

"Supporting Moldova's National Climate Change Adaptation Planning Process" supported by the Austrian Development Agency (ADA) with funding from the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management and implemented by the Climate Change Office, Ministry of Environment in partnership with UNDP Moldova.



Photo credits: Alexandru Chiriac; Climate Change Office Moldova.











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"Supporting Moldova's National Climate Change Adaptation Planning Process" ADA/UNDP Project

Cross-sectoral multi-stakeholders Coordination Mechanism



Mainstreaming Climate Change Adaptation into planning process



Capacity building





On the ground implementation of innovative climate change adaptation technologies







CLIMATE CHANGE IMPACT and ADAPTATION in MOLDOVA

The Republic of Moldova's economy, population, and environment are highly vulnerable to climate variability and change. According to a range of studies, including the Republic of Moldova's Second National Communication and Third National Communication under the United Nations Framework Convention on Climate Change (UNFCCC) and the 2009/2010 National Human Development Report, the impacts of climate change are expected to intensify as changes in temperature and precipitation affect economic activity.

Responding to the risks posed by climate change requires a coordinated and concerted effort on the part of the Government of Moldova. The three year project, "Supporting Moldova's National Climate Change Adaptation Planning Process", supported by the Austrian Development Cooperation (ADC) with funding from the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management and implemented by the Climate Change Office, Ministry of Environment in partnership with UNDP Moldova is responding to this need. The project has set a strong foundation for adaptation planning process and implementation actions to take place in a systematic and iterative way.

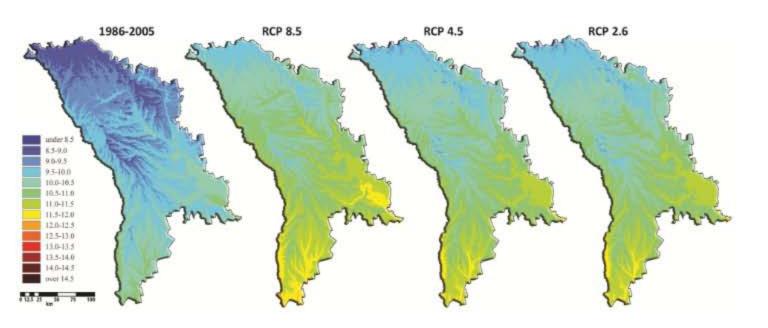
The project aims to ensure that Moldova has the system and capacities in place for medium to long term adaptation planning and budgeting contributing to reduced vulnerability of the population and key sectors to the impacts of climate change.

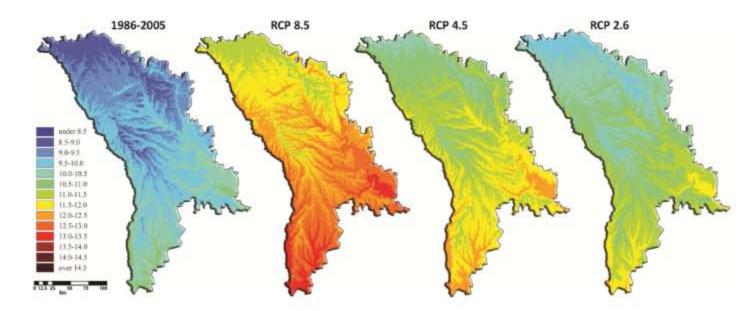
Output 1. Institutional and policy frameworks for medium- to longterm gender-sensitive adaptation planning and budgeting are in place.

Output 2. Institutional and technical capacities for iterative development of comprehensive NAP strengthened.

Output 3. Adaptation interventions in priority sectors implemented including demonstration projects at a local level to catalyse replication and upscaling.







Projected Multi - Model Ensemble Annual Mean Air Temperature, °C through the Republic of Moldova Reference: Lilia TARANU, Igor BERCU

Climate change is already challenging Moldova's development and future climate change projections show a wide range of impacts across all sectors of the country.

Climate change impact and adaptation in Moldova

Historical data indicate that Moldova is exposed to a highly variable climate that has already experienced an increase in extreme events.





In the last two decades, droughts have been more frequent and generally more severe.

Early warnings of extreme weather phenomena, primarily via precise forecasts of weather conditions, allow people to adapt and prepare.





With extended droughts, temperature increases, decreased water reserves, and soil erosion, households reliant on farming have been the first to feel the impacts of climate change.



STAKEHOLDER ENGAGEMENT and CAPACITY BUILDING



During the inception phase of the project, a number of key national institutions (sectoral ministries, agencies, NGOs) were identified as having a central role to play in the adaptation planning process of Moldova. The level of their understanding of climate change, and adaptation in particular, was identified through an institutional capacity assessment of seven key sectors of Moldova's economy (agriculture, water resources, transport, energy, health, forestry, regional development). Through a survey in 38 governmental institutions and agencies, the results showed a number of knowledge gaps with regard to climate change adaptation at the level of institutions and sectors. Therefore, strengthening of institutions at national, sector, district levels to enhance their capacity to plan for and implement adaptation was a continuous project effort oriented toward its sustainability beyond the project life.

A two-pronged approach to developing and strengthening institutional capacity and adaptive responses was applied:
(i) development and strengthening the enabling institutional capacity, and (ii) the development and strengthening of adaptive institutional capacity. Project activities were designed to address gaps related to climate awareness, human resources, and risk management information and technologies. Strengthening and enhancing the capacity of institutions at national, sector, district levels to to plan for and implement adaptation was a continuous part of project efforts - designed to ensure sustainability beyond the project.

Through raising awareness and supporting ownership in the NAP process, the project generated interest and encouraged climate change adaptation (CCA) leadership within the sectors. Information and training events enhanced learning as stakeholders increasingly engaged in the NAP process.

A combination of participatory approaches, tools and methods were applied in order to increase stakeholders knowledge of climate change adaptation and its medium- and long-term planning. Decision makers of local, sector, national levels, line ministries staff, a total of over 800 (600 m, 297 f) participants increased their level of knowledge in CCA during the awareness and knowledge-sharing workshops, training seminars, round tables, and training courses.



















The ADA/UNDP project recognized the potential value of connecting the expertise of the Austrian Central Institute for Meteorology and Geodynamics (ZAMG) with the needs of the State Hydrometeorological Service of Moldova (SHSM)

Within the ZAMG-SHSM partnership, which encourages the sharing of best practices in an environment of mutual assistance supported by disaster risk reduction drills, support was given to fortify SHSM institutional capacities and performances in line with EU Meteoalarm standards and provide high quality hydrological and meteorological services.

Tailored advanced training courses provided by ZAMG staff introduced advanced skills and competencies of the SHSM staff - supporting the successful operation of the Meteoalarm system, including severe weather warning, forecasting, and use of Opera and Emma systems.

One of the major outcomes of the ZAMG-SHSM partnership is Moldova's membership in Meteoalarm. Meteoalarm is a unique initiative by EUMETNET, the Network of European Meteorological Services, active in 35 countries in Europe and strongly supported by the World Meteorological Organization.

In order to improve the quality of data management, data availability and access a full the SHSM website has been updated and streamlined. In addition to the enhanced navigability, the data has been modified to adhere to Meteoalarm standards and ensure broader cohesion.



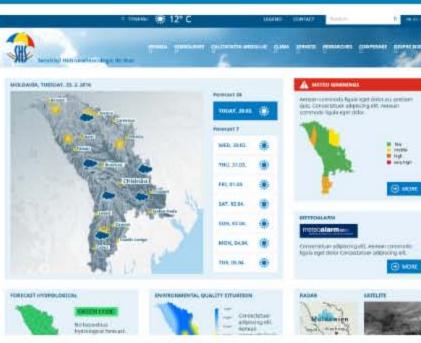
Capacity building





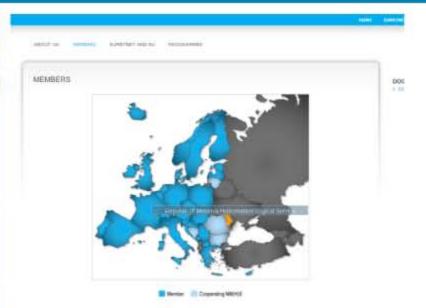






One of the major outcomes of the ZAMG-SHSM partnership is Moldova's membership in Meteoalarm.

The ZAMG-SHSM partnership has been particularly fruitful in building capacity, training forecasters and IT staff, building better computer modeling systems, and analyzing historical extreme weather events.



For Moldova, you can now find detailed information and warnings in the awareness reports for a variety of weather conditions (e.g. wind, snow/ice, fog, forest fires, rain, flood). A user can also tailor this information to a specific area of Moldova.



Following the partnership, Moldova became the 34th member of Meteoalarm (www.meteoalarm.eu).







Local level prevention capacities for eventual climate risks disasters have been strengthened with a comprehensive civil protection exercise undertaken by the Civil Protection and Emergency situation Department within the framework of the Agreement on Support signed between Republic of Moldova and the Federal Government of Austria regarding the mutual assistance in case of natural and technological disasters and the cooperation for their prevention.

Field exercise "Giurgulesti – 2015" was implemented by the Emergency Situations Coordination Center of the Commission of the Emergency Situations of the Republic of Moldova and the intervention teams of the Civil and Emergency Situations Service. The exercise was observed by the Head of Civil Protection and Exceptional Situations Service of Moldova, Deputy Minister of Ministry of Internal Affairs, Deputy Minister of Ministry of Environment, representatives of the Austrian Embassy in Moldova, ADA representatives, permanent Deputy Representative of UNDP, attaché of the Austrian Ministry of Internal Affairs in Moldova. The objective of conducted over two days exercise was to test the ability of rescue intervention in the liquidation of consequences as a result of adverse weather conditions.

inquidation of consequences as a result of adverse weather conditions.

In Chisinau, on 14 July 2016, government ministers and delegates from 16 countries across Eastern Europe, the Caucasus, and Central Asia attended a workshop to share the status of their National Adaptation Plans and to discuss regional climate change challenges.

For these countries, the trans-boundary nature of climate change gives particular urgency for establishing a coordinated approach towards disaster risk reduction and adaptation efforts.

The workshop, organized by the joint UNDP-UNEP National Adaptation Plan Global Support Programme (NAP-GSP), in collaboration with the Government of the Republic of Moldova, UNDP Regional Hub for Europe and CIS and the project, allowed delegates to share national experiences, work to identify medium- and long-term climate adaptation needs and discuss strategies to mainstream these needs into national development planning processes and strategies.









































ENABLING ENVIRONMENT

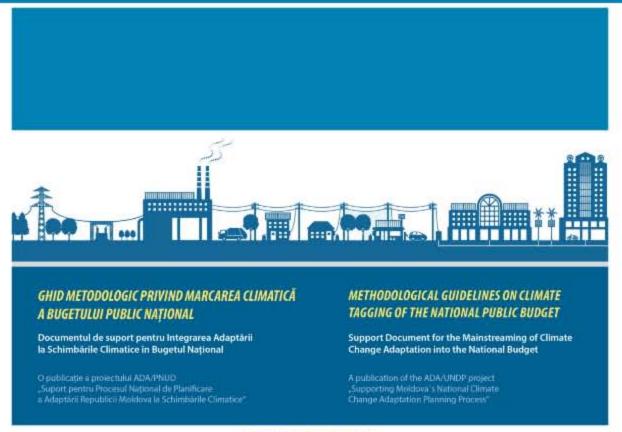


The project has set a strong foundation for adaptation planning processes and implementation actions to take place in a systematic and iterative way. The project supported the development of an enabling environment for sector specific activities through *Climate Change Adaptation Strategies* and the implementation of *Action Plans* in the health and forestry sectors. In the transport and energy sectors, a mainstreaming approach for climate change adaptation was integrated into existing development planning. In addition, district level socio-economic development strategies were drafted for 6 districts of Moldova: Singerei, Falesti, Nisporeni, Calarasi, Basarabeasca, Leova.

To enhance the integration of climate change considerations into governance and decision making process, a cross- sectoral multi-stakeholder *Coordination Mechanism* concept, including a *Monitoring and Evaluation* component was developed. Formulated as a Government Decision, and to serve as a clear mandate that will give the authority to the National Commission on Climate Change, the concept was created to coordinate both cross-sectoral and sector specific adaptation and serve as a mechanism for enhancing learning. In addition, the intention is that this can also be used as a tool of accountability with regard to adaptation. Through the development of a cross-sectoral *Climate Change Adaptation Coordination Mechanism*, stakeholders from all sectors and especially those most exposed to climate change will be empowered to participate in adaptation planning and implementation.

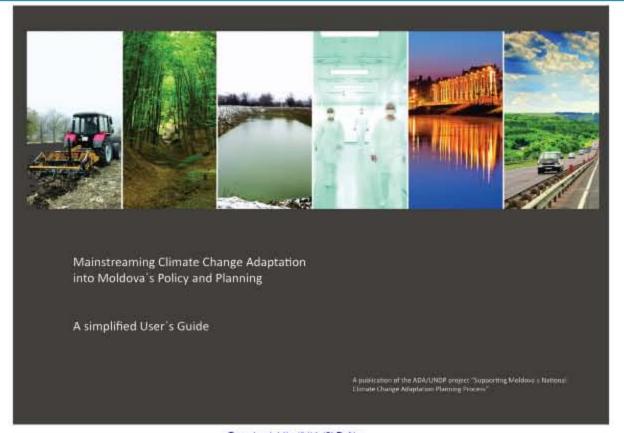
Mainstreaming Climate Change Adaptation into planning process





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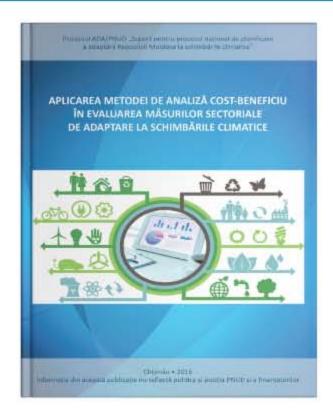
The methodological Guidelines articulate the process for identifying ('tagging') climate change expenditures across sectoral budgets, for the use of officials and technical staff as part of the sectoral budget development process. Described in the Guide approach supports the ability of the Ministry of Finance and the Ministry of Environment of Moldova to track climate expenditures and improves their ability to ensure progress on climate change vis-à-vis Moldova's national development goals and international commitments. This process also supports the development of the financial records required to help build a climate-financing framework.



Download: http://bit.ly/2hDzNsy

Mainstreaming climate change into Moldova's development process means integrating climate change considerations in decision making processes, in an informed way. This includes identifying risks and opportunities from current climate conditions and trends as well as projections for future, long-term climate. While climate mainstreaming is often applied to projects, programs or other specific activities in order to reduce risks and optimize preparedness for climate impacts, a process sometimes referred to as "climate proofing", this Guide focuses on strategic development documents, such as Plans, Strategies and Policies.

Enabling environment. Tools used.



A dedicated publication on application of cost-benefit analysis was developed with the aim to describe the role of undertaken economic analysis of adaptation options during the implementation of adaptation action at the sector level. The publication included clear guidelines on methodological approaches and best practices for applying these tools to adaptation efforts proposed in the energy, transport, and agricultural sectors in Moldova.



Enabling environment. Tools used.



Mainstreaming of climate change adaptation into sectoral planning of transport and energy sectors prove to be challenging. The project has therefore supported the development of a methodological approach, using sectoral climate risks and vulnerability assessments, identification of adaptation opportunities, recommendations of adaptation measures and investments and their integration into sectoral strategies and action plans.





Enabling environment. Sector specific strategies.

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The development of Climate Change Adaptation Strategy for forestry sector was identified as a as a requirement from the sector to develop specific enabling environment as a way of framing climate problems and formulating specific policy responses to current and future climate changes. The Action Plan of strategic document indicates the set of measures to be implemented at sector level in a concrete timeframe with estimated costs and expected benefits.





Enabling environment. Sector specific strategies.

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- Se aprobă Strategiu sociorială de adaptare a Sistemului de sărătiate la Schimbirile cilmunice.
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PRIM -MINISTRU

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Recanita Glavan

Pavel FILIP



The direct impact of climate change, including the effects of temperature extremes, heat waves, floods is acutely felt by Moldova's population therefore, the implementation of adaptation measures that would decrease population's vulnerability is a priority of the health sector. Project helped to develop health system strategic view and formulate it as Climate Change Adaptation Strategy of Health sector accompanied by the implementation Action Plan comprised of practical implementation measures to protect population against direct and indirect effect of climate change, including climate variability.



ADAPTATION MEASURES at the LOCAL LEVEL



Through the promotion of innovative technologies implemented at the household level in the most vulnerable rural areas of Moldova, the project provided opportunities to showcase strong adaptation action. These efforts introduced technological responses to climate change, and enhanced the climate-resilience of rural communities. For example, in the agriculture, water and energy sectors, the project identified high priority districts in Moldova and instituted a small grant programme for activities.

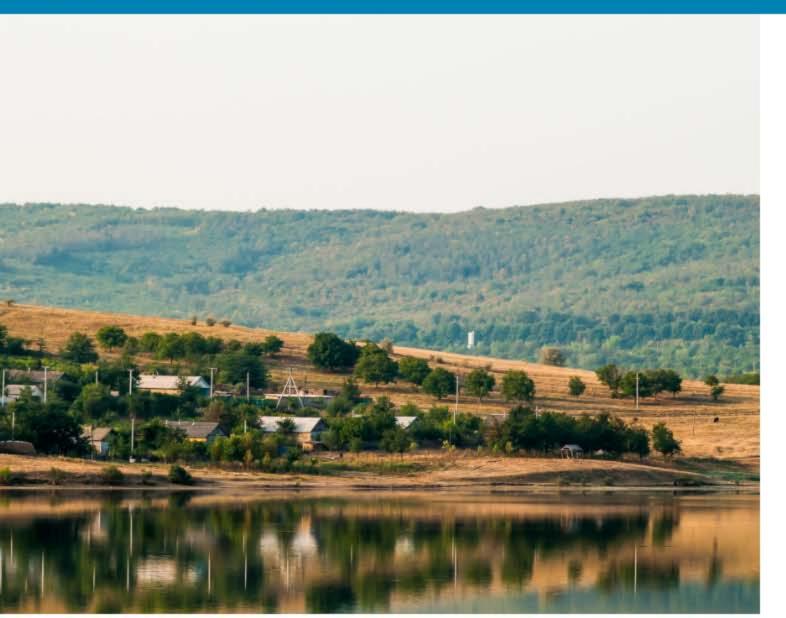
In addition to stimulating innovative ideas to local community resilience, launching the grant programme raised awareness and, coupled with information campaigns, sensitized local communities to climate change challenges.

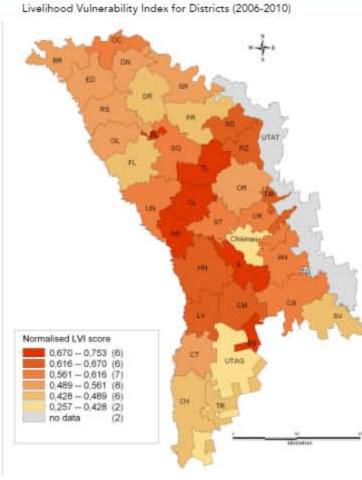
To encourage replication of the innovative technologies, workshops were held to promote sharing information and knowledge gained during the implementation of pilot projects. The workshops also engaged local authorities and civil society in similar adaptation initiatives and also to contribute to capacity-building of local communities with regard to climate resilience.

The project also developed scaling-up strategies of the agriculture and energy pilot initiatives - moving innovative adaptation initiatives from discrete projects to more strategic and programmatic approaches.

On the ground implementation of innovative climate change adaptation technologies

Adaptation measures at the local level





The Grant Scheme was implemented in the most vulnerable districts of the country during 2014-2016 y.y. The districts have been selected based on the *Livelihood Vulnerability Index (LVI)* elaborated in Moldova's Third National Communication, submitted to the UNFCCC in 2014.



Guidance for implementing climate change adaptation options as a Small Grant Scheme was developed, specifying the principles of selecting the target districts for implementation of adaptation interventions, the approaches used in prioritizing the sectors at the local level, and the general approach for financing adaptation projects. The *Application Guide* was developed to support application process contains information on general requirements of application procedure, selection process and eligibility criteria for advanced project proposals, project partners and costs. The Guide was made available to all applicants from the most climate vulnerable districts of Moldova.

Resilience capacity development to climate change effects using new technologies in the soil processing pilot project.

















Increase of adaptive capacities to climate change by promoting new agricultural technologies pilot project.

Using tillage conservation system pilot project



















Construction of a reservoir by capturing rainwater pilot project

















Ensure the growth and preservation of gooseberries plantation by using alternative electric energy source pilot project











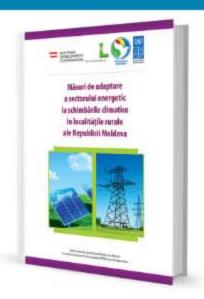














COMMUNICATING CLIMATE CHANGE ADAPTATION

The ADA/UNDP project applied a wide range of communication tools to improve its communications and advocacy work on results achieved. Geared to broaden and deepen awareness of national stakeholders on adaptation, engage with key audience (donors, media, as well as internal stakeholders), the project organized stakeholders and broader events open to the public. Climate change awareness and information messages were provided to project partners - thereby increasing their level of knowledge on CCA.

The work also sought to improve the web presence and impacts of ADA/UNDP Project climate change adaptation work, initiate a more visible campaign to showcase results achieved to date, as well as systematize the way that knowledge is harvested and materials are created and presented.

By developing publications and promotional materials (e.g. brochure, leaflets, guides, poster, video and audiospots) the project used a number of tools to communicate with targeted audiences. Promotion of these products, and efforts to engage a larger national and international audience included Facebook, Twitter, Instagram, YouTube, Flickr, Issuu, CCO and UNDP websites.

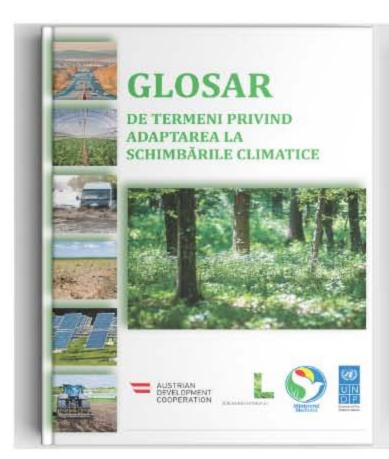


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The Glossary of terminology used in climate change adaptation was produced at the request of sectoral communicators and journalists, but also for all users interested and willing to understand the meaning and use correctly the terminology in order to avoid misinterpretation.

Right

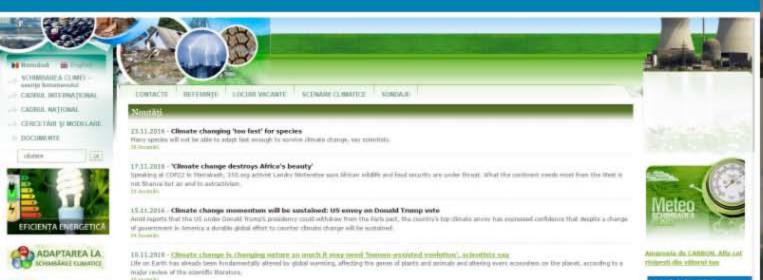
Brochures on Tools used in communication and Guide on internal and mass media communication have produced to facilitate climate change communication under the Project.







Communicating climate change adaptation





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THROUGH RAIN OR SHINE

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SMART FARMING TECHNOLOGY

Promoting climate-resilient agriculture in Moldova

IMPROVING METEOROLOGICAL SERVICES IN MOLDOVA

Tailoring severe weather warnings for decision makers and the public

















Communicating climate change adaptation

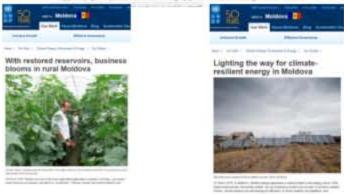


Cultivating climate resilience in Moldova



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For the ADA/UNDP project, social media and the communication work served to raise awareness of project activities, build support for CCA in the Republic of Moldova, and acknowledge UNDP, government and funding support for the project.

Using social media and other knowledge platforms as active dissemination tools for the communications and knowledge products (like WeAdapt, Issuu, Facebook, Instagram, Flickr, and Exposure.co) has allowed the project team to highlight the results of the individual activities to different audiences and mobilize partners, stakeholders, and the general public to advocate for the results achieved through the portfolio.













GENDER SENSITIVE ADAPTATION

Gender mainstreaming of project activities was a priority for the ADA/UNDP project, which included the establishment of institutional and policy frameworks for medium- and long-term gender-sensitive adaptation planning. Integrating gender perspectives ensured equal participation across genders across the range of adaptation and implementation actions.

Gender-specific activities included:

- A gender analysis and incorporation of gender perspectives into climate change capacity assessment reports across multiple sectors: energy, transport, forest, health, agriculture, water, and development;
- A gender focus for all documents developed under the ADA/UNDP Project,
- Dedicated training on gender mainstreaming for sectoral planners, experts, journalists, and focal points from line ministries;
- Development and dissemination of informational materials on the gender-climate nexus, along with sectoral guides on gender and climate change
- On-line and radio broadcasts of youth-focused gender and climate change messages;
- Contributions to the Moldova Gender Equality Strategy for 2016-2020;
- Publication of the 'Women leading the way to climate-resilience in Moldova' success story.







Project's participants competency building to mainstream gender into sector developmer policies and correctly communicate climate change adaptation was continuous effort under the Project.





















Awareness raising and guiding materials produced for gender mainstreaming



























THANKS

As part of the NAP Global Support Programme, assisting Least Developed Countries (LDCs) to advance National Adaptation Plans (NAPs), the project is aligned with the NAP-GSP's aims to strengthen medium and long-term climate change adaptation planning as well as budgeting, with an emphasis on gender-sensitive approaches.

Whether enhancing meteorological capacity, introducing more sustainable agricultural practices, or integrating adaptation considerations into policies, the ADA/UNDP project is ensuring that there is a system in place for medium- to long-term adaptation planning, thereby reducing the climate vulnerability of Moldova.





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