

# Relevance of development adaptation strategies and plans

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**Strategic Roundtable on Increasing Resilience to Climate Change in the Water and Sanitation Sector** 

### Introduction



- Despite the fact that climate change is not currently a major factor in health risks, its negative social consequences may increase exponentially over the next decades;
- This determines the relevance of developing now long-term strategies and plans for adaptation and protection of the population, a number of necessary measures that require significant organizational efforts and financial costs;
- Understanding how populations can adapt to new climate conditions is key to truly assessing the health and other impacts of climate change. In general, the sensitivity of a population to any health threat depends on the local environment, the level of material resources, the effectiveness of government and civil institutions, the quality of public health infrastructure, and access to information about the threat of extreme weather events.



- A special feature of the impact of climate change is that it increases other threats to public health and safety, primarily the negative consequences of air and water pollution, impacts on agricultural production, continued aridization of territories, an increase in the frequency of large forest fires, degradation and erosion, and increased uneven social economic development (unemployment, income inequality, etc.);
- The mutual influence of environmental, climatic, economic and social factors and risks determines the basic approach to adaptation, as well as government programs and national development projects, and this maximizes their positive effects on society,



• In this context, quite broad activities are being carried out in Azerbaijan, namely, a number of state programs, national plans have been developed, scientific conferences are held and contacts have been established with international structures involved in mitigating the effects of climate change.

#### In recent years the following have been prepared:

- Action Plan for 2020-2022 to ensure efficient use of water resources;
- State program for 2023-2030 "Improving air quality in the Republic of Azerbaijan and reducing the impact of climate change". An intersectoral Action Plan for the for 2023-2030 has been developed for the State Program, deadlines and implementers have been determined;
- In 2023 a project has been prepared to update the Contribution of the Republic, determined at the national level, to reduce greenhouse gas emissions by 35% by 2050. (NDC Nationally Determined Contributions);

- "Azerbaijan 2030: National Priorities for Socio-Economic Development" The document describes five national priorities that are of particular importance for the implementation of obligations arising from the UN "2030 Agenda for Sustainable Development" and one of them is "Clean Environment" and a country of green growth. The document states that along with the promising economic development of the country, it is necessary to ensure a healthy environment;
- -"Report on climate change and development of Azerbaijan", prepared by World Bank experts (October 2023) (The draft document was submitted for approval to various structures 2 weeks ago).
- -In the practical field, the Republican Center for Hygiene and Epidemiology of the Ministry of Health, together with the Ministry of Ecology and Natural Resources, in preparation for the summer season, carried out environmental monitoring to study the sanitary and epidemiological condition of beaches and study the chemical and biological indicators of sea water quality. Based on the results obtained, information about the sanitary and epidemiological state of the beaches was covered in the media.



- The activities of the climate change commission are carried out on the basis of an Action Plan drawn up and agreed upon between various economic, scientific and social sectors, such as the Ministry of Ecology and Natural Resources, the Ministry of Agriculture, and the Ministry of Energy, Ministry of Economy, State Oil Company, National Academy of Sciences of Azerbaijan and others;
- The problems of climate change in the water sector are reflected in the Action Plan in a separate paragraph proposing the preparation of a <u>National Adaptation</u> <u>Strategy Plan</u>;
- The Action Plan also includes an item on stormwater management and collection;



 In 2023, a Working Group was created to prepare the National Adaptation Strategy Plan. Several meetings have already taken place, discussions are being held, several trips have been carried out for the purpose of field research, including rivers, lakes, reservoirs and the Caspian Sea.



- The Ministry of Emergency Situations has prepared an Action Plan to prevent the negative consequences of climate change before, during and after natural disasters;
- Sectoral structures, including the Ministry of Health, after meetings and discussions, gave their proposals and additions to the Action Plan of the Ministry of Emergency Situations;

## Conclusion



 Based on information about the current and predicted state of the environment, it is necessary to develop adaptation measures for weather-dependent and climate-dependent sectors of the economy by identifying and implementing optimal economic solutions.

Key challenges facing the health sector in assessing the health impacts of climate change

Environmental information on climate change and early warning of the population Building capacity for health impact assessments in terms of population sensitivity ( for various categories); exchanging of knowledge and experience in this context between countries Developing an intervention to reduce the adverse impacts of climate change in the health sector

#### **Lessons learned and perspectives**



- Climate change manifests itself through water. Most natural disasters are hydrological in origin;
- Water-related climate risks flow through food, energy, urban and environmental systems;
- Sanitation is important for health, economic growth and the environment. Investing in sanitation is about protecting human health, investin in people and changing their lives;
- Raising awareness and education remains the main element of the communication activities of the Republican Center for Hygiene and Epidemiology of the Ministry of Health in the field of problems related to climate change, ensuring regular access to information for officials and institutions responsible for making decisions on climate change issues, as well as for the population.
- It is necessary for the public to understand what measures must be taken and what changes must be made in order to adapt to the impacts of climate change;
- Considering that some of the basins rivers and the Caspian Sea are transboundary, adaptation in the water sector will only be successful if there are joint water resource management plans between countries.
- Additional adaptation measures may include measures to conserve water consumption and increase reserves for use during the summer months of high consumption, sealing irrigation canals (concreting the bottom), using advanced irrigation technologies, etc.

## Water must be a key focus of adaptation strategies.



- Water, sanitation and hygiene services are an important element of preventing infection and protecting human health during infectious disease outbreaks;
- Climate change can have a very large impact on water resources and sanitation
  where there has been a real decline in water supplies and supplies. Episodes of
  drought can cause increased concentrations of pathogens in reservoirs where
  raw water is stored. In addition, water scarcity may necessitate the use of
  inferior fresh water sources, such as rivers, which are often polluted. Increased
  rainfall can cause flooding and flooding of sewer systems. All these factors can
  lead to an increase in morbidity;
- Temperature and relative humidity have a direct impact on the rate of replication of microbial and protozoal pathogens and the survival of enteroviruses in the environment. The frequency and level of contamination of drinking water can be influenced by rainfall and, especially, heavy rainfall.
- The most important adaptation measure in the water sector is to ensure universal access to clean drinking water and sanitation. In addition, it is necessary to assess the state of sanitation infrastructure and determine its sensitivity to extreme situations (droughts and floods).

## Thank you!

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