sustainable development of rural areas;
- targeted regulation of migration flows and expansion of official export of labor;
- improving the quality of the population through a system of continuous education and quality medical services.

**In the field of social security:**

- development of kindergarten dislocation schemes in the context of each district, taking into account the geographical location and the population settlement pattern; designing typical kindergarten projects that meet modern architectural standards, local conditions and demand; development of family kindergartens in the rural areas;
- organization of transportation of pupils by school shuttle buses, improvement of the material and technical base of the educational institutions, significant improvement in the level of qualifications and raising the prestige of the teaching staff;
- development of an optimal scheme to cover the population with the medical institutions and pharmacy network, which takes into account the population settlement pattern; establishment of the system of continuous training and retraining for nurses and doctors, foundation of branches of Russian medical centers reputable in key areas of morbidity, equipping the healthcare facilities with advanced medical equipment; and development of private healthcare sector;
- expansion of rural and urban housing construction based on modern typical projects that take into account the climatic and environmental conditions of the region and meet the needs and demands of the population;
- cardinal improvement of supply of quality drinking water through mobilization of all available water sources and implementation of the most advanced water desalination and purification technologies; setting up an efficient management system based on the best world practices;
- establishment of a new targeted social protection system for low-income segments of the population with the participation of government bodies and civil society organizations, development of minimum state-guaranteed social standards.



**In the field of environmental security:**

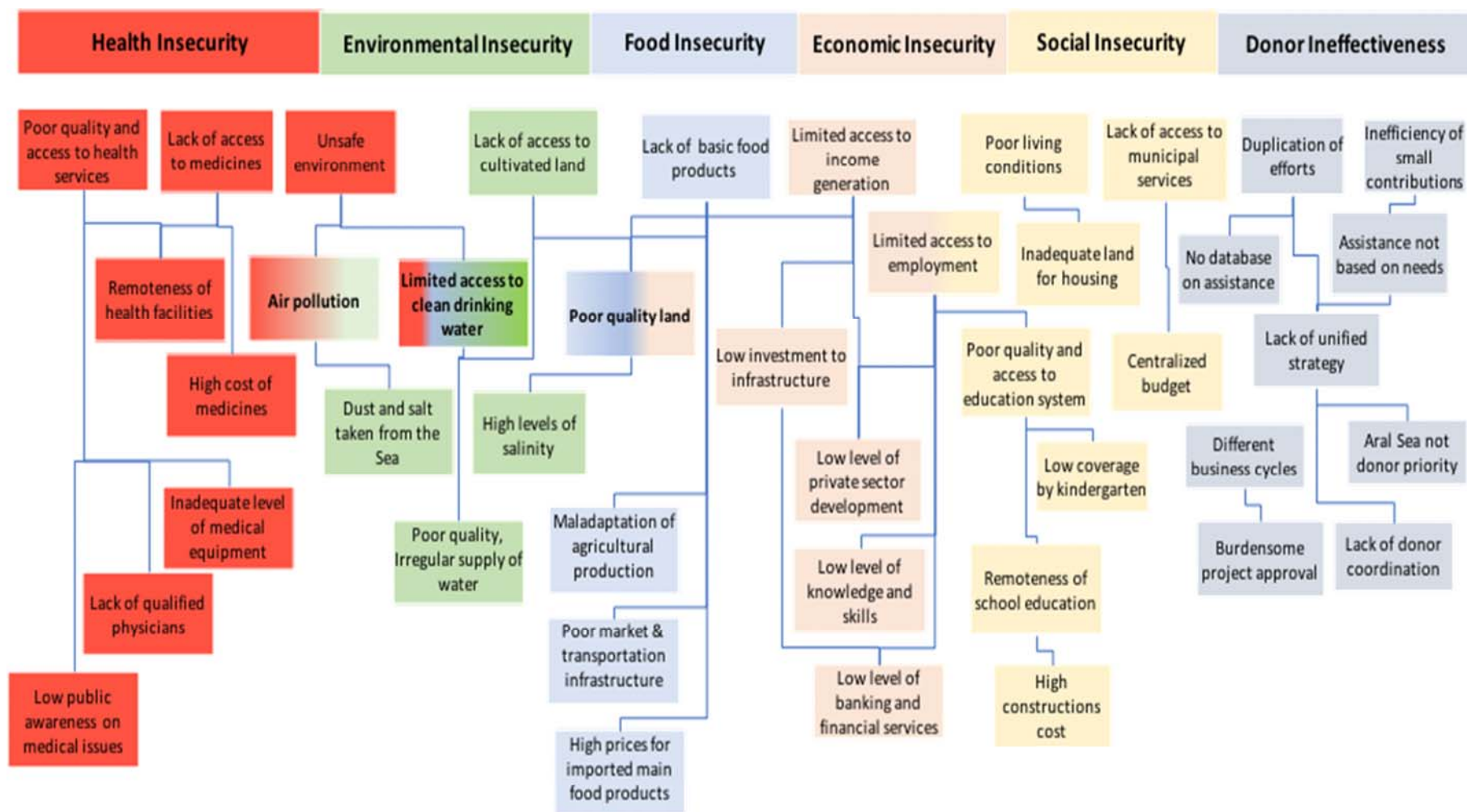
- regular monitoring and updating the population on the quality of drinking water, the state of soil and air basin;
- construction of small solid and liquid household waste processing plants, desalination stations and pasture wells;
- development of proactive measures to reduce the negative impact of climate change, drought periods and frequent dust storms;
- expansion of the scope of works on innovative reconstruction of the collector-and-drainage system.

The above priority directions for meeting the needs and requirements of the population stem from specific local initiatives that are systematized in the database of recommendations and proposals in the context of each district. The data bank will be attached to the report in electronic form.

**The principles and the mechanisms of action.** The implementation of specific recommendations and management decisions should be based on the following general principles:

- the decisions shall be made based on the long-term consequences of the emerging potential social risks and threats to the population safety and security;
- when addressing the needs of the population, a differentiated approach shall be applied to each aul, kishlak, mahalla, and rural areas. Such approach shall be based on natural and ecological factors, and take into account the population distribution pattern and transport accessibility;
- development of a regional regulatory framework that takes into account the specifics (construction standards and rules, zonal infrastructure design, research base for sustainable development of rural areas) and minimum social standards;
- the region can become a testing ground for the implementation of innovative local initiatives and projects to address the most complex social and economic problems (integrated drinking water supply management system, the latest resource-saving technologies, development of water infrastructure and alternative energy sources, advanced information technologies in education, healthcare, agriculture, ecology, etc.);
- establishment of the most favorable treatment regime for the people's lives and welfare, as well as for attracting domestic and foreign investments (special funds, benefits and preferences);
- approbation at the regional level of the development of an adapted indicator system and a set of measures to implement the goals set in the UN Agenda for sustainable development until 2030, which coincide with the strategic goals and objectives of the Government of Uzbekistan.

## Problem Tree Analysis



Low population density, continuous worsening of the ecological situation, aid fragmentation

**UN MULTI-PARTNER HUMAN SECURITY TRUST FUND FOR THE ARAL SEA REGION IN UZBEKISTAN (MPHSTF)  
RESULTS FRAMEWORK**

**Total funding requested: US\$ 123.2 million**

<p><b>SDG 3</b> – Ensure healthy lives and promote well-being for all at all ages (targets 3.4, 3.8, 3.C)  <b>SDG 8</b> – Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (targets 8.2, 8.4, 8.5)  <b>SDG 11</b> – Make cities and human settlements inclusive, safe, resilient and sustainable (targets 11.2, 11.5, 11.A)</p>		
<p><b>OUTCOME 1: The stress on local communities due to the deteriorating environmental situation reduced</b>  <b>Indicators:</b></p> <ul style="list-style-type: none"> <li>• # of hectares of arable land increased</li> <li>• public satisfaction of environmental policy</li> </ul>		
<b>Output</b>		<b>Output Indicators (Baseline and target values for the indicators will be additionally defined by the Fund Steering Committee with inputs from the PUNOs and national/ local experts)</b>
<b>1</b>	Local management practices and knowledge of ecosystem services are improved	<ul style="list-style-type: none"> <li>• % of communities with access to ecosystem services</li> </ul>
<b>2</b>	New technologies in the area of water purification, agroforestry, afforestation, and soil stabilization are piloted	<ul style="list-style-type: none"> <li>• # of pilot projects that test out new technologies adjusted to local conditions</li> <li>• Area (ha/km<sup>2</sup>) of desert lands covered by forest stands</li> <li>• Share of the area of farm and dekhkan farms with improved quality of irrigation water</li> <li>• Area of restored tugai forests (thousand ha)</li> </ul>
<b>3</b>	The quality of water, air and soil pollution is monitored and addressed through local regulatory practices	<ul style="list-style-type: none"> <li>• # of newly established or improved environmental quality checks</li> <li>• # of base stations monitoring the climate in the Aral Sea region</li> <li>• % of water/air quality monitoring laboratories regularly reporting through the surveillance system</li> </ul>

<b>OUTCOME 2: The employment and income generation opportunities for local communities increased</b>		
<b>Indicators:</b>		
<ul style="list-style-type: none"> <li>• % of population that is economically active</li> <li>• # of new business initiatives started</li> </ul>		
<b>4</b>	New income opportunities in sectors adjusted to local conditions (e.g. agriculture, ethno-tourism, infrastructure and housing construction, service industry) are created	<ul style="list-style-type: none"> <li>• # of small and medium-sized companies created</li> <li>• # of jobs created in target communities per year</li> </ul>
<b>5</b>	Skills and knowledge of local communities to participate in new industries are to become entrepreneurs, as well as, adaptability to new work conditions for employability are improved	<ul style="list-style-type: none"> <li>• % of people surveyed that are satisfied with their skills levels</li> <li>• # of people trained and retrained in the specialized centers to improve and develop their entrepreneurial skills/knowledge</li> </ul>
<b>6</b>	Investments in local infrastructure serving local communities (e.g. energy, access roads, service industry, banking) are increased	<ul style="list-style-type: none"> <li>• % increase in investments in local infrastructure</li> <li>• % of people surveyed that are satisfied with trade services</li> <li>• % of people surveyed that are satisfied with the services of banking and financial institutions</li> </ul>
<b>OUTCOME 3: Local community access to affordable and healthy food and clean drinking water secured</b>		
<b>Indicators:</b>		
<ul style="list-style-type: none"> <li>• % of population with access to clean water</li> <li>• % reduction in malnourishment of local population</li> <li>• % of household budget spent on food</li> </ul>		
<b>7</b>	Local infrastructure investments for access and distribution of clean water are increased	<ul style="list-style-type: none"> <li>• % increase in investments in water access and distribution infrastructure</li> <li>• % of people surveyed that are satisfied with access to drinking water</li> </ul>
<b>8</b>	Local production, processing, storage and sale of diverse, affordable and high-quality food is increased	<ul style="list-style-type: none"> <li>• % increase in local production of food</li> <li>• # of created of networks of fruits and vegetables cold-storage</li> </ul>
<b>9</b>	The quality of nutrition is increased through standardization, regulation, monitoring, information, and education	<ul style="list-style-type: none"> <li>• # of newly established or improved food quality checks</li> <li>• # of new crop varieties, adapted and resistant to harsh climatic conditions</li> <li>• # of newly established or improved biological laboratories for protection of plants and the prevention of diseases arising from environmental influences</li> </ul>

<b>OUTCOME 4: The overall health of the local population improved and healthy lifestyle promoted</b>		
<b>Indicators:</b>		
<ul style="list-style-type: none"> <li>• % reduction in infant and maternal mortality</li> <li>• % of population satisfied with health services</li> </ul>		
<b>10</b>	Investments in local health services and pharmacies (e.g. facilities and equipment) are increased	<ul style="list-style-type: none"> <li>• % increase in investments in local health infrastructure</li> <li>• % of people surveyed that are satisfied with the availability of affordable medicines</li> <li>• % of medical institutions equipped with modern equipment</li> </ul>
<b>11</b>	Access to rural health clinics and to medication primarily in remote areas is improved	<ul style="list-style-type: none"> <li>• # of new health clinics and pharmacies</li> <li>• % of functional rural health clinics strengthened</li> <li>• % of people surveyed that are satisfied with the quality of medical services</li> <li>• doctors/nurses/health care professionals/hospital beds per 1000 people</li> </ul>
<b>12</b>	The quality of health care is improved through increased professional education	<ul style="list-style-type: none"> <li>• # of health care professionals educated and retrained</li> </ul>
<b>13</b>	Healthy lifestyles and practices, drug and alcohol use prevention, as well as, mental health are promoted, including sanitation, vaccination, waste disposal, and local medicinal plants	<ul style="list-style-type: none"> <li>• % of populations responding positively to new healthy lifestyles in survey</li> <li>• availability of teacher's manual on healthy lifestyle in Karakalpak language</li> <li>• # of teachers trained on Healthy lifestyles</li> <li>• # of projects and activities conducted on promotion of Healthy lifestyles</li> </ul>
<b>Outcome 5: The living conditions of local populations improved, with particular focus on vulnerable groups such as women, children and youth</b>		
<b>Indicators:</b>		
<ul style="list-style-type: none"> <li>• % of population with increase access to social and community services</li> <li>• % of populations responding positively to increased living conditions</li> </ul>		
<b>14</b>	Adequate housing appropriate for the local living conditions is provided	<ul style="list-style-type: none"> <li>• % of people surveyed that are satisfied with access to social and community services</li> <li>• adapted standards for the design and construction of residential buildings and social facilities, taking into account the actual ecological and geographic conditions of the Aral Sea region</li> <li>• # of social infrastructure facilities constructed in accordance to the new standard projects that meet local conditions</li> </ul>

15	Social and community services, including pre-school education and leisure opportunities, and life skill education for children and youth are improved	<ul style="list-style-type: none"> <li>• # of new and improved pre-schools</li> <li>• % of enrollment of children by pre-school educational institutions</li> <li>• % of people surveyed that are satisfied with the quality of school education</li> <li>• # of community members and school children covered through youth led peer to peer education programme</li> </ul>
16	The local governance system for addressing the human security needs of the population is improved	<ul style="list-style-type: none"> <li>• % of populations (disaggregated by sex) responding positively to their involvement in the local governance system</li> <li>• # of representatives of local authorities participating in special training courses on human security, local development planning and etc.</li> <li>• % of people surveyed that are satisfied with local public service delivery and the role of the mahallas in ensuring stability</li> </ul>

**MPHSTF FACTS:**

Outcomes/Results 5  
 Outcome indicators 11  
 Outputs 16  
 Output Indicators 43 (O1-7, O2-7, O3-7, O4-12, O5-10)

## MPHSTF Steering Committee Terms of References

The Steering Committee has overall responsibility for the Aral Sea MPHSTF. It is responsible for leadership, strategic direction, and decisions on eligibility, allocation and other managerial and oversight aspects.

The SC meets semi-annually and decides by consensus. Detailed terms of references for the Steering Committee are included in the Operational Guide of the MPHSTF.

### Composition:

The Steering Committee (SC) is co-chaired by the High-Level Government representative and the UN Resident Coordinator (RC). Members include 2 representatives of donors (on rotational bases) contributing to the MPHSTF, 2 civil society members (on rotational bases), 5 Participating UN Organizations, and 2 national government representatives. The Administrative Agent and Secretariat will be ex-officio members of the Steering Committee. Steering Committee composition will ensure the principles of national ownership, inclusiveness and balanced representation, as well as the need to have a manageable size for decision-making effectiveness.

### Key Tasks and Responsibilities:

- To review and approve their Terms of Reference and Rules of Procedures, based on the generic SC TOR, and update and/or modify them, as necessary, in case of compelling requirements. In case of departures from the generic TOR, the TOR of the SC should be referred for endorsement to the HQs Fiduciary Management Oversight Group;
- For funds earmarked by donors to thematic clusters/sectoral groups<sup>1</sup> or Agencies and prioritized/allocated within thematic clusters, to review and ensure the alignment of the allocations with the strategic development framework of the country and approved national priorities;
- For unearmarked funds, (1) to review and approve the criteria for the allocation of available MPHSTF resources<sup>2</sup> if applicable; (2) to allocate available resources to thematic clusters, making sure that the allocations are aligned with the strategic development framework of the country and approved national priorities. The clusters will be responsible for the prioritization within the cluster allocation;
- To review and approve proposals from PUNOs submitted for funding; ensure their conformity with the requirements of the MPHSTF agreements (MoUs etc). To ensure the quality of proposals to receive funding from the MPHSTF.
- To discuss the MPHSTF requirements and priorities concerning, inter alia: Programme/project management, including consistent and common approaches to programme/project costing, cost recovery, implementation modalities, results-based reporting and impact assessment; and information management including MPHST donor visibility;
- To define Terms of Reference and composition for the thematic clusters/sectoral groups or other similar review bodies.

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<sup>1</sup> The establishment of formal thematic clusters/sectoral groups may not be applicable to all MDTFs.

<sup>2</sup> The SC Support Office will prepare the criteria for discussion by the SC.

- To ensure appropriate consultative processes take place with key stakeholders at the country level so as to avoid duplication or overlap between the MPHSTF and other funding mechanisms;
- To review and approve the periodic progress reports (programmatic and financial) consolidated by the Administrative Agent based on the progress reports submitted by the PUNOs. To ensure consistency in reporting between clusters; Consolidated annual reports should include a section on the activity of the Steering Committee.
- To review findings of the summary audit reports consolidated by the internal audit service of the Administrative Agent. To highlight lessons learnt and periodically discuss follow up by Participating Agencies on recommended actions that have MPHSTF-wide impact;
- To agree on the scope and frequency of the independent “lessons-learned and review” of the MPHSTF commissioned by the SC, in consultation with the HQ Fiduciary Management Oversight Group.
- To review the draft/final reports on lessons learnt, ensure the implementation of recommendations and identify critical issues for consideration by the HQs Fiduciary Management Oversight Group (to be brought up to the ASG Group, if/as required).

#### **Decisions:**

The Steering Committee makes decisions by consensus. Decisions of the Steering Committee shall be duly recorded.

Prior to presenting their position on a significant issue to the SC, its UN members have to make sure that it is endorsed internally by their Agencies and is in line with their Agencies’ regulatory requirements.

Decisions on programme/project proposals will only be taken upon completion of a review by the appropriate thematic clusters, sectoral working groups or other SC agreed review bodies.

#### **Role of the co-chairs of the Steering Committee:**

- To make sure that the decisions taken by the Steering Committee are in accordance with the regulatory requirements and frameworks of the PUNOs and agreements with the programme country and donors;
- To ensure that the decisions taken by the Steering Committee are duly recorded and promptly communicated to the members of the Steering Committee, including PUNOs, the programme country, and donors, as appropriate;
- To monitor the implementation of the decisions of the Steering Committee;
- To report to the MDTF Fiduciary Management Oversight Group on the evolving risks and to flag issues that may affect the implementation of the decisions of the Steering Committee or otherwise impede the operations of the Fund;

The UN co-Chair, representing the SC, is accountable to the Chair of the MDTF Fiduciary Management Oversight Group, representing the Committee, for the inter-agency fiduciary issues related to the Participating UN Agencies on issues related to funding through the UN for the MDTF activities.



## MPHSTF Technical Secretariat Terms of Reference

In order to ensure good programming the MPTF is supported by the Technical Secretariat. The Technical Secretariat provides technical, operational and administrative support to the MPHSTF Steering Committee and works under its overall guidance. The Technical Secretariat supports the entire programming cycle of the MPHSTF with a work plan and budget reviewed annually by the Steering Committee.

The Technical Secretariat also provides advice and quality control over the MPHSTF implementation and coordinates the meetings. It facilitates collaboration and communication between the Government of Uzbekistan, Participating UN Organizations, contributing donors and the co-chairs of the MPHSTF. It develops and implements a resource mobilization strategy to attract investments from other donors.

A key role of the Technical Secretariat is to review the submission of projects/proposals to the Steering Committee. As may be necessary, the Technical Secretariat may organize independent technical review of proposals, for which independent consultant will be recruited. The Technical Secretariat will be responsible for reporting on the implementation of funded projects.

### The Technical Secretariat's main functions are:

- Coordination of efforts within MPHSTF, including the implementation of decisions made by the Steering Committee;
- Elaborate an Operations Manual, in accordance with the signed legal agreements, and ensure compliance with it;
- Plan and prepare the meetings of the Steering Committee and hold records of decisions through minutes of the meetings;
- Coordinate projects/programmes eligibility and allocation processes, including any calls for proposals;
- Provide advice and recommendations (in close collaboration with the Administrative Agent) to the Steering Committee on implementation performance, and cash management planning;
- Submit Fund Transfer Requests, approved by the SC, to the Administrative Agent;
- Oversee the design, development and maintenance of one integrated platform for programme design, management and reporting;
- Ensure monitoring and control of operational risks (update the risk monitoring matrix regularly);
- Consolidate the narrative annual and final reports submitted by Participating UN Organizations and present the consolidated report to the Steering Committee for review.
- Support coordination of efforts with the Government of Uzbekistan and other development actors rendering assistance to the Aral Sea region to avoid overlapping and duplication;
- Liaise with the Administrative Agent on MPTF administration issues, including issues related to MPTF extension and closure;
- Within the MPHSTF M&E system, advise the Participating UN Organizations on appropriate performance indicators and data gathering, consolidate the

information received from the Participating UN Organizations into a central results-based management system;

- Monitor and evaluate the implementation of projects/programmes against the programmatic framework of the MPHSTF.

**Composition:**

It is proposed that the TS will compose of the following vacancies:

- Chief Technical Advisor – Head of the Secretariat
- Reporting Officer
- Coordination Officer
- Resource Mobilization and Outreach Specialist
- Monitoring and Evaluation Specialist
- Consultants (if necessary)

The TS structure can be reviewed by the Steering Committee and decided upon to reflect needs and budget availability. The budget required to perform the functions of the TS throughout the MPTF's lifecycle will be agreed upon annually by the Steering Committee. The rule of thumb is that TS costs not exceed 3% of total fund capitalization.

## Risk ranking matrix

#	Risks	Character	Impact	Probability	Mitigation Strategy
1.	Lack of or limited access or no trust to information about Aral Sea disaster and its impact on environment, climate change, socio-economic situation in the Region (The Government strategy in Aral Sea is not fully supported by donors)	Contextual	High	Low	Raising awareness programs promoted among international donors/IFIs and other development partners based on evidence based approach.
2.	Low interest from IFIs towards Aral Sea catastrophe (majority of donors do not have a special emphasis on Aral Sea issue in their Country Strategies in Uzbekistan)	Contextual	High	Medium	Negotiations between the Government and the international partners with the purpose of explaining high importance of solution of the Aral Sea related problems and triggering donors to include Aral Sea catastrophe thematic in their Country Program Documents.
3.	Lack of cooperation between IFIs in Uzbekistan, including different strategy/financial cycles and procedures	Contextual	Medium	Medium	Meetings with participation of donors/IFIs, the Government of Uzbekistan representatives and the stakeholders with the purpose to explain the importance and efficiency of an integrated/holistic approach to solution of the Aral Sea catastrophe related problems.
4.	Natural disasters negatively affect MPTF performance	Contextual	High	Low	Establishment of the contingency plans in case of natural disasters.
5.	Insufficient institutional / operational capacity of UN Participating agencies in supporting the financial, procurement and management planning and implementation of MPTF and pilot projects	Institutional	High	Low	The possible mitigation measure include expansion of the operational capacities of the participating UN agencies in accordance with the MPTF operational needs.
6.	Fund is insufficiently capitalized	Contextual	High	Medium	Scaling down and sequencing programmes to fit available resources.

7.	Insufficient national and local absorptive capacities (in terms of financial delivery, procurement, human resources, etc.)	Institutional	Medium	Medium	Development of capacity building measures and proper planning mechanisms to increase national and local absorptive capacities.
8.	Lack of transparency and poor reporting system during projects implementation at local level	Institutional	High	Medium	Capacity building of local development actors within MPTF in financial and programmatic reporting.
9.	Low level of sustainability of initiatives launched within the MPTF.	Programmatic	High	Medium	Awareness raising to include the MPTF initiatives in to the regional development plans supported by government budget allocations.
10.	Low level of commitment from National/Local level Government to accept/use proposed technologies and methods in Aral Sea region	Programmatic	High	Low	Negotiations between the Government and international development actors on efficiency of proposed technologies and methods and extensive capacity building measures.
11.	Insufficient capacities of national government and local beneficiaries in use of new techniques and approaches	Programmatic	Medium	Medium	Capacity building of national government and local beneficiaries in use of new techniques and approaches with specific customization to local needs.
12.	Demand for funding from local authorities/ beneficiaries exceeds the available financial resources	Programmatic	Medium	Medium	Regular needs monitoring and updating Programmatic Framework and resource mobilization strategy, as well as prioritizing and scenario setting.
13.	The Programme does not produce the desired results	Programmatic	High	Low	The risk will be mitigated by the continuous monitoring and evaluation of the programme delivery, engagement with local/national partners and the strategy to promote the uptake of evidence produced by the programme.
14.	Beneficiaries are not adequately consulted resulting in ineffective programming.	Programmatic	Medium	Low	Representation by CSO representative of the population; surveys.