UNITED NATIONS DEVELOPMENT PROGRAMME

UNITED NATIONS MOLDOVA

COVID-19 RESPONSE

INVESTING IN RESILIENT COMMUNITIES IN MOLDOVA

COVID-19 Impact

The COVID-19 pandemic has put the spotlight on country's capabilities and preparedness to act in crisis situations. It has also revealed disproportionate social and economic impacts of COVID-19 outbreak in rural and urban areas, and specifically on those who are already vulnerable and marginalized.

Despite the challenges revealed, this pandemic offers a very important opportunity to elaborate more on root causes of crisis phenomena, modernize national approaches to tackle crisis, as well as to start developing resilience, response and recovery mechanisms to all crises and risks, including eminent climate induced extreme weather risks.

Needs and Challenges

Moldova is one of the most vulnerable countries in Europe and Central Asia to climate change, based on many social and economic indicators it is confronted by numerous climate adaptation challenges. Climate change is expected to increase the frequency and intensity of extreme weather events such as heat waves, severe droughts, floods, hailstorms, torrential rains, late frosts, and heavy winds. All this will lead to a decrease in food production and will have a negative impact on human health and standards of living.

Climate modeling anticipates that droughts will become longer and more severe. The major expected effects of climate change in Moldova are:

- Decline in average annual rainfall by 6.8% for 2040-69 and decline in summer and autumn precipitation by 19.3% and 16%, respectively;
- Frequency and severity of drought, with the probability of catastrophic drought (less than 50% of annual rainfall) might increase by 4.5 times;
- Decrease in available water resources by two-thirds by the 2080s;
- Increased number of hailstorms, torrential rains with increased incidence of flashfloods
- Increased severity of floods.

The people of Moldova are already experiencing the impacts of climate change with more frequent droughts, heavy rains and flooding, and other severe weather events. On average Moldova is exposed to 4-5 severe drought and 1-2 disastrous floods each 10 years.

In Moldova the poverty rate is 7.5 times higher in the rural areas than in large cities. Since a significant part of the rural population is engaged in subsistence agricultural activities, the risk of falling below the poverty line is high in years of climate related extreme events.

2nd National Determined Contribution (2020) estimates the losses caused by global warming and the extreme weather events associated with it at $1.3 billion annually by 2050, if the climate change mitigation and adaptation measures will not be taken.

As a central actor in the United Nations Development System, UNDP is playing an important role in shaping and driving climate action worldwide. UNDP Climate Promise announced at the 2019 UN Climate Summit has resulted in enhanced National Determined Contributions (NDCs), Moldova being 4th country globally to report more ambitious NDC targets and introducing adaptation as an important part of NDC. It contains cross-sectoral perspectives involving a multi-level governance system to plan and implement adaptation priorities. "Resilient development of urban communities" and "Community-based adaptation action in rural communities" are among new identified adaptation priorities.

When extreme climate related events occur, local governments are the first line of response, bearing multiple responsibilities and often lacking necessary knowledge and response capacities. They are equally in the first line of response when it comes to preparedness, risk reduction and building resilience to climate induced risks.

Moldovan authorities still use a very narrow approach on "civil protection and emergency response" when it comes to climate and disaster risk management. They have relatively recently adopted "Prepare, respond and recover" and "Increased resilience to risks" approaches and started using these in their activities and actions.

Nevertheless, given the large portfolio of actions which imply these approaches - e.g. hazards and vulnerability assessments, effective institutional capacities and coordination mechanisms, investment in protective infrastructure, early warning systems, ecosystem protection and restoration, training, education and awareness, etc.- their efforts are fragmented and require significant support from development partners.

Way Forward

UNDP Moldova supports the local authorities to **identify climate vulnerabilities and further address climate resilience in local planning documents.** Among the practical examples of this kind of support might be mentioned:

- Development of climate vulnerability assessment/ Climate change profiles at local level (with observed trends in temperature, precipitation, humidity, etc.)
- Incorporating climate vulnerabilities into local development planning frameworks (e.g. Socio-economic development strategy, local disaster risk reduction action plans).

Demonstrating **community-based disaster risk reduction and climate adaptation practices** in various sectors (agriculture, forestry, transport) is also among UNDP's portfolio of supported activities. Thus, a series of small-scale water reservoirs are being constructed to improve water storage infrastructure and increase water availability for agricultural livelihoods and flood protection.

Similarly, UNDP Moldova is advocating for **ecosystem-based adaptation and nature-based solutions**, that are meant to enhance the resilience of communities based on ecosystems services delivered by neighboring natural habitats. Local natural ecosystems serve as natural buffer and are protecting against adverse climate change effects. If not undermined, they increase the resilience of communities by strengthening livelihoods and the availability of natural resources, water and food supplies.

Such solutions have been successfully piloted in Soroca and Stefan Voda districts and are having high replicability potential. Negative impacts of Climate Change have been anticipated by increasing the resilience and self-restoration capacities of the local aquatic and terrestrial ecosystems. Besides reduced climate vulnerability, strengthened ecosystems have supported local business activities, associated with forest and agriculture ecosystems services valuation, such as medicinal plants or berries collection/production, and consequently increased revenues of local inhabitants.

Moreover, as an ecosystem-based adaptation solution, UNDP Moldova has successfully piloted sustainable management of community forest and pastures by developing community pasture and forest management plans. Based on these plans, pasture and degraded lands were restored with economic valuable and climate resilient flora species. These activities have demonstrated significant benefits in increasing local public budgetary resources and financial predictability, increasing employment for local work force, increasing demographic stabilization, premises for better local infrastructure and public services, and more enabling business environment especially in the area of animal breading and animal products processing.

UNDP is continuing to invest in sustainable and inclusive climate resilient communities by building environment management and adaptive capacities to climate change and supporting environment friendly and climate resilient income generation activities with the highest potential in 30 communities from 4 districts and Transnistria and Gagauzia regions.

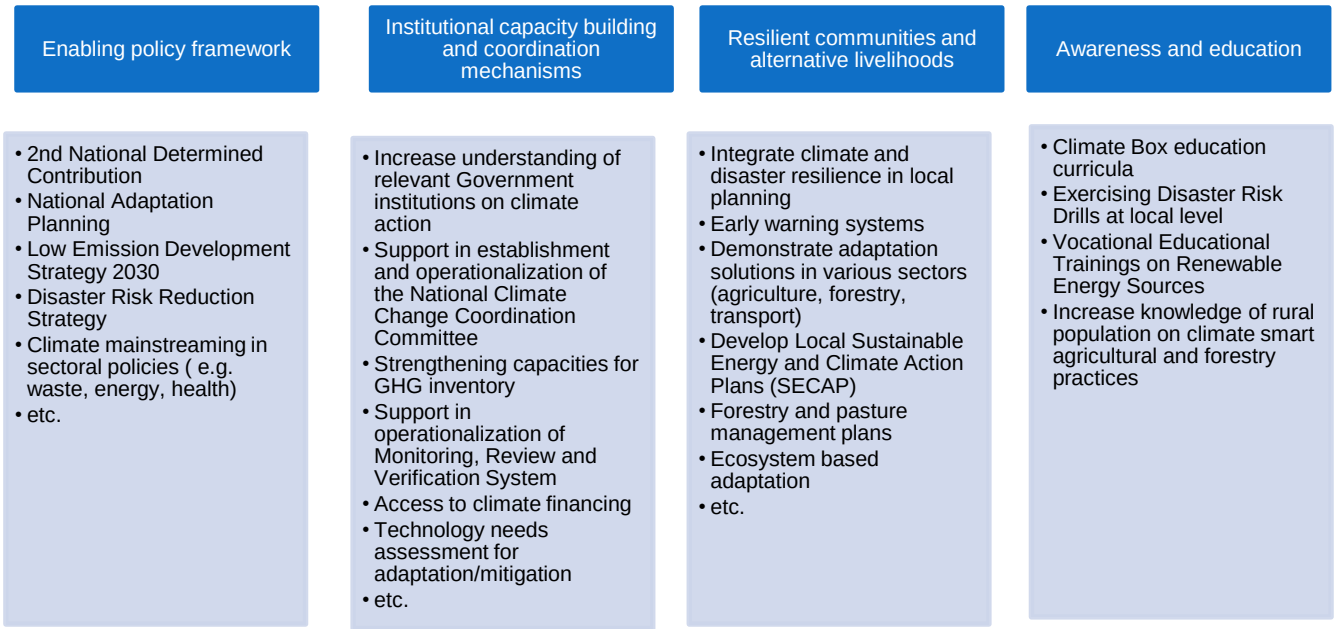
In certain communities and watersheds which are highly vulnerable to the consequences of climate-driven rainfall variability, particularly to the risks associated with fluvial and flash floods, UNDP develops a series of pilot activities as part of ecosystem based adaptation (e.g. reforestation, strengthened management of wetlands, soil conservation works, and other floodplain revitalization activities).

UNDP is equally advancing efforts to ensure **climate resilient urban development**, particularly in Chisinau with a focus on new commitments on low-emission buildings (e.g. Green Building Design Code), electric vehicles and climate-smart practices in public transport and urban infrastructure.

The solutions exemplified above are part of the UNDP Moldova well-defined vision *(please see Figure 1)* on how to embrace climate perspective and ensure climate resilient and low-emission development both at national and local levels.

However, a transformational shift from response to preparedness might be achieved if investment in climate resilient communities are implemented either at scale or are scaled up in coordination across the UN System, with Government and other development partners and communities.

Figure 1. Pillars of support on climate resilient development



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