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Guidelines for Enhancing Climate Change Aspects in Social Development Projects

National Expert
Suzana Ignjatovikj Aleksova

International Expert
Magdalena Hoerst

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List of abbreviations

CCA	Climate Change Adaptation
CEECCA	Central and Eastern Europe, Caucasus, and Central Asia
DRR	Disaster Risk Reduction
ENDC	Enhanced Nationally Determined Contributions
GCF	Green Climate Fund
GHG	Green House Gas
IPCC	Intergovernmental Panel on Climate Change
MoLSP	Ministry of Labour and Social Policy
NAPs	National Adaptation Plans
NDCs	Nationally Determined Contributions
NGO	Non-Governmental Organization
SAC	Strategic Advisory Committee
SP	Social Policy
SPL	Social Protection and Labour

1. Introduction

According to the national and international projections the annual mean temperatures will rise through the year 2050 and beyond leading to adverse effects for all sectors[1]. North Macedonia will have a hotter and drier climate, with an increase in hot temperature extremes and a decrease in cold temperature extremes. Despite projections for drier conditions, an increase in extreme precipitation events is expected, resulting in an increased risk of flash floods. In the summer period, the number of consecutive dry days is likely to increase, leading to more frequent droughts. The growing season is also expected to shift and to be prolonged. Current research suggests that these climate extremes including droughts, floods and heatwaves will increase in frequency and magnitude in the future.

Even more alarming is that climate change effects are already recorded in North Macedonia:

- Increases in the average mean annual temperature in comparison with the period from 1961 to 1990 range from 0.2°C to 0.5°C.
- Among the ten warmest years for the period 1951-2012, five of the last six most recent years are included (2007, 2008, 2009, 2010 and 2012).
- Precipitation observations have indicated a general trend of decreasing rainfall.
- The greatest frequency of heat waves has occurred in the last ten years, with maximum occurrences at the greatest number of stations in 2012 and 2007[2]

The North Macedonian government acknowledges these problems and wishes to act, and decision-making should combine inclusion of marginalized and vulnerable groups. Climate change is predominantly considered a challenge for local infrastructures, energy supplies, agriculture, forestry, and other economic sectors – rarely as a social challenge. Although health impacts are probably the main social issue debated with respect to climate policies, even these impacts are very poorly analyzed in the North Macedonian's context and hence, lack sufficient appropriate policies. Many other social challenges such as poverty and well-being, climate-change-induced migration, increased gender inequality caused by weather extremes, the impacts on life expectancy and quality of life, as well as the environmental, educational, and cultural impacts tend to be neglected in active policy implementation. Some national climate-policy authorities seldom include governmental bodies responsible for social policy, often social interests and the specific needs of vulnerable groups are missing. There is no continuous cooperation between gender mechanisms and different sectors related to climate change (environment, spatial planning, etc.) in the field of climate change policy making. Coordinators for Equal Opportunities on Women and Men in Public Administration Bodies are not familiar, nor informed with the text of the Action plan on Gender and Climate Change, nor are familiar with the dependence on the gender based vulnerability to the climate change negative impacts (how and does gender relates to the mitigation and adaptation capacities), although some have participated in workshops on climate change policy-making.

They have no information on whether men and women have equal access to mitigation and adaptation resources / services and whether climate change is increasing existing gender

[1] IPCC Special Report on Global Warming of 1.5°C - formally approved by the world's governments in 2018
[2] Fourth National Communication on Climate Change, https://api.klimatskipromeni.mk/data/rest/file/download/15644574e26d61

disparities and vulnerability. Also, the coordinators have no knowledge of the reasons for the different positions of women and men in mitigating and adapting to climate change.[3]

There is identified lack of technical support in undertaking Environmental and Social Assessments and Gender Action Plans during development of project proposals. Despite that this topic is starting to be addressed in many projects and programs, especially funded by the multilateral development programs, the support that exists in the market is still primarily associated with the specific donor funding programs and is based on the specific donor requirements.[4]

The main goal is to protect the citizens from the damages and losses already caused by climate change, as well as from the threats and disasters. So far, many interventions for adaptation and mitigation to climate change[5] have focused on the role of specific sectors — such as energy, communications, or water — and on the climate proofing of infrastructure projects. There is for example a lot of research in the agricultural sector about how to modify crops in the context of climate change and shift to negligent emission technologies. More attention must be paid to social issues, such as indirect risks, household vulnerability, disaster risk management, and inclusion of poor and vulnerable people. There is a need of robust social policy response, with the understanding of the risks associated with climate change and climate vulnerability the poor are facing. There is also a role for social policy to empower the poor and help them develop the voice and political assets needed to claim access to climate risk management instruments. Therefore, social protection should be seen as a key sector for adaptation and mitigation in the Republic of North Macedonia.

Synergy can be created among the social policy approaches to adaptation to climate action and poverty alleviation. The key is understanding the risks associated with climate change and climate vulnerability facing poor and vulnerable people, and designing instruments that help people manage these risks.

Despite the recurrent problem of dealing with climate shocks and mitigating them, coverage of programs and instruments helping poor and vulnerable people manage climate risks remains very low; pro-poor adaptation should aim to change that situation. In general, several tools exist to meet the needs of vulnerable groups, as e.g. the introduction of focused social funds on social safety nets for natural disasters, livelihoods, microfinance, and insurance. Also, any effectful mitigation measure will be for the benefit of the entire society, including vulnerable groups.

The Green Climate Fund acts on the inequalities magnified and produced by climate change for vulnerable communities and acknowledges there with the fact that climate change disproportionately affects vulnerable groups, including the poor, elderly, and those with limited access to resources. These groups are less able to prepare for, respond to, and recover from climate-related disasters. Also, women often face greater challenges in the context of climate change due to social, economic, and cultural factors. They may have limited access to resources,

[3] Source: https://api.klimatskipromeni.mk/data/rest/file/download/07015e39ea890385
[4] Source: https://www.greenclimate.fund/sites/default/files/document/mkd004.pdf
[5] Adapting to climate change is the process of adjustment to actual or expected climate and its effects. Whereas mitigation involves actions that reduce the rate of climate change. Climate change mitigation is achieved by limiting or preventing greenhouse gas emissions and by enhancing activities that remove these gases from the atmosphere.

decision-making power, and face higher risks during climate-related disasters. Considering this set of complex challenges, the GCF is active in following areas:

- The GCF supports projects that build resilience in communities prone to climate-induced migration. This includes investments in sustainable agriculture, water management, and early warning systems to reduce the need for migration as a coping mechanism.
- The GCF prioritizes projects that address the needs of vulnerable populations. This includes funding for community-based adaptation initiatives, capacity-building programs, and the development of inclusive policies that ensure equitable access to resources and services. The GCF promotes gender-responsive approaches in its funded projects. This involves ensuring women's participation in project planning and implementation, targeting women-specific vulnerabilities, and supporting initiatives that empower women as agents of change in climate action.

These Guidelines are developed in the light of the need to create synergies between climate action and social policy. By understanding the risks faced by poor and vulnerable people, adaptation strategies and social policy projects can be designed to both – (1) address climate impacts and (2) contribute to social development. The goal can be to increase the coverage of programs that help poor and vulnerable people manage climate risks. This can include expanding social safety nets for natural disasters and ensuring that adaptation efforts are inclusive and equitable.

Addressing migration, social vulnerability, and gender issues is essential for effective climate change adaptation. GCF's funding priorities reflect the need to integrate these considerations into mitigation and adaptation projects to ensure that they are inclusive, equitable, and responsive to the needs of the most vulnerable populations. The Strategic Plan for 2024-2027 articulates how GCF will significantly enhance its support to developing countries, improve access, and strive to deliver the highest levels of catalytic impact through its key assets – financial resources, partnerships, convening power, people and knowledge. The proposals are required to meet the six GCF investment criteria which are impact potential, paradigm shift potential, sustainable development potential, needs of the recipient, country ownership and, efficiency and effectiveness.

1.1. Background and Rationale

Evidence, as presented in the regular reports of the Intergovernmental Panel on Climate Change (IPCC) and other research[6] , shows that some of the most adverse effects of climate change will be in developing countries, where populations are most vulnerable and least likely to easily adapt to climate change, and that climate change will affect the potential for development in these countries. Hence, social policy projects and initiatives will have to take these changing conditions and impacts for vulnerable groups into account.

Social development aims to facilitate the realization of the complete potential of each member of a society by enhancing their standard of living. The success of society is linked to the well-being of

[6] Poverty and Climate Change - Reducing the Vulnerability of the Poor through Adaptation, https://documents1.worldbank.org/curated/en/534871468155709473/pdf/521760WP0pover1e0Box35554B01PUBLIC1.pdf

each citizen. Social development means investing in people. Climate change has severe consequences for people and the environment, especially in developing countries. Social policies and projects present an opportunity to develop inclusive comprehensive risk management strategies to address loss and damage from climate change. Developing climate-responsive social policies consider a broad range of issues including urbanization and migration, impact of green policies on the poor, access to essential health care and risks to socially marginalized groups.

Some synergies already exist between climate change policies and the sustainable development agendas in developing countries, such as in areas of energy efficiency, renewable energy, transport, and sustainable land-use policies. Despite limited attention from policy-makers to date, climate change policies could have significant ancillary benefits for the local environment. The reverse is also true as local and national policies to address congestion, air quality, access to energy services and energy diversity may also limit GHG emissions. Nevertheless, there could be significant trade-offs associated with more ambitious levels of mitigation, for example where developing countries are dependent on coal and may be required to switch to cleaner yet more expensive energy sources to limit emissions, as is the case of the Republic of North Macedonia. The distributional impacts of such policies are an important determinant of their feasibility and need to be considered up-front.

Moreover, future agreements on mitigation and adaptation will need to recognise the diverse situations of the country with respect to its level of economic development, vulnerability to climate change and ability to adapt or mitigate. Recognition of how climate change is likely to influence social development may be a first step towards building cost-effective strategies and integrated, institutional capacity in the country to respond to climate change.

1.2. Guideline Objectives

This Guideline's objective is to increase the understanding of policy- and decision-makers about the intersection between the social dimensions and climate change mitigation and adaptation efforts and to raise awareness of the social development in response to climate change. It shall also provide a practical guidance what to consider when developing projects in the social development area, that integrate climate change. The Guideline is specifically developed for the Ministry of Labor and Social Policy, it might however be relevant for other stakeholders as well.

1.3. Scope and structure

With these Guidelines, the Ministry of Labour and Social Policy (MoLSP) as a member of the National Climate Change Council and the National Sustainable Development Council and providing the appointed UNFCCC Gender and Climate Change Focal Point[7]; will be in position to define informed measures for promoting climate-smart and inclusive social development actions.

[7] Source: http://unfccc.org.mk/

Currently, there is a growing understanding by the MoLSP that climate change will have an increasing impact on demand for social protection and will require adjustment of existing labour and social policies. This is also backed by the recent work within the MoLSP on for example the development of Gender and Climate Change Indicators[8] . Within this document it is emphasized that measures in gender equality plans and measures in climate change plans need to be synchronized in order to intersect gender and climate change. Also, the revision and upgrading of existing gender equality strategic documents can be done through the establishment of working groups or other formal inter-institutional bodies (committees, working bodies) composed of representatives from all relevant institutions, CSOs, academia and the business sector working in the field.

On the other hand, the existing strategic documents related to the environment and climate change should be revised to include gender mainstreaming. There is no inter-institutional or intra-institutional collaboration on the link between climate change and gender perspective was observed, i.e. for the latter Equal Opportunities Coordinators were most often not involved in activities (workshops, consultations, working groups) and are not consulted on a gender perspective when creating climate change policies within their institution. There is no data on the involvement of the Inter-Departmental Group on Equal Opportunities in the processes of climate change policy-making, while the National Committee on Climate Change in the field of gender mainstreaming as an example exemplifies the Action Plan on Gender and Climate Change. On the other hand, NCCC members consider that this committee is not operational and that its work should be strengthened above all, after which steps should be taken to actively address gender and climate change issues into its work.[9]

As mentioned in the Recommendations for strengthening the implementation of the Draft Action Plan on Gender and Climate Change, strengthening the capacities at the administrative and decision-making level of both climate change and gender equality stakeholder groups for the existence of gender intersection with climate change is a prerequisite for effective implementation of the NDC.

This Guide is structured in a way to elaborate the scope and raise the potential role of social and labour policies in addressing climate change induced challenges to support the transition to sustainable development and to gain increasing attention.

To lead to this understanding, the Guideline provides an overview about the intersection and overlaps of social development in chapter 2. This section elaborates on the current discourse on social development and climate change, the linkages between the sectors, as well as the key climate change challenges for social development. Chapter 3 provides insights on how climate change issues can be integrated into social development. It further elaborates on the principles for climate-responsive social development, stakeholder collaboration, as well as gaps and challenges of linking climate change and social development. Further on, Chapter 4 presents a practical step-by-step guide how to mainstream climate change issues into social development projects. This includes sections on the identification of climate-related risks, the identification of vulnerabilities, a presentation of design features and options for climate-responsive social development, and

[8] Source: https://mtsp.gov.mk/content/pdf/2021/8d47e610e8991b47f1377e
[9] Source: https://klimatskipromeni.mk/data/rest/file/download/4c85b126a2b6

recommendations on the implementation, monitoring and evaluation of projects. The Guidelines provide concluding remarks in Chapter 5 and a set of examples of social development programmes that integrate climate change issues in the Annex.

2. Climate Change and Social Development

Social protection (SP) is a mix of policies and programmes that aim to reduce poverty, vulnerability, and inequality throughout the life cycle, and has evolved into a call for adapting social protection systems to global change challenges like migration, climate change and environmental degradation. The focus of social protection measures addresses more immediate needs and vulnerabilities, whereas social development pursues similar goals (improvement of the well-being of individuals and communities) by addressing underlying structural issues and promotes sustainable development by long-term measures.

In this Guideline both terms will mostly be used as synonyms and are interchangeable since the linkages to the climate change topic are the same.

The link between social development and climate change has been viewed in the perspective that climate change can undermine social development interventions, and therefore policy-makers and practitioners need to climate-proof their action plans and programming. For instance, the World Bank Social Protection and Labour (SPL) Strategy 2012–2022[10] foresees actions to protect vulnerable people against climate shocks, and to enhance their adaptive capacity including through insurance and livelihoods diversification, among others.

Climate-aware social protection and development planning entails incorporating climate risk and uncertainty into decision-making. Social protection projects and strategies, therefore, should have a greater focus on empowering marginalized people to become active agents in building resilience to climate change. Furthermore, to achieve social inclusion, more research on the vulnerability to climate change of socially marginalized people is needed.

2.1. Current discourse on Social Development and Climate Change

Addressing climate change in social development creates opportunities, as it increases the adaptive capacities of communities and it helps enhance social development objectives. At the same time, addressing social aspects will enable mobilization towards equitable climate resilient pathways.

Despite the fact that societies have historically demonstrated the ability to adapt to climate risks and changes, the management of climate fluctuations remains an expensive, insufficient, and ineffective approach to preventing humanitarian catastrophes – and even more though in the light of the climate change projections (see chapter 1). The Republic of North Macedonia is susceptible

[10] Source: https://www.worldbank.org/en/topic/socialprotection/publication/social-protection-labor-strategy-2012-2022

to adverse impacts due to its geographical vulnerability, dependence on sectors that are sensitive to climate change, economically disadvantaged status, and limited capacity for adaptation.

Particularly, how to prioritize investments, policies, and programs for adaptation and how to identify country-level barriers (policy, knowledge, technology) to effective adaptation are not well understood. How to synchronize climate action with other social objectives, such as gender parity, poverty reduction, and empowerment, is even less understood. All of this prompts fundamental inquiries regarding the conceptualization of vulnerability and the appropriate function of social policy in alleviating the consequences of climate change for vulnerable populations.

Climate-responsive social protection can function as **ex-ante prevention against shocks** (e.g. social insurance and risk diversification programmes), **ex-post protection against disasters and climate variability** (e.g. social assistance and services, and public works programmes). Social development programmes can **promote long-term adaptive capacity** (e.g. through livelihood promotion and diversification).

Climate Change key terms and definitions

Adaptation: 'Adjustments to reduce vulnerability or enhance resilience in response to observed or expected changes in climate and associated extreme weather events. Adaptation occurs in physical, ecological, and human systems. It involves changes in social and environmental processes, perceptions of climate risk, practices, and functions to reduce potential damages or to realise new opportunities' (IPCC, 2007).

Mitigation: 'Ability to diminish the intensity of the natural (and other) stresses to which it might be exposed. Since this definition suggests that a group's capacity to mitigate hinges on the severity of impacts, capacity may be defined as "a country's ability to reduce anthropogenic greenhouse gases or enhance natural sinks' (IPCC, 2007).

Resilience is the capacity of systems (and communities, households, individuals) to prevent, mitigate or cope with risks/shocks and recover. A system is resilient when it is less vulnerable to shocks over time, enabling recovery by adaptation.

Vulnerability is the propensity to be adversely affected by shocks; it is a complex issue incorporating various dimensions. It is useful to consider vulnerability of 'what' to 'what'. Structural and situational factors in a given context largely determine vulnerability.

Adaptive capacity refers to the 'Ability or potential of a system to respond successfully to climate variability and change'. Adaptive capacities include preventive strategies, which involve making decisions to minimise or avoid an event, and strategies to facilitate recovery. Research has highlighted that adaptive capacities are interrelated, and no single factor is likely to account for the degree of reduced vulnerability and increased resilience in any given context.

Transmission of climate stress may be increased or reduced by the specific vulnerabilities at each level of the system. If households face repeated shocks that steadily erode their assets, vulnerability is likely to increase as resilience erodes over time. Vulnerability depends on both physical and social

2.2. Linkages between Climate Change and Social Development

In North Macedonia, poverty and social inclusion is particularly influenced by climate change due to increased climate volatility and long-term impacts on the livelihoods and ecosystems. For example, households that depend on agriculture, livestock, and forestry are especially vulnerable to climate variations. This is because these industries rely heavily on natural resources, which are directly affected by changing climate patterns.

Vulnerable groups within households, such as children, women, the elderly, and individuals with disabilities, are likely to be disproportionately affected by climate change. They may face reduced well-being and increased poverty, greater fluctuations in well-being, and more challenges in maintaining and reconstructing assets and livelihoods after natural disasters.

The increased occurrence and intensity of weather extremes, both sudden and gradual, are expected consequences of climate change. These disasters exacerbate the already difficult situation faced by impoverished and vulnerable populations in North Macedonia and the Balkans. Poor households often have limited assets and face discrimination, institutionalized inequalities, and restricted access to employment and resources. Years of development progress can be destroyed by the devastation of livelihoods and loss of life due to inadequate disaster risk management.

Current policies and mechanisms for managing climate risks in North Macedonia provide limited protection to vulnerable households. The fluctuations in consumption and assets caused by climate change and other disruptions have negative consequences for economic growth and household welfare.

The immediate consequences for households include increased work hours and reduced resources for nutrition, healthcare, and education. Long-term consequences can include poverty, homelessness, asset depletion and malnutrition. Recovery from adversity is often inadequate and slow, making it difficult for vulnerable groups to rebuild assets and repay debts.

Government and donor aid in response to large-scale natural disasters is often inadequate, delayed, and in the form of food or goods rather than cash. This support is crucial but is not usually part of a long-term strategy to protect household livelihoods against disruptions. International humanitarian aid often arrives only after a situation has reached the brink of total degradation.

There is also a concern that donor-funded assistance might discourage the country from developing and financing their own social protection systems and weather-related insurance. Households anticipating uninsured risks may engage in low-return, low-risk activities, reducing efficiency and hindering poverty alleviation.

Overall, present social responses to ongoing climate are inadequate in providing adequate safeguards for the impoverished. In the event that climatologists' forecasts regarding the escalation of weather pattern volatility due to climate change materialize, then development practitioners and state leaders will need to anticipate more intently how to mitigate the adverse impacts of climate volatility on the economic well-being of impoverished populations.

One such example is the 2021 floods in Skopje and Tetovo, which displaced thousands and caused significant economic damage and increased the vulnerability and poverty of communities. The poverty rates increased in rural areas which are heavily reliant on agriculture, affected by the devastating floods but also other unpredictable weather patterns. The existing social assistance programs provide ad-hoc response in providing support during and after climate-related disasters but are insufficient to ensure long-term social development.

In conclusion, current social responses to climate volatility are inadequate in providing sufficient safeguards for vulnerable groups and citizens. In the light of the scientific climate projections,

development practitioners and national leaders in North Macedonia and the Balkans will need to focus more on mitigating the adverse impacts of climate change on the economic well-being of impoverished populations.

2.3. Key Climate Change Challenges for Social Development Projects

Social development projects have the potential to empower marginalized and vulnerable groups of people to become active agents in building resilience to climate change and to be included in decision-making.

To achieve social inclusion, social development projects need more consideration of the vulnerabilities to climate change of socially marginalized people. Attention should be given to understanding and responding to the specific vulnerabilities of people with disabilities in the context of climate change.

Climate change poses significant challenges for social development projects, as it exacerbates existing vulnerabilities and introduces new complexities. The following section describes key climate change challenges for social development projects:

- Increased Vulnerability of Communities:

Climate change disproportionately affects vulnerable communities, including those living in poverty, marginalized groups, and regions with limited resources. Social development projects need to consider the heightened vulnerability of these communities to climate-related impacts such as extreme weather events and changing precipitation patterns. For example, increased flooding and storms, can more easily destroy poorly constructed homes and infrastructure, displacing residents and disrupting economic activities.

- Changing Weather Patterns:

Climate change leads to unpredictable and changing weather patterns, including more frequent and intense storms, droughts, floods, and heatwaves. These changes can disrupt social development projects by damaging infrastructure, impacting agriculture, and causing displacement of communities. A particular challenge for North Macedonia is the increase in extremely hot days in summer, which affects the health of marginalized people even more than better-situated populations.

- Food Security and Agriculture:

Climate change affects agricultural productivity, threatening food security. Changes in temperature and precipitation patterns, along with increased frequency of extreme weather events in particular flood, hail, or droughts can lead to reduced crop yields and destroyed fields, affecting the livelihoods of farmers and the overall food supply. Being agricultural country, for North Macedonia this means breakage of the food supply continuity.

- Water Scarcity and Quality:

Changes in precipitation patterns can lead to water scarcity in certain regions, while increased frequency of heavy rainfall can cause flooding influencing the drinking-water quality. In both cases, it can affect water quality, impacting the availability of safe and clean water for communities. An example: A water sanitation project in a community may encounter difficulties as reduced rainfall leads to water scarcity which has been the case of Prilep, and increased heavy rainfall events contaminate water sources, affecting the health and well-being of the population such as during the floods in Tetovo.

- Health Impacts:

Climate change can exacerbate health challenges, with an increase in the prevalence of vector-borne diseases, heat-related illnesses, and the spread of waterborne diseases. Social development projects must address these health risks and strengthen healthcare systems in vulnerable areas. For instance, open air workers are particularly vulnerable to extreme weather condition, implying delays for the economy and development. Such extremely high summer temperature the country has experienced in the latest years, when the open-air work has been forbidden during the heat peak hours.

- Migration and Displacement:

Climate-induced events, such as extreme weather events, and prolonged droughts, can lead to population displacement and migration. Social development projects need to consider the potential increase in climate-induced migration and its impact on the social fabric of both origin and destination communities. A project aimed at community cohesion may be challenged by the influx of climate migrants from rural areas affected by drought, leading to increased pressure on urban infrastructure and social services. So far North Macedonia has not experienced similar situation, however there is no guarantee for the future and this risk cannot be diminished.

- Increased Costs and Resource Constraints:

Climate change mitigation and adaptation measures and their response efforts often require additional financial resources. Social development projects may face increased costs due to the need for climate-resilient infrastructure and adaptive strategies, potentially straining already limited resources. For example: A project planning to install solar panels in a remote community may face increased costs due to the need for more resilient equipment and disrupted logistics.

- Policy and Governance Challenges:

The dynamic nature of climate change requires adaptive and flexible policies. Social development projects must navigate complex policy and governance challenges to integrate climate change considerations effectively. For instance, a project working on land rights and community development may need to navigate policy changes as governments implement new regulations and policies to address climate change, which can impact land use and resource management.

Addressing these challenges requires social development projects to be flexible, adaptive, and collaborative, involving stakeholders at all levels to develop solutions that are sustainable and resilient to the impacts of climate change. Collaboration between various stakeholders, including governments, NGOs, and local communities, is essential to building resilience and ensuring the

success of social development projects in the face of climate change. It also requires a comprehensive approach that integrates climate resilience into social development projects, ensuring that they are sustainable and effective in the face of changing climate conditions in North Macedonia. dimensions – a social vulnerability lens is therefore essential to understand why certain individuals, households or communities experience impacts differently, even when they are in the same location.

Specific climate change challenges for social development in North Macedonia:

Increased Vulnerability of Communities:
In the Polog region, known for its agricultural production, communities may face increased vulnerability due to more frequent floods, impacting crop yields and local livelihoods.

Changing Weather Patterns:
In the Skopje region, social development projects focusing on urban development may need to adapt to more intense and unpredictable rainfall patterns, leading to challenges in managing urban flooding and drainage systems.

Food Security and Agriculture:
In the Pelagonia region, projects aimed at enhancing food security might encounter difficulties as changing climate conditions lead to shifts in suitable crops, requiring farmers to adapt to new agricultural practices and crops.

Water Scarcity and Quality:
In the Strumica River Basin, water management projects may face challenges due to decreased rainfall and increased evaporation rates, leading to water scarcity and impacting both drinking water supplies and irrigation for agriculture.

Health Impacts:
In urban areas like Bitola, social development projects focused on public health may need to address increased respiratory problems and heat-related illnesses due to higher temperatures and air pollution.

Migration and Displacement:
Rural areas affected by declining agricultural productivity due to climate change may experience out-migration to cities like Skopje, putting pressure on urban infrastructure and services.

Infrastructure Vulnerability:
In the Ohrid and Prespa regions, infrastructure projects related to tourism may need to consider the impact of increased flooding and erosion on lakeside facilities and heritage sites.

Increased Costs and Resource Constraints:
Projects aiming to improve energy efficiency in public buildings may face increased costs due to the need for more advanced technologies and materials that can withstand extreme weather conditions.

Policy and Governance Challenges:
Social development projects working on land management and rural development may need to navigate changes in agricultural policies and subsidies as the government implements climate adaptation and mitigation strategies.

3. Integrating Climate Change into Social Development Projects

Integrating **climate change issues** into social development programming is vital in order to address potential obstacles to the accomplishment of social development objectives. The adverse effects of climate change encompass a worsening and persistence of pre-existing vulnerabilities and a disproportionate impact on individuals living in poverty.

Likewise, integrating a **social development perspective** into climate change adaptation and mitigation programmes can improve the design and implementation of climate change response measures while promoting social development goals. Applying wide social analysis in climate change programme design can make the interventions more effective and improve the adaptive capacities.

A social analysis lens can be useful in emphasizing issues of equity, social justice and, and among the more marginalized and vulnerable population groups such as indigenous peoples and women.

It is critical to conducting a **social analysis at the start of programme design in order to identify and characterize the effects and impacts of climate change in a given area**. This analysis should cover all relevant sectors, populations, and livelihoods. Usually, vulnerability and resilience are influenced by many factors (e.g. biophysical, social, economic, political, institutional and technological structures and processes), so social-ecological systems should be assessed using a multi-dimensional approach. This provides a holistic view in which climate projections are only one part of the assessment of threats to social and environmental resources.

The social analyses should **identify the most vulnerable locations and contexts in need of adaptation and mitigation interventions**, particularly causes of vulnerability and potential benefits of programme interventions on the most vulnerable. It is recommended to use **bottom-up, holistic, context-driven approaches, which include community-based participatory methods** that take into account both climatic and non-climatic local features.

Community participation in assessments is essential – not only for gathering information using the diverse views, but also for building community ownership of the process to increase the likelihood of successful implementation and sustainability of interventions.

Participatory methodologies have been shown to be critical for understanding the dynamics of vulnerability to climate change and identifying sources of resilience. Assessments based on social analysis can also help identify baseline indicators that incorporate socioeconomic, livelihood and equity factors.

3.1. Principles for climate-responsive social development projects

Mainstreaming climate change risk into social development refers to the process of integrating climate concerns into new and existing policy and institutional frameworks and decision-making mechanism. Mainstreaming climate risks is a multi-level process, which necessitates a holistic and integrated approach oriented towards reducing the underlying factors of vulnerability along with climate-proofing projects and programmes.

Drawing upon this conceptualization, following design principles for mainstreaming climate change risk into national social protection (SP) frameworks can be considered by social policy makers at the MoLSP:

- Assess and acknowledge climate-related risks and uncertainties to create a long-term strategic outlook.

Climate-aware social development planning entails incorporating climate risk and uncertainty into decision-making. Improved risk assessment and climate forecasting systems can enable the implementation of innovative social development measures such as insurance and forecast-based financing with social protection systems – an approach to risk mitigation, which has the potential to advance the effectiveness of traditional early warning systems and post-disaster humanitarian responses. Anticipatory social protection actions like public works to strengthen critical infrastructure or unconditional cash transfers to support evacuation of people prior to a forecasted climate extreme event, can be an effective strategy to avoid losses.

- Establish social protection systems that facilitate both incremental and transformational adaptation to climate risks.

Social protection activities could be linked to incremental adaptation measures as they aim to maintain a certain level of protection and prevention against climate change and extremes, and to build adaptive capacity. People who experience loss of traditional livelihood activities and lifestyle because of fundamentally altered environment or forced relocation will need social support to learn new skills, establish new social relations and find new economic opportunities.

- Recognize the greater need for climate-responsive social protection among socially marginalized groups.

Research and policy on developing climate-responsive social protection for socially marginalized people such as ethnic minorities, people with disabilities, and vulnerable women and children remain largely neglected. More research on the vulnerability to climate change of socially marginalized people is needed. For example, devoted attention to understanding and responding to the specific vulnerabilities of people with disabilities in the context of climate change is missing. Social development projects and strategies should have a greater focus on empowering marginalized people.

Such interventions should be better integrated with disaster preparedness, relief and reconstruction programmes, e.g. not only through cash transfer schemes, but also through public work programmes on post-disaster reconstruction that aim at improved accessibility of people with disabilities to basic services and evacuation routes. Identify rural- and urban-specific measures, including strategies to address migration.

Rural and urban populations face different climate-related risks as their exposure and vulnerability are conditioned by fundamentally different factors.

With their livelihood depending almost entirely on natural resources and climate-sensitive economic sectors, millions of people living in rural areas are vulnerable to the impacts of climate change The majority of the population lives in cities, (only in Skopje lives nearly 33% from the total country

population) the urban population is growing fast and poverty is rapidly urbanizing. The high concentration of poor and vulnerable groups in settlements located in disaster-prone zones is a major problem particularly in urban centers, e.g. Skopje. It is important to note that many ethnic minorities and migrants who live in poverty do not have formal residency and employment status and hence access to formal social protection including health coverage. Moreover, new urban dwellers, especially informal residents, are often excluded from community-based networks and support mechanisms. Urban authorities have a major role in social protection as they are often responsible for ensuring that citizens have adequate access to basic services, public health and safety facilities, and early warning information. Climate change will likely undermine the efforts to extend health protection coverage and improve access to essential health care in both rural and urban areas in developing countries. In some locations, climate change events such as more frequent and severe seasonal floods will reduce the physical access of rural communities to health care facilities. Therefore, it is crucial for North Macedonia to strengthen and climate-proof their social development policies in the health domain by accounting for the differential climate change-related risks in rural and urban areas. National social development strategies should be designed to anticipate and address climate-induced internal mobility.

- Facilitate a just transition to a green economy.

Green growth development pathways should address environmental degradation and climate change and promote intergenerational sustainability and equity. Green policies could create new economic and employment opportunities that can benefit the poor in the long term if SP programmes such as skills development are climate-proofed. Still, environmental policies can have a negative social impact, particularly on people whose livelihoods are dependent on carbon-intensive and unsustainable practices. GIZ published a discussion paper on “Skills for a Just Transition for a Green Future" which explores how projects in the area of skills development can promote a green transition.[11]

Social development has been increasingly seen as an instrument to support a just transition to a green growth by protecting vulnerable groups and combating poverty and social inequality. The country has already recognized the need of integrating the pro-climate reforms with social development in the form of unemployment benefits, social transfer programmes and trainings for people affected by environmental regulations. Social development policies can be designed to support vulnerable groups through: (i) small-scale green development initiatives aimed at creating employment and business opportunities, and improving livelihood; and (ii) social support and assistance programmes designed to address the risks emerging from new environmental policies and regulations, e.g. by climate-proofing targeting mechanisms and developing suitable instruments.

The following section contextualized the presented principles for North Macedonia and provides examples on how the suggested principles can be applied in North Macedonia.

- Assess and Acknowledge Climate-Related Risks and Uncertainties:

[11] 2022, GIZ: Discussion Paper. Skills for a Just Transition to a Green Future. Accessible here: https://www.giz.de/fachexpertise/downloads/27_giz2022-0387en-just-transition-green-future.pdf

Urban: Integrate early warning systems and evacuation plans in social development projects for urban areas prone to flooding, such as parts of Skopje, to protect residents and reduce the impact of extreme weather events.

Rural: Integrate social projects with other initiatives, for example drought-resistant agricultural practices and provide training to farmers in rural regions like Pelagonia to enhance their resilience to changing climate conditions.

- Consider climate risks in social protection and development projects:

Urban: Integrate climate risk assessment tools (scenario-based planning, robust decision-making) for new urban developments, masterplans, public spaces, social projects.

Rural: Improved risk assessment and climate forecasting can increase the rural population's resilience by making better-informed choices on farming practices. It can also enable the implementation of index-based insurances as social protection measure.

- Recognize the Greater Need for Climate-Responsive Social Protection Among North Macedonia's Socially Marginalized Groups:

Urban: Offer targeted support to vulnerable urban groups, such as ethnic minorities, by ensuring access to healthcare and social services in the face of climate-induced health risks.

Rural: Enhance the resilience of rural communities with a high proportion of socially marginalized groups, such as the Roma population, by providing tailored climate adaptation resources and training.

- Facilitate a Just Transition to a Green Economy:

Urban: Support the development of green industries in urban centers, providing training and social protection for workers transitioning from traditional to green sectors.

Rural: Implement rural development programs that focus on sustainable agriculture and renewable energy, creating new economic opportunities and reducing dependence on unsustainable practices.

By considering the proposed principles and incorporating them into MoLSP programs, North Macedonia can ensure that its social development projects are climate-responsive and beneficial to both urban and rural populations, addressing the unique challenges and opportunities presented by climate change in each context.

Examples on how MoLSP programs in North Macedonia can provide benefit to both urban and rural populations

- Universal Programs with Targeted Measures:

Social Assistance: Expand existing social assistance programs (e.g., the minimum guaranteed assistance) to cover climate-related shocks faced by both urban and rural populations. For

example, provide temporary top-ups during droughts affecting agricultural income in rural areas or floods impacting informal workers in urban areas.

Childcare Services: Expand access to affordable childcare services in both urban and rural areas, enabling parents, especially women, to participate in the workforce and adapt to climate-related challenges. Offer transportation subsidies or mobile childcare units in rural areas.

Skills Development: Implement training programs for both urban and rural populations focused on green jobs and climate-resilient livelihoods. Offer online learning options for rural residents and tailor training to specific regional needs (e.g., sustainable agriculture in rural areas, green construction in urban areas).

- Urban-Specific Measures:

Urban Heat Island Mitigation: Support initiatives to plant trees, create green spaces, and improve building insulation in urban areas to combat rising temperatures and improve air quality.

Disaster Preparedness: Invest in early warning systems, evacuation plans, and emergency shelters specifically for vulnerable urban populations living in flood-prone zones like Skopje, Tetovo or landslide areas like Rostusha, Debar.

Public Transportation: Promote and subsidize sustainable public transportation options like buses, trams, and cycling infrastructure to reduce urban heat and carbon emissions, benefiting both residents and tourism.

- Rural-Specific Measures:

Climate-Smart Agriculture: Provide resources and training to farmers in adopting climate-resilient agricultural practices like drought-resistant crops, water conservation techniques, and agroforestry.

Rural Microfinance: Facilitate access to microloans for rural communities to invest in climate-resilient infrastructure like improved irrigation systems or small-scale renewable energy solutions.

Rural Connectivity: Expand broadband internet access in rural areas to enable access to remote education, telemedicine, and e-commerce opportunities, fostering adaptation and economic diversification.

- Other Measures:

Social Dialogue: Engage with community leaders, NGOs, and private sector actors in both urban and rural areas to understand specific needs and tailor programs accordingly.

Data-Driven Approach: Utilize data on climate risks, vulnerable populations, and program effectiveness to monitor progress and inform future interventions.

Long-Term Sustainability: Integrate climate change adaptation measures into broader development strategies and ensure financial sustainability through diversified funding sources.

By implementing targeted measures as the ones proposed, the MoLSP can ensure its programs effectively address the diverse needs of both urban and rural populations in the face of climate change, fostering resilience and promoting equitable development across the country.

3.2. Stakeholder collaboration

It is of great importance to involve various stakeholders' groups at all stages of the project, including planning, design, implementation, and monitoring. To make sure that their voices are heard, and their needs are considered in the process. Data derived from consultations, interviews, and participatory methodologies will provide important qualitative narratives, bringing the perceptions and views of stakeholders to the fore, and facilitating the identification of desired change and results.

Application of a participatory approach will bring a holistic observation and treatment of the needs of the diverse social groups arising from climate change aspects. An existing structure in place that has the potential to act as stakeholder collaboration mechanism is the Economic and Social Council (coordinated by the MoLSP).

Like any integration of sectors that have mostly been working withing their silos, it will be important to bring the stakeholders from both sectors – climate change adaptation and mitigation and social development – together.

Stakeholders to collaborate can include:

- Government Agencies: MoLSP, ministries and departments responsible for environmental protection, urban planning, and economic development need to work together to formulate policies and allocate resources for climate-responsive projects.

- Local Municipalities: Local governments play a crucial role in implementing climate adaptation and mitigation measures at the community level. They are responsible for infrastructure development, land use planning, and providing essential services to residents.

- NGOs and Civil Society Organizations: Non-governmental organizations and civil society groups often have expertise in community engagement, advocacy, and grassroots initiatives. They can contribute by raising awareness, mobilizing resources, and implementing projects that address the social aspects of climate change.

- Academic and Research Institutions: Universities, research institutes, and think tanks can provide valuable research, data analysis, and technical expertise to inform climate-responsive project design and implementation.

- Businesses and Industry: Private sector companies have a role to play in investing in sustainable technologies, adopting environmentally friendly practices, and supporting community development initiatives that contribute to climate resilience.

- International Organizations and Donors: Collaboration with international organizations and donors, such as the Green Climate Fund can provide access to funding, technical assistance, and best practices from other countries.

- Community Members: Engaging with local communities is essential for the success of climate-responsive projects. Their knowledge, priorities, and needs should be taken into account during project planning and implementation to ensure relevance and effectiveness.

Therefore, it is important to:

- Share information: keeping all the interested parties informed;
- Hold consultation: ensuring a multi-way flow of information for establishing a closer dialogue;
- Make decisions: involving high-level representatives of all the interested parties in making decisions;
- Initiate actions: as the highest level of participation is achieved when all the interested parties initiate new actions.

3.3. Gaps and challenges of linking climate change and social development projects

Linking climate change and social development projects can be challenging due to several gaps and issues that need to be addressed. These are some of the key challenges and gaps:

Complex Interconnectedness: Climate change and social development are complexly connected, but their interdependencies can make it challenging to design projects that effectively address both issues simultaneously. There may be a lack of holistic approaches that consider the multifaceted relationships between climate change impacts and social development goals.

Varying Vulnerabilities: Different communities and social groups have varying vulnerabilities to both climate change and social development issues. Identifying and addressing these diverse vulnerabilities is a complex task. One-size-fits-all approaches may not be suitable, leading to marginalized communities being left out or not adequately supported in project designs.

Resource Allocation and Competition: Limited resources may lead to competition between climate change and social development projects for funding and attention. Prioritization may favour one aspect over the other, potentially leaving critical issues unaddressed and exacerbating existing challenges.

Time Horizon Mismatch: Climate change often operates on longer time scales, while social development projects may aim for more immediate impacts. Aligning project timelines to address both short-term and long-term challenges can be difficult. Projects may focus more on immediate social needs, neglecting the long-term resilience-building required to address the impacts of climate change.

Data and Knowledge Gaps: In many regions, there is a lack of comprehensive data and knowledge regarding both climate change impacts and social development indicators. Insufficient

information can hinder effective project planning and implementation, making it challenging to tailor interventions to the specific needs of communities.

Cross-Sectoral Collaboration: Effective integration of climate change and social development requires collaboration across various sectors, including environment, health, education, and infrastructure. Silenced approaches and a lack of coordination between different sectors may hinder the development of comprehensive strategies that address both climate and social issues.

Policy and Institutional Barriers: Existing policies and institutional structures may not be conducive to the integration of climate change and social development goals. A lack of policy coherence and institutional frameworks can impede the successful implementation of projects that aim to address both challenges simultaneously.

Community Engagement and Participation: Ensuring meaningful community engagement and participation in projects is crucial for success, but it can be challenging to involve communities effectively in planning and decision-making processes. Projects may face difficulties in achieving sustainable outcomes if they do not consider the perspectives, needs, and knowledge of local communities.

Addressing these challenges and filling the identified gaps requires a multidisciplinary and collaborative approach, involving governments, NGOs, communities, and the private sector. Developing innovative and context-specific solutions that consider the dynamic interplay between climate change and social development is essential for achieving long-lasting positive impacts.

4. Step by step Guide to mainstream Climate Change in Social Development projects

This section presents a practical step by step guidance for incorporating climate change aspects into social development projects.

1. **Vulnerability Analysis:**

First, conduct a thorough vulnerability analysis to understand how climate change affects women, men, and vulnerable groups differently. Then identify the disparities in access to resources, decision-making, and opportunities related to the project.

2. **Stakeholder Engagement:**

Involve various vulnerable groups at all stages of the project, including planning, design, implementation, and monitoring. Ensure that their voices are heard, and their needs are considered.

3. **Capacity Building:**

Invest in capacity-building activities to enhance the knowledge and skills of the vulnerable communities to actively participate in the project and adapt to climate change impacts.

4. **Data Collection and Analysis:**

Collect gender-disaggregated and vulnerability data and ensure considerations are integrated into the project's data collection and analysis processes. This data will help track the project's impact on different vulnerable groups.

5. **Responsive Policies and Regulations:**

Ensure that project design and implementation adhere to national and international policies and regulations. Promote legal frameworks that support equal opportunity for all.

6. **Health and Well-being:**

Consider the health and well-being of project beneficiaries, especially of vulnerable groups, by integrating aspects such as clean water, sanitation, and healthcare into climate projects. Climate impacts can affect health outcomes.

7. **Monitoring and Evaluation:**

Develop a robust monitoring and evaluation system that tracks the project's impacts. Regularly assess whether the project is achieving its goals in terms of gender equity and vulnerable groups.

8. **Adaptive Management:**

Be prepared to adapt the project as necessary based on the changing climate conditions and the evolving needs of the affected communities. Incorporate feedback from stakeholders, especially vulnerable groups.

9. **Knowledge Sharing:**

Promote knowledge sharing and best practices related to vulnerable group integration in climate projects to ensure that lessons learned are applied to future initiatives.

4.1. Identifying climate-related risks (climate risk assessment)

Climate risk assessment is a process of evaluating potential impacts, vulnerabilities, and risks associated with climate change on various systems, sectors, or communities. It involves analyzing the likelihood and severity of climate-related hazards and their potential consequences. The following details the most commonly applied steps of a climate risk assessment:

- Identification of Climate Hazards:

Climate hazards are adverse weather and climate events, such as extreme temperatures, storms, floods, droughts, and sea-level rise. It is important to identify and characterize the climate hazards that are relevant to the specific region, sector, or system under assessment.

- Vulnerability Assessment:

Vulnerability refers to the degree to which a system, community, or sector is susceptible to harm from climate hazards. Therefore, evaluate the sensitivity, exposure, and adaptive capacity of the system or community. This involves understanding how social, economic, and environmental factors contribute to vulnerability.

- Impact Assessment:

Impact assessment involves analyzing the potential consequences of climate hazards on different aspects of the system or community, such as infrastructure, ecosystems, human health, and economic activities. It is needed to qualify the potential impacts, considering both direct and indirect effects. This step helps in understanding the magnitude and nature of the risks associated with climate change.

- Risk Analysis:

Risk is the combination of the probability of an event occurring and the consequences or impacts of that event. Combine the information from hazard identification, vulnerability assessment, and impact assessment to conduct a comprehensive risk analysis. This involves calculating the likelihood and severity of various climate-related risks.

- Scenario Development:

Scenarios involve constructing plausible future conditions based on different climate and socioeconomic factors. Develop scenarios that represent different potential futures, incorporating various climate change projections and socio-economic development pathways. These scenarios help in exploring a range of possible outcomes and planning for uncertainty.

- Adaptation Options and Strategies:

Adaptation involves adjusting policies, practices, and systems to reduce the negative impacts of climate change and take advantage of potential opportunities. It is important to identify and evaluate adaptation options and strategies that can enhance resilience and reduce vulnerability. This may include infrastructure improvements, changes in land use planning, and the development of early warning systems.

- Integration into Decision-Making:

Integrating climate risk assessment into decision-making processes ensures that the information is used to inform policies, strategies, and investments. Working closely with stakeholders, policymakers, and community representatives to integrate the findings of the climate risk assessment into decision-making processes at various levels is crucial.

- Monitoring and Review:

Continuous monitoring and periodic review are essential to update the assessment and adapt strategies as new information becomes available. So, establishing a monitoring and review framework to track changes in climate conditions, vulnerabilities, and the effectiveness of implemented adaptation measures is a must.

Climate risk assessment is a dynamic and iterative process that should be regularly updated to reflect evolving climate science, socio-economic conditions, and adaptation needs. It provides a foundation for informed decision-making and helps build resilience to the impacts of climate change.

4.2. Identifying vulnerabilities

Identifying vulnerabilities in climate change and social development projects involves a systematic assessment of factors that may make individuals, communities, or systems more susceptible to negative impacts. Here are the key steps to help identify vulnerabilities in such projects:

- Stakeholder Engagement:

Engage with local communities, relevant stakeholders, and experts to understand their perspectives and experiences. Conduct interviews, focus group discussions, or surveys to gather information on existing vulnerabilities, community needs, and aspirations.

- Contextual Analysis:

Understand the social, economic, and environmental context of the project area. Analyze demographic trends, economic structures, existing infrastructure, and environmental conditions to identify potential vulnerabilities.

- Climate Hazard Assessment:

Identify specific climate-related hazards that pose risks to the project area. Evaluate historical climate data, climate projections, and local knowledge to identify potential hazards such as floods, droughts, storms, or heatwaves.

- Socioeconomic Vulnerability Assessment:

Evaluate the existing vulnerabilities within the social fabric of the community or system. Analyze factors such as poverty levels, access to education, healthcare, employment opportunities, and social cohesion. Identify groups that may be more vulnerable, such as women, children, the elderly, or marginalized communities.

- Infrastructure and Resource Vulnerability:

Assess the vulnerability of critical infrastructure and resources. Evaluate the resilience of existing infrastructure (e.g., buildings, roads, water supply systems) to climate impacts. Assess the availability and sustainability of key resources like water, energy, and food.

- Health and Well-being:

Evaluate the potential health impacts of climate change and social development projects. Assess the prevalence of existing health issues, access to healthcare services, and the potential for increased health risks due to climate change (e.g., vector-borne diseases, heat-related illnesses).

- Livelihoods and Economic Vulnerability:

Understand the dependence of the community on specific economic activities and the vulnerability of these activities to climate change. Analyze the main sources of livelihood, such as agriculture, fisheries, or tourism. Evaluate the susceptibility of these activities to climate-related changes.

- Cultural and Indigenous Knowledge:

Recognize the importance of cultural practices and indigenous knowledge in shaping vulnerability. Consult with local communities to understand traditional knowledge and practices that contribute to resilience or vulnerability. Incorporate this knowledge into project planning.

- Institutional and Governance Analysis:

Assess the capacity of local institutions and governance structures to respond to climate-related challenges. Evaluate the effectiveness of local governments, community organizations, and other institutions in managing and responding to climate risks. Identify gaps in institutional capacity.

- Education and Awareness:

Assess the level of awareness and understanding of climate change and its impacts within the community. Gauge the knowledge and awareness of community members regarding climate change and their ability to adapt. Identify opportunities for capacity building and awareness-raising activities.

- Gender Analysis:

Recognize gender-specific vulnerabilities and opportunities. Conduct a gender analysis to understand how climate change affects men and women differently. Identify gender-specific roles, responsibilities, and access to resources.

- Data and Technology Accessibility:

Evaluate the availability and accessibility of data and technology for monitoring and responding to climate change impacts. Assess the community's access to climate information, early warning systems, and technology that can enhance resilience.

By systematically addressing these aspects, project planners and implementers can gain a comprehensive understanding of vulnerabilities and develop strategies that are more inclusive, adaptive, and resilient. This approach ensures that climate change and social development projects are better tailored to the specific needs and challenges of the communities they aim to benefit.

4.3. Design features and options for climate-responsive social development projects

Climate-responsive social development projects should integrate design elements and choices that facilitate their ability to adjust to and alleviate the effects of climate change. In order to accomplish this objective, a number of crucial design characteristics can be applied. These encompass adaptable and versatile initiatives that can expand their reach in response to climate-related catastrophes, targeting systems that are responsive to climatic conditions, investments in

sustainable livelihoods that enhance resilience at the community and household level, and the promotion of improved climate risk management.

The integrated design process for creating climate-responsive buildings include elements such as the diversity of design aspects, transparency in the design process, integration of design objectives, adaptability of evaluation methodologies, and collaboration across multidisciplinary design teams.

Additionally, it is crucial to take into account concepts and considerations for integrating climate change risk into social protection policies in order to guarantee their responsiveness to climate-related challenges.

By integrating these design characteristics and choices, climate-responsive social development initiatives can more effectively tackle the difficulties presented by climate change and enhance the resilience of communities and livelihoods.

4.4. Implementation, monitoring, and evaluation

Measuring the effectiveness of integrated climate change and social development programs is complex. These programs often span multiple sectors, involve different stakeholders, and operate at various scales. To tackle this complexity, robust participatory analyses are necessary to inform program design. These analyses identify baseline indicators across various dimensions (e.g., socioeconomic, livelihood, and environmental) to track vulnerability and resilience changes over time. It's crucial to disaggregate data by gender and beneficiary group to understand how different stakeholders are affected. Additionally, considering social factors such as local perceptions of climate adaptation and cultural values in monitoring and evaluation frameworks is essential. Mixed-methods approaches provide a comprehensive understanding of changes and their underlying reasons.

5. Conclusion

Designing comprehensive, climate-responsive SP strategies that effectively address residual loss and damage is a challenging issue. Integrating climate risk into the national strategic planning frameworks is an essential measure to enhance the country's capacity to protect its most susceptible population from the detrimental impacts of climate change.

Primarily, decision-making in the field of sustainable planning must fully grasp and consider the risks and uncertainties linked to climate change. Within this framework, we emphasize the importance of taking into account the potential consequences of gradual climate events, alongside the risks posed by extreme climatic conditions. However, there is limited understanding regarding the impact of climate risk assessments on SP policy and planning, as well as the necessary knowledge and resources for state actors to make informed decisions. Climate risk assessments should also provide a comprehensive understanding of the root causes of vulnerability, enabling targeted interventions to address the needs of the most at-risk groups, including the impoverished, women, persons with disabilities, and remote communities.

Furthermore, to overcome the limitations of existing approaches to climate risk management, it is crucial to develop SP policies and practices that facilitate both transformative and incremental climate change adaptation (CCA). To accomplish this, it is imperative to examine the enduring impacts of CCA programs on socioeconomic, environmental, institutional, cultural, and infrastructure policy and practice.

It is proposed that policymakers should consider migration and access to social health protection as significant factors. Additionally, social protection (SP) programs present prospects for diminishing poverty and fostering sustainable development and resilience in vulnerable rural areas and rapidly expanding urban centers. By analyzing these several areas of interest, research can be conducted to determine whether green policies, CCA (Climate Change Adaptation), and DRR (Disaster Risk Reduction) interventions reduce or amplify the vulnerability of those who need social protection. Additionally, the research aims to identify climate-responsive social protection programs that can enhance sustainability and long-term resilience.

This Guideline also addresses the crucial matter of the interdependence of institutions and sectors when it comes to integrating climate risk into national SP frameworks. Considering climate-responsive social protection as a part of a comprehensive Climate Risk Management (CRM) strategy, rather than the sole approach to enhance resilience to climate change, is crucial. When integrated with additional initiatives in sectors such as infrastructure, agriculture, and health, SP can provide advantages in disaster risk reduction and climate change adaptation. It is crucial to recognize that there are challenges in integrating climate change risk into the SP sector. The development of comprehensive national SP systems will require several decades, along with substantial institutional, financial, and technological resources to effectively incorporate a diverse range of objectives aimed at enhancing climate change resilience. The nation's SP systems may experience overload due to their inherent limits. Some situations suggest that offering humanitarian assistance may be a more efficient and cost-effective option compared to building shock-responsive social protection.

Regardless of their climate-proofing, cash distribution programs possess the capacity to enhance resilience to climatic hazards. To facilitate the allocation of resources and enhance the capabilities at the local level, a comprehensive analysis should be conducted to explore the potential development of strategic policies that can incentivize private sector engagement and promote local initiatives to address climate change.

Another essential aspect to consider is the incorporation of SP into national development and climate change goals through governmental surveillance systems. Monitoring and evaluating climate-responsive social protection projects is a complex and mostly unexplored field of research.

Annex A: Examples of Social Protection programmes that integrate climate risk management

EXAMPLES AND IDEAS FOR THE REPUBLIC OF NORTH MACEDONIA:

1. Just Transition Programmes:

- Skills development: upskilling and reskilling workers in carbon-intensive industries for jobs in the green economy (e.g., renewable energy, energy efficiency, sustainable agriculture). Develop targeted training programs for workers in regions like Bitola, Negotino and Oslomej, transitioning from coal-based industries to jobs in renewable energy, energy efficiency, and sustainable agriculture. Prioritize inclusion of women and marginalized groups disproportionately affected by the transition.
- Income support: Provide temporary financial assistance to workers affected by the transition to green jobs, ensuring they have a safety net during the transition to green jobs.
- Social safety nets: Expand existing social protection programmes (e.g., unemployment benefits, pensions) to ensure vulnerable populations are not left behind during the transition.
- Community-based projects: Invest in green infrastructure projects (e.g., renewable/solar energy microgrids, sustainable waste management) that create local jobs in urban centers and reduce emissions.

2. Climate-Smart Agriculture:

- Financial incentives: Offer subsidies or low-interest loans to farmers in regions like Eastern Region, South East Region, Vardar Region and Pelagonia for adopting climate-smart practices, such as drought-resistant crops and water-saving irrigation systems.
- Technical assistance: Provide farmers with training and extension services on climate-resilient agricultural practices to help farmers adapt to changing weather patterns.
- Risk insurance: Develop weather-indexed insurance schemes to protect farmers from climate-related losses.
- Market access: Support initiatives that connect farmers with markets for their climate-friendly products, promoting sustainable agriculture and improving income stability.

3. Green Urban Development:

- Public transportation subsidies: Encourage the use of public transportation in cities like Skopje by offering subsidies for bus passes and investing in bike-sharing programs and electric vehicle infrastructure.
- Building retrofits: Provide incentives for homeowners and businesses to improve energy efficiency in buildings, reducing energy consumption and emissions.
- Urban green spaces: Invest in the development of parks, green roofs, and urban gardens to enhance biodiversity, reduce the urban heat island effect, and improve air quality.

- Waste management: Upgrade waste management systems to promote recycling and composting, reducing landfill emissions and promoting a circular economy.

4. Community-Based Disaster Risk Reduction:

- Early warning systems: Implement early warning systems for floods and droughts, particularly in flood-prone areas like the Vardar River basin.
- Evacuation plans and shelters: Develop comprehensive evacuation plans and build climate-resilient shelters for communities in high-risk areas.
- Natural infrastructure restoration: Support projects that restore ecosystems like forests and wetlands, which provide natural barriers against climate impacts.
- Climate education and awareness: Conduct community outreach programs and educational campaigns to raise awareness about climate risks and adaptation strategies.

Remember to:

- Tailor mitigation strategies to the specific context and needs of your target population.
- Ensure that social inclusion and equity are central to the design and implementation of mitigation programmes.
- Promote collaboration between government, civil society, and the private sector to leverage resources and expertise.
- Monitor and evaluate the effectiveness of mitigation strategies and adapt them as needed.
- By integrating these mitigation strategies into social protection programs, we can create a more just and sustainable future for all, while addressing the challenges of climate change.

By designing these mitigation strategies to the specific context of North Macedonia and ensuring social inclusion and equity, the MoLSP can effectively address the challenges of climate change while promoting sustainable development and protecting vulnerable populations. Collaboration between government, civil society, and the private sector is crucial for leveraging resources and expertise, and ongoing monitoring and evaluation will help adapt strategies as needed.

CROATIA'S LONG-TERM STRATEGIC AND FINANCIAL PLANNING

Croatia has developed a Strategy on Adaptation to Climate Change to 2040[12], with a corresponding Action Plan (until 2040, with some longer-term considerations up to 2070

The Strategy provides the vision and guidelines for developing climate change adaptation measures, while the Action Plan identifies priority measures for five-year periods.

The government applied a multi-criteria approach for selecting the priority measures and involved numerous stakeholders from relevant sectors. Of the 155 activities proposed, 81 were selected for implementation for water and sea resources management, fisheries, agriculture, forestry, biodiversity, energy, tourism, health, coastal area spatial planning and management, risk

[12] Source: https://mingor.gov.hr/UserDocsImages/KLIMA/Climate%20change%20adaptation%20strategy.pdf

management and supra-sectoral measures. A system of indicators was adopted to monitor implementation and the effectiveness of measures for reducing vulnerability and strengthening the resistance of social and natural systems. The government appointed the Inter-Sectoral Coordination Commission for climate-change policy, mitigation, and adaptation measures to control implementation of the Action Plan, review reports and propose measures to remove obstacles and improve implementation. In the short run, the Adaptation Strategy is estimated to cost EUR 3.6 billion (99 % from EU funds).

Any Central and Eastern Europe, Caucasus, and Central Asia (CEECCA) country can apply such a comprehensive approach, which features:

- a long-term planning horizon with 5-year milestones;
- a broad range of activity options to be prioritised;
- various sectors representing diverse socio-economic challenges;
- many stakeholders setting the priorities and helping ensure representation of different social groups;
- an inter-sectoral coordination body facilitating implementation; and
- correctly identified and estimated funding resources.

Further details can be obtained at the official website of the Ministry of Economy and Sustainable Development of Croatia and the Strategy on Adaptation to Climate Change to 2040, with a view to 2070, in both Croatian and English versions:

Croatian version: https://narodne-novine.nn.hr/clanci/sluzbeni/2020_04_46_921.html

English version: https://narodne-novine.nn.hr/clanci/sluzbeni/2020_04_46_921.html

While the Ministry of Economy and Sustainable Development leads the national climate change policy and strategy, several other ministries and institutions play crucial roles in integrating the social dimension. Specifically, the Ministry of Labour and Social Policy (MoLSP) holds significant responsibility for addressing the social impacts of climate change and ensuring climate-responsive social protection programs.

The Inter-Sectoral Coordination Commission for Climate Change Policy, Mitigation, and Adaptation Measures includes representatives from various ministries and stakeholders, including the MoLSP. This ensures that social considerations are integrated into the planning and implementation of climate action plans and strategies.

In addition, the MoLSP has published its own strategy on "Green Social Development 2021-2030," which outlines its actions to address climate change's social impacts and promote a just transition to a green economy.

You can find more information about the MoLSP's initiatives related to climate change and social protection on their website: https://mrosp.gov.hr/

GREEN CLIMATE FUND (GCF) PROJECTS IN CENTRAL ASIA

When connecting the Green Climate Fund (GCF) projects in Central Asia with the overall aim of the guidance and make them relevant for the staff of the Ministry of Labour and Social Policy (MoLSP) drafting and implementing social protection (SP) programs, we can consider the following points:

The MoLSP staff can benefit from understanding the GCF projects in Central Asia, as these projects provide valuable insights into climate-resilient development. By studying the successes and challenges of these projects, the staff can apply relevant lessons to the design and implementation of SP programs in North Macedonia.

The GCF projects often focus on building climate resilience, which is a critical aspect for SP programs. The MoLSP staff should ensure that SP programs in North Macedonia incorporate climate risk assessments and adaptation measures to protect vulnerable populations from the impacts of climate change.

Understanding the GCF projects can help the MoLSP staff identify opportunities for accessing international climate finance to support SP programs. By aligning SP programs with climate resilience objectives, the MoLSP can enhance the eligibility of these programs for GCF funding or other international financial mechanisms.

GCF projects often employ innovative approaches to address climate change, such as leveraging technology, promoting sustainable agriculture, and enhancing water management. The MoLSP staff can explore how these innovative approaches can be adapted and integrated into SP programs to achieve multiple benefits, including climate adaptation, economic development, and social protection.

The implementation of GCF projects involves collaboration between governments, international organizations, civil society, and the private sector. The MoLSP staff can use this as a model for building strong partnerships to enhance the effectiveness and sustainability of SP programs.

The GCF projects in Central Asia are aligned with national and regional development priorities. The MoLSP staff should ensure that SP programs are coherent with national climate change strategies and policies, contributing to the overall goals of sustainable development and climate resilience.

The MoLSP staff can engage in knowledge-sharing and capacity-building initiatives with counterparts in Central Asia to exchange best practices and experiences in integrating climate risk management into SP programs.

In March 2018, the GCF approved a large-scale project, »Building climate resilience of vulnerable and food insecure communities through capacity strengthening and livelihood diversification in mountainous regions of Tajikistan«.

Green Climate Fund project page: https://www.greenclimate.fund/project/fp067

This project is implemented by the World Food Programme (WFP) in collaboration with the Committee on Environmental Protection (CEP) of Tajikistan. It aims to increase the climate

resilience of vulnerable communities in the Rasht Valley, Khatlon, and Gorno-Badakhshan Autonomous Region (GBAO) by:

- Strengthening the capacity of communities to adapt to climate change through training and awareness raising.
- Diversifying livelihoods to reduce dependence on climate-sensitive activities.
- Improving water management and agricultural practices.

The project is expected to benefit over 120,000 people, including farmers, herders, women, and children.

Mountain communities have very weak adaptive capacities for coping with the severe impacts of increasing temperature and rainfall variability and recurrent natural disasters, particularly droughts and floods. This USD 10 million project will introduce adaption measures to address climate change effects that decrease agricultural yields, increase food prices, and reduce incomes in the most vulnerable rural communities. A joint Tajik-Uzbek initiative was approved in June 2016: The GCF provided USD 68.8 million for a climate adaptation and mitigation programme for the most vulnerable communities in the Aral Sea Basin. Various loans and grants focused on climate resilient measures for priority areas, including the poorest populations in risk-prone areas and marginalised groups, such as women. Low-income CEECCA countries with limited experience in resilience building initiatives can build on this programme to develop and implement GCF-funded projects. All the project documentation is available at the GCF portal and can be used as templates for new projects. Climate Adaptation and Mitigation Program for the Aral Sea Basin (CAMP4ASB), is a joint initiative by Tajikistan, Uzbekistan, and the World Bank funded by the Green Climate Fund (GCF).

Here are some relevant links:

Green Climate Fund project page: https://www.greenclimate.fund/project/fp014

World Bank project page: https://projects.worldbank.org/en/projects/P151363

Additional information on CAMP4ASB: https://carececo.org/en/main/activity/projects/

HUNGARY'S ADAPTATION FINANCE

Hungary has very successfully tapped various sources to finance its adaptation activities. The New Hungary Development Plan includes policies and operational programmes aimed at environmental and climate protection and agricultural and rural development. Overall adaptation support for Hungarian programmes from 2014 to 2020 cost EUR 893 million, mostly funded by the EU. Priorities include water management, drinking water and air quality protection; developing biodiversity and green infrastructure; and specific measures regarding climate change adaptation and risk management. Hungary uses multiple instruments to raise funds for climate finance, such as the EU Strategy for the Danube, the European Regional Development Fund, the European Neighbourhood Instrument and Norwegian Financial Mechanisms. Hungary is also participating in regional initiatives to enhance climate change resilience and adaptation, for instance by launching The Balkan Regional Trust Fund to implement Nationally Determined Contributions by Balkan

countries, financial contributions to the GCF, and other bi- and multilateral funds (approximately EUR 30 million annually between 2016 and 2018). Hungary's impressive success in attracting massive finance for development and adaptation and resilience activities comes from its ability to propose a wide range of projects and programmes to donors[13].

Here are some links about Hungary's success in attracting significant funding for development, adaptation, and resilience activities can be attributed to several factors:

- https://www.oecd-ilibrary.org/sites/ec7d67f1-en/1/3/1/
- https://commission.europa.eu/business-economy-euro/economic-recovery/

Hungary has been successful in proposing a wide range of projects and programs that cater to various sectors, including environmental protection, infrastructure development, energy efficiency, and climate adaptation. This diversity makes it more likely to match the interests and priorities of different donors. The country has established robust institutions and mechanisms to manage and implement these projects effectively. This includes clear governance structures, transparent procurement processes, and efficient project management systems, which increase donor confidence.

Hungary has actively sought partnerships with international organizations, other countries, and private sector entities. These partnerships help leverage additional resources, expertise, and technologies for its projects.

As a member of the European Union, Hungary has access to various EU funds and financing mechanisms, such as the Cohesion Fund and the European Regional Development Fund, which support development and resilience activities. The country has been able to effectively communicate the importance and potential impact of its projects to potential donors. This includes showcasing success stories, demonstrating the alignment of projects with global sustainability goals, and highlighting the benefits for both Hungary and the broader region.

Also, they have shown a willingness to adapt to changing circumstances and incorporate innovative approaches into its projects. This includes embracing new technologies, engaging in public-private partnerships, and developing projects that address emerging challenges such as climate change.

Overall, Hungary's ability to propose a wide range of well-designed and strategically aligned projects, combined with its strong institutional framework and strategic partnerships, has been key to its success in attracting significant funding for development and resilience activities.) Other CEECCA countries could benefit from Hungary's example and create portfolios of project proposals for potential donors instead of implementing numerous small projects that require just as much paperwork.

[13] Source: https://www.oecd-ilibrary.org/sites/ec7d67f1-en/1/3/1/index.html?itemId=/content/publication and https://commission.europa.eu/business-economy-euro/economic-recovery/

CZECH REPUBLIC: OPTIONS FOR FINANCING ADAPTATION USING EU EMISSION-TRADING-SCHEME (EU ETS) REVENUES

EU carbon regulation27 obliges Member States to use at least 50 % of revenues generated from EU ETS auctions for pre-defined purposes – primarily involving GHG reduction and adapting to the negative effects of climate change. The Czech Republic anticipates earning EUR 1 billion by 2020 by auctioning its GHG allowances, and much more between 2021 and 2030.28 While most of these revenues are to be invested in energy efficiency and renewable energy sources, other national priorities include agriculture and forestry, and improving air quality and waste management. The EU Effort Sharing Decision allows countries more flexibility in transferring a limited number of credits from the land-use sector – which could stimulate resilience measures in agriculture and forestry between 2021 and 2030. Carbon credits generated in this sector can provide rural communities with additional finance for adaptation. All EU Member States in the CEECCA region, as well as Kazakhstan and other countries with ETS or other carbon-pricing mechanisms, could apply such carbon-credit-revenue instruments to finance resilience and adaptation problems, preferably those focused on social challenges and needs.