

EXECUTIVE SUMMARY

Chapter 1. Introduction

Climate change is a truly unprecedented and unique challenge for mankind. Though it is global in nature, poor nations appear to be most vulnerable as many of them will be hit disproportionately and, at the same time, their adaptive capacity is much more limited. Therefore, immediate and concerted action on both international and national levels is required in order to mitigate climate change by reducing greenhouse gas emissions and help both developed and developing countries to adapt to those effects which are already inevitable. Unfortunately, in Moldova climate change is sometimes perceived of as a remote and irrelevant concept.

The authors of this report believe that the challenges of climate change should be fully introduced into the national policy agenda. If they are neglected and we proceed with business as usual – both in terms of allowing climate change to continue unabated and in terms of adapting to its impacts – the cost of inaction faced by current and future generations may be significant. Development policies, however, should also aim at advancing the interests of their intended beneficiaries – the people. Therefore, this report goes beyond an assessment of bio-physical impacts and applies a human development perspective throughout its analysis by trying to shed more light on the way climate change will affect Moldova's development trends and agenda and, ultimately, the hopes and opportunities of the Moldovan people.

Chapter 2. Human development in Moldova – the background

Human development basically means freedom of choice for all the people living in a given country or region. In order for people to make effective use of this freedom, they need enabling conditions such as adequate education, good health, material well-being, social participation, empowerment and inclusiveness and equitably distributed benefits of economic growth.

Human development is thus a multifaceted and complex phenomenon spanning many areas. One measure used to assess a country's development progress is the Human Development Index

(HDI). From an HDI perspective, Moldova is one of the least advanced European and/or transition countries. In 2005, Moldova had the fourth lowest HDI in the group of 20 Central and Eastern European (CEE) and Commonwealth of Independent States (CIS) countries for which the HDIs were available. Moldova was also among the four transition countries which in 2005 were worse off in terms of HDI than in early transition, and its losses in terms of human development were the largest compared to all other countries. This decline was largely due to the economic collapse associated with lower enrolment in education and the population's poorer health status. As its economic growth model fundamentally influences a country's outcomes in terms of human development, it has to be said that in Moldova this growth has been narrowly based in geographical terms as well as socially inequitable. The decade-long increase in outward migration of labour is a symbol of Moldova's deficient economic growth model, which contributed to a weakened social fabric, family disintegration, domestic violence and a worsening demographic outlook.

Climate change influences human development in many ways. Global warming has already changed livelihoods in many parts of the world and the poor are suffering the most. Needless to say, developed countries have more financial and human resources available to implement the measures necessary to adapt and provide for human security even in the case of extreme weather events, while lower income countries lack these. Therefore, climate change, be it through heightened water insecurity, increased exposure to extreme weather events, environmental deterioration or loss of natural resources and ecosystems, may raise significant hurdles to improving Moldova's human development. Of particular concern are the impacts on agriculture, which is a major source of income in Moldova, where more than half the population lives in rural areas and about one third of the labour force is still employed in agriculture. Depending on how well long-term development strategies in Moldova will perform, this situation might change within the next two generations. There might be less agricultural employment and welfare dependency on rural income, a trend which could come hand in hand with demographic change, productive innovation

and climate change. Nevertheless, for the coming decades and until all the expected changes start to take place, the possibilities for human development in Moldova will be determined by the majority of the population's dependency on agricultural income and a rural way of life. In this respect, droughts have repeatedly reduced agricultural income in the past and their frequency and intensity is expected to increase in the future.

The whole extent of climate change's impact on Moldovan society itself depends in turn on future human development performance which has the potential to significantly reduce the negative impacts of climate change and take advantage of potential positive outcomes. This depends on the country's adaptive capacity, i.e. the ability or potential to respond successfully to climate variability and change, and includes adjustments in both behaviour and resources and technologies. Human and social capital are key determinants of adaptive capacity, as important as income levels and technological capacity, population development and governance structures (which may enhance but also decrease specific adaptation potentials). The four Moldovan regions investigated (North, Centre, South and Chisinau) do not belong to those region types that are presumed to have the lowest adaptive capacity. Chisinau's potential to adapt to climate change is the highest in Moldova – the capital has a high ranking, even compared to Romanian and Bulgarian regions of high adaptive capacity.

Chapter 3. **Climate change and its challenges for Moldova**

Moldova is located in a temperate continental climate zone, slightly modified by the proximity of the Black Sea and the intrusion of warm wet air from the Mediterranean. Climatic seasons are clearly defined with a short and soft low-snow winter and a long summer which can be very hot and dry. On the whole, Moldova is located in an insufficiently wet zone which results in a high frequency of droughts which negatively affect its economy. For example, between 1990 and 2007 alone, nine droughts were registered in the country.

The climate projections for Moldova in this Report are based on a range of recent coupled atmosphere-ocean General Circulation Models (GCMs). Such models are used as a research tool for studying and simulating the climate, and for operational purposes, including monthly, sea-

sonal and inter-annual climate projections. The results of six GCM experiments based on the A2 and B2 marker scenarios of the Special Report on Emission Scenarios (SRES) for three time-slices (2010–2039; 2040–2069; 2070–2099) served as a basis for downscaling.

These models suggest that annual mean air temperature in Moldova will increase under both emission scenarios. By the end of this century the increase may amount, on average, to 4.1–5.4 °C. Depending on the GCM experiment, these values vary from 1 °C to 6 °C. Along with warming, a continuous annual fall in summary precipitations is expected, especially for the A2 emissions scenario.

Moldova expects maximum warming in winter and in transition seasons. By the 2080s, the baseline negative winter mean temperatures (-2.1 °C) could increase by up to 2 to 5.7 °C; the spring and autumn mean temperatures could increase by about 4 to 5 °C. The lowest relative warming is expected in the summer months: by 1 °C in the beginning and by about a 3 °C by the end of the century. Moderate increases in precipitation are expected in winter and spring, but the summer and autumn tendencies are mainly negative (20–30 per cent decrease by the 2080s). On the whole, Moldova will face warmer and wetter winters but hotter and drier summers and autumns. To use an analogy, Moldova can expect winters like in England and summers like in Greece or Spain.

In order to represent the new humidity conditions, which are particularly critical for the agricultural sector, separate temperature and precipitation changes should be incorporated into other, more complex indices. In this report, two indicators of new humidity conditions – *Potential Evaporation (PE)* and *Aridity Index (AI)* – were calculated. These indicators show that the annual decrease in precipitation, against a temperature increase, stimulates a strong humidity deficit. Potential Evaporation is likely to increase by 15–20 per cent over the first time horizon and practically double by the end of this century, with the A2 emissions scenario resulting in stronger climate change signals. The Aridity Index also shows that Moldova is moving towards a dryer climate, from insufficiently wet and wet subhumid zones to dry subhumid and semiarid zones. While in Moldova's baseline climate (1961–1990) only the end of summer and the beginning of autumn were semiarid, in the future significantly longer and more intense dry periods are likely.

Extreme weather events are likely to become more frequent in the future. Projections suggest that what were considered as extreme rare events for absolute maximum temperatures under the baseline climate (34–35 °C) will possibly become mean maximum summer temperatures. The observed and expected increase in night temperatures is especially important for human health because it results in unfavourable conditions for night relaxation.

The summer of 2007 may provide a glimpse of the shape of the future climate to come and a foretaste of some of the negative impacts that are likely in the distant future. The heat-wave of 2007 is clearly more closely related to what may be expected in the future climate than to contemporary climate conditions. Moreover, the summer of 2007 is also a signal for policy- and decision-makers that climate change and its impact are issues that should be given attention in the present and not be left for the future.

Chapter 4. Climate change and water resources

Water is a critical resource for human development and economic growth, being essential for the vital functions of all living beings, plants, for agricultural production as well as for many industrial processes. In general, Moldova's water supply-withdrawal balance is adequate with respect to the available resources. In spite of this adequacy, specific regions in the South already face water scarcity. Climate change is likely to affect the adequacy of water resources, and the water-deficient regions are likely to suffer the most. Addressing deficits in these regions will be critical for supporting a sustainable economic recovery. Due to climate change, Moldova is expected to experience increasing frequency of short-term water oversupply, particularly in the form of flash floods as well as seasonal droughts.

Moldova does not have enough financial resources to implement the primary technological adaptation measures needed to address the expected water variability, such as dams and dykes. Considerable external funding would be needed for these measures to be successful. Comprehensive and efficient implementation of Moldova's "Strategy on the modernisation and development of communal water supply and disposal systems in the settlements of the Republic of Moldova" and the "Concept of national water re-

sources policy" would be an important first step towards addressing Moldova's water situation. The "Framework regulation on using communal water supply and disposal systems" needs to be improved in many ways, including establishing rules for up-stream and down-stream users and for force majeure situations.

Given Moldova's limited financial resources, introducing new crops and agricultural practices, together with reduced use of flood plains in crop production, would provide some relief from expected climate-related water stress.

Chapter 5. Ecosystems: vulnerability assessment, climate change impacts and adaptation measures

Agricultural ecosystems cover some 75 per cent of Moldova's land area, while natural ecosystems account for 15 per cent. Ecosystems in Moldova are currently threatened not only by climate change but also by socioeconomic conditions, poverty and a lack of political will to address these challenges. Practices such as overly intensive irrigation, heavy use of chemical fertilisers, pesticides and fungicides and use of heavy agricultural machinery, etc., lead to degradation, erosion, compaction, and depletion of the soil which, in turn, affects its capacity to sustain agricultural crops and human welfare. Unauthorised waste disposal, overgrazing, illegal tree felling, illegal hunting and fishing, and industrial and agricultural pollution are examples of other activities which have a substantial negative impact on the functioning of ecosystems.

The state of the agricultural ecosystems fundamentally influences Moldova's ability to support its economic and human development. Agricultural ecosystems are highly vulnerable to climate variability and extreme weather events which are expected to increase as climate changes. Some specific measures to reduce their vulnerability include rational land consolidation, promotion of ecological agricultural practices, improvement of soil fertility and efficient irrigation.

Natural ecosystems are also in a poor situation, with large portions being highly degraded and the number of endangered species climbing rapidly. Climate change is expected to have substantial negative impacts on forests and aquatic species, especially in the southern and eastern parts

of Moldova; these are currently semi-arid regions and as the climate changes they may turn arid. A number of proactive measures, including the extension and better protection of protected areas, need to be implemented in order to ensure biodiversity conservation.

Establishing new policies based on an integrated landscape approach to biodiversity protection under different climate change scenarios and on developing River Basin Management Action Plans for the sustainable use of water resources are some of the most important long-term adaptation measures that need to be implemented in order to meet the sustainable development objectives.

The projected climate changes are likely to have significant impacts on biodiversity from the level of species right through to the level of ecosystems or biomes. Rising temperatures will force many living organisms to migrate to cooler areas in the northern part of the country, while new organisms will arrive. Such movements might involve many species including plants and trees. However, some flora and fauna species could have low resilience to temperature and precipitation changes because climate systems will move more rapidly than they can follow.

Chapter 6. Impact of climate change on the agricultural sector

In general terms, Moldova has climate conditions and a relief favourable for agriculture. Soils are highly fertile in the northern region and have a medium level of fertility in the central and southern regions. However, in the transition period, Moldovan agriculture has suffered a dramatic decline, one of the deepest in the group of transition countries. This has had a significant impact on human development outcomes, as many rural inhabitants are migrating to urban areas or abroad and villages are losing their human capital.

The main causes of the agricultural decline in the last decade include low levels of investment in the sector, the inadequacy of the recent reforms and a number of institutional and regulatory obstacles affecting exports and domestic sales. However, as a result of poor technological development and a failure to adopt soil protection measures, natural calamities such as droughts, late spring frosts, hail, and floods frequently have had a destructive impact on harvests and on farmers' income. Despite the generally high level

of soil fertility, agricultural productivity indicators in Moldova are very low. If the issue of soil protection is not pursued seriously and soils continue to deteriorate at the present rate, agricultural productivity and farmers' incomes will decline further still.

Climate change could seriously undermine Moldova's food security, as patently proven by the severe drought of 2007, when both the overall quantity and the composition of food available to rural inhabitants worsened. Large families, single-headed households and families with disabled members have been assessed as being the most vulnerable in conditions of drought. According to international estimates of the impact on ecology and agriculture, this drought was of catastrophic proportions. In the 20th century such a phenomenon was registered only once, in 1946-47. More than 90 per cent of the country's territory and 80 per cent of the rural population depending on agriculture was affected by the diminished harvest. The savings and income of the rural population were severely reduced, with total losses amounting to USD 1bn, according to official estimates. Output of cereal crops diminished by 70 per cent compared to 2006, and the wheat harvest fell by a factor of 10. Many households were not able to maintain their livestock because of the lack of fodder. Bovine livestock diminished by one quarter, pigs by almost 50 per cent, and sheep and goats by 10 per cent, and the number of poultry by 25 per cent. By January 2008, many families had had to liquidate their entire livestock resulting in a loss of foodstuffs. High inflation fuelled the deteriorating situation.

Projected climate changes are likely to have a negative effect on wheat production, which has a central role in providing food security. It is also likely that climate change will affect vineyards, which are economically very important. If no alternative economic occupations are provided, these trends will drive more rural families into poverty and further encourage the depopulation of rural areas. Small peasant farms, averaging 1.5 hectares, as well as farmers in the central hot semi-humid and south hot-arid zones are the most vulnerable to the types of extreme climate conditions expected to become more frequent and severe with climate change. The provision of irrigation in appropriate areas within these two zones would provide significant benefits even under current conditions, potentially increasing yields by 1.5 to 2 or more times as compared to yields without irrigation.

Even though climate change can induce some positive changes, the overall balance of the climate change effects projected for the next 100 years is not favourable for Moldovan agriculture. A rough economic assessment of the impact of climate vulnerability on wheat and corn in the period 1996-2008 suggests that net losses have so far exceeded net gains. In order to adapt Moldovan agriculture to changing climate conditions, a number of no regret measures are recommended, including using modern farming techniques, improving short-term weather forecasts and preventing soil erosion. At the same time, reforms should continue with the aim of adapting the agricultural system, implementing an efficient system of farmers' training and education and putting in place a developed agricultural infrastructure (including irrigation and hail protection).

Chapter 7. Climate change impact on transport infrastructure

The importance of the transport infrastructure for human development is hard to underestimate. First, it supports economic growth and thus poverty reduction efforts. Second, it helps with access to basic services which can significantly improve livelihoods and income opportunities. The importance of transport infrastructure is further underlined by the fact that Moldova is a small and landlocked country. Although the density of Moldova's road network is more or less on a par with regional standards, the very poor quality of these roads undermines their ability to fulfil their economic and social function. Little investment in road infrastructure has been made in the last two decades, significantly contributing to its vulnerability. The level of funding of road maintenance declined from about 80 per cent of total necessary funds in 1990 to less than 10 per cent in 2000. It rose to 20 per cent of needs by 2006, but this is obviously still inadequate. As a result of constant underinvestment, the road network has almost collapsed in terms of quality. Railroads, which also play an important role, are only in a slightly better shape.

There are several main effects climate change will have on the transport sector. First, lasting heat-waves can worsen or even destroy the asphalt pavement of national roads. Second, high temperatures during summertime can cause deformation of railroad lines which are already old; further they potentially accelerate the physical

wear-out of metal parts in bridges and can even cause thermal deformation. Moreover, higher temperatures will underscore the need to use heat-resistant engines, while air-cooling will have to be more widely employed, leading to higher energy consumption. Still more critical, climate change is set to significantly constrain the development of naval transport envisaged also by the strategic framework for the development of the transport network. Besides higher temperatures, extreme weather events can also have a significant impact on transportation, both in urban and rural areas, with the risk of cutting off some rural communities where roads are especially poor.

There is a series of adaptation measures that can be taken into account in order to tackle climate challenges in the transport sector. A no-regret measure would be the incorporation of climate change considerations into the technical standards to be implemented throughout the sector. Thus, building higher-quality, weather-resilient roads would increase the competitiveness of the sector and road safety. In order to minimise the impact of heavy trucks on roads, their movement on sensitive roads should be limited during the day.

At the same time, warmer winters will allow for less rigorous requirements regarding the depth of the roadbed, thus freeing up resources that can be employed in improving road quality.

Chapter 8. Climate change impact on the energy sector

Access to energy is crucial for serving society's social needs, fuelling economic growth and promoting human development. The energy sector of Moldova exposes a series of vulnerabilities, such as limited production capacity, low energy efficiency and insecure supply. Thus, due to wear-out and lack of investment, the actual power generation capacity is half the original installed level, while energy imports cover almost all the country's energy needs.

Given the Republic of Moldova's external vulnerability to disruptions and price hikes in the foreign energy supply, it is hardly surprising that recent developments on the global energy markets hit Moldovan consumers particularly hard. During the last couple of years, prices for imported gas and electricity have risen significantly, especially for gas, as Russia has started to apply a new price policy toward CIS countries. Furthermore, rising prices appear to undermine state efforts aimed

at installing gas networks in rural Moldova, since exorbitantly high investment costs prohibit rural consumers from connecting to the networks, while increased prices make many people refrain from consuming gas even after being connected to the network.

The overall rise in prices for imported energy has resulted in growing tariffs for heat energy, putting strains on households as well as the public budget. Moreover, the date of the start of the heating season for social public institutions such as hospitals, schools and kindergartens has become an issue of heated debate.

Climate change will most likely affect the energy distribution infrastructure, patterns of demand and energy production capacities. The patterns of demand will change as winters become warmer, decreasing heat energy needs, while in summer, higher temperatures will push up demand for the electricity needed to power air-conditioning equipment. The energy infrastructure may suffer as result of more frequent and more violent extreme weather events, damaging supply grids, while growing demand in the summer time could cause transmission lines to sag. Further, climate change potentially puts Moldova's plans to enhance its domestic capacity to produce energy at risk, as water resources may become scarcer in coming decades.

Although climate change is set to pose significant challenges for Moldova's energy sector, it should be said that most of the solutions on the table would need to be implemented even if climate change were not taken into account. The main adaptation efforts should aim at changing consumer behaviour both through tariff stimuli and information campaigns, strengthening domestic energy efficiency by integrating the relevant standards into technical requirements and building codes, and spurring the development of renewable energy production. Emphasis should also be placed on the consolidation of infrastructure through technological modernisation, taking growing climate risks into account.

Chapter 9. Climate change and human health

The ability to live a long and healthy life is at the core of human development. At the same time, the impact of climate change on human health is significant and well-documented. The effects are passed on to human health through chang-

ing weather patterns (more frequent and severe extreme weather events) and indirectly through changes in water, air and food quality and quantity, ecosystems, etc. More specifically, the direct impacts of climate change include deaths from floods, low and high temperatures and other climate change-related disasters. Indirect impacts include rising numbers of infection bearers such as mosquitoes which swarm near flooded land and spread diseases and a larger tick population. Altogether, when temperatures are high enough, these bearers contribute to developing encephalitis and Lyme disease. Failure to supply the population with good-quality drinking water also increases the risk of infections spreading. This exacerbates the risks caused by water shortages that are already visible in some parts of the country, especially in the southern region. In fact, a direct link between the maximum frequencies of diarrheic diseases and salmonellas in the hottest months of the year is easy to observe. Thus, the entire population, especially children, are at risk during this period. Furthermore, heat-waves represent an enormous risk for the elderly population, as well as for those with chronic cardiovascular illnesses resulting from hyperthermia. Another important risk is increasing exposure to allergic diseases via aeroallergens in part as a result of changing pollen counts.

Overall, the rural population appears to be more vulnerable to climate change impacts as it has more limited access to medical services as well as to medical insurance coverage, is much more dependent on a non-centralised supply of water (which is of much lower quality), and has a higher share of the more vulnerable elderly population. Also, as climate change will significantly affect the agricultural sector, the risks of malnutrition will become particularly important for the rural population. The urban population, however, may be significantly affected by the creation of 'heat islands' in the cities, with critical effects for the vulnerable groups of the population.

The health risks stemming from climate change were already outlined in the First National Communication of the Republic of Moldova. Unfortunately, the conclusions and recommendations of this effort are not taken fully into account in the national health-related strategic framework.

Therefore, the national health policies should incorporate in a proper manner responses to the health risks posed by climate change. Other important measures include: introduction of

early warning systems with regards to extreme weather events, extending medical insurance to fill the gaps in the coverage of the poor and rural population, implementing sanitation and water-treatment projects to ensure rural communities and social institutions have access to quality water, and developing aeroallergen monitoring and asthma surveillance systems. At the same time, the development of electronic databases for relevant data collection from doctors and medical institutions and proper public information on climate change-related health risks should be put in place.

Chapter 10. Towards a risk-resilient society

Risk transfer represents an important instrument for managing the risk resulting from natural perils and can help mitigate or minimise disaster losses. A well-implemented plan for spreading economic risks from extreme events across society and/or transferring those risks from victims to the financial markets is a fundamental adaptation measure that crucially affects how the impact of climate change will ultimately affect a society. Although risk transfer does not prevent the damage climate change causes, it represents an effective mechanism for managing the hardship resulting from climate risks and quick recovery, especially of those climate risks which cannot be prevented by means of risk mitigation measures.

Furthermore, risk transfer can be seen as an effective instrument for helping reduce poverty. For example, access to these tools can help rural households stabilise their incomes, to safeguard their financial resources and to improve their access to credits by lowering the risk of lending and hence reduce the cost of borrowing. In Moldova, the insurance sector has developed dynamically in recent years. Nonetheless, it is still poorly developed compared to western European countries. For instance, the insurance depth (the share of gross written premiums in GDP) is about 1.3 per cent compared with 9.2 per cent in the EU-15. The low levels of development are mostly explained by the low income of the population, a lack of public risk information and the existence of public funds that also compensate victims.

It should also be mentioned that the insurance sector is even more poorly developed in rural areas. Despite the fact that the insurance of agricultural production is subsidised by the state, ag-

riculture remains one of the most underinsured sectors. In order to build a proper risk transfer mechanism a set of conditions should be met. A non-exhaustive list of prerequisites includes: optimally coordinated risk partnership between insurers, state and citizens; generation of a risk collective of sufficient size to enable an effective balancing of risks; effective control of adverse selection and moral hazard; and generation of incentives with respect to collective and individual risk prevention.

Moreover, the development of such a risk transfer mechanism would require political efforts aimed at providing better risk zoning and mapping, encouraging ex ante insurance and joining regional risk transfer mechanisms.

Chapter 11. Policy discussion: climate change realities in the country development agenda

Despite the fact that climate change is a recognised fact of global importance, the national strategic framework lacks integrated measures for mitigating climate change or adapting to its effects. Some of the impacts are mentioned sporadically and in differing contexts, but the connection between them and climate change as well as the complex repercussions are mostly omitted. Based on an analysis of current strategies and the legal framework, it can be concluded that Moldova urgently needs to put forward adaptation measures that would reduce the potential negative impact of climate change on further development. To date, the topic of climate change is mostly a priority for the Ministry of Environment. However, efforts by this Ministry alone will not be enough to successfully adapt to climate change. It is an issue that needs to be incorporated into different policy areas – whether energy, transport, agriculture or industry, etc. Therefore, a timely elaboration of national adaptation strategies and the integration of climate change aspects into development cooperation as well as into the relevant national sectoral policies are of high importance.

These relevant policies should be designed and implemented by the government at many levels, under the pressure of severe financing constraints. Responding to climate change will require the integration of adaptation measures into all aspects of policy development and planning for poverty reduction. These government

efforts would require consistent international support, going beyond financing. Assistance will be needed for capacity development in areas like energy and water efficiency, organic and sustainable agriculture, alternative energy sources etc. While project-based support plays an important role, adaptation planning has to be part of national programmes and budgets. Furthermore, all adaptation efforts should be society-wide and engage all key actors. Public authorities, the private sector, civil society and individuals all have to be involved and take responsibility.

At the strategic policy level, for adaptation efforts to be successful they will require a climate change adaptation framework that ensures an effective adaptation of the country to climate change impacts. Otherwise, projected impacts could prejudice Moldova's development and worsen the situation in the economic and social realms. Moldova has to put in place sectoral adaptation strategies or amend the current strategies in order to incorporate necessary adaptation measures. This is important as each sector needs a specific approach, but at the same time all adaptation measures must be taken as a complex whole, to make sure a qualitative, effective and coherent climate change adaptation process takes place. A well-designed policy framework for

climate change adaptation will ensure a timely response to climate change challenges, allowing the country and its citizens a progressive positive development.

All the proposed strategies could be part of an umbrella programme named the National Climate Change Adaptation Programme that would also include an Action Plan to implement adaptation measures, enforced also by a set of market-based instruments that would serve as economic stimulus. Part of the same programme should be a joint communication strategy that will provide for information access, public awareness, and public participation in the decision making process, cooperation between authorities at different levels and collaboration with academia in matters related to climate change adaptation for all sectors.

All in all, given the level of Moldova's economic development, the process of adaptation to climate change will not be easy. Our country will need to invest great efforts in order to ensure success in the adaptation of Moldova's development policies to climate change-related risks. However, all efforts made today will help ensure progress in human development for both current and future generations.