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INCLUSIVE GOVERNANCE IN INSTITUTIONAL MANAGEMENT OF THE WATER SECTOR IN NORTH MACEDONIA

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ABSTRACT

This paper examines the legislative and institutional framework for water management in North Macedonia, emphasizing gender and social inclusion. The Law on Waters establishes the legislative basis, with the Government defining river basin districts and adopting the National Strategy and Water Master Plan. The Ministry of Environment and Physical Planning (MoEPP) oversees water management activities, including granting concessions, adopting river basin management plans, and setting water quality standards. However, the MoEPP's capacity is insufficient to meet all obligations in line with the principles of Leave No One Behind (LNOB) and Gender Equality (GE).

The Ministry of Health (MH) is responsible for identifying water bodies suitable for human consumption and bathing, ensuring the safety and health of drinking and bathing waters, and protecting the population from water-borne diseases.

The paper also discusses principles of good governance in groundwater management (GWM) from a gender and social inclusion perspective. Good governance involves inclusive, transparent, and accountable decision-making processes at both central and local levels. Key principles include treating water as an economic, social, and environmental good, managing water resources at the lowest appropriate level, and recognizing the central role of women in water management.

A survey of 20 institutions responsible for GWM revealed that 50% operate at the central level and 50% at the local level, highlighting the importance of broad-based participation and negotiation among various stakeholders.

Keywords: Water Management, Public Administration, Legislative Framework, Gender Equality, Social Inclusion.

OVERVIEW OF INSTITUTIONAL FRAMEWORK ON WATER MANAGEMENT IN NORTH MACEDONIA

The legislative framework for water management is set forth by the Law on Waters (Official Gazette of RM No. 87/2008). The Government of North Macedonia defines the river basin districts and adopts the National Strategy and Water Master Plan (MoEPP, 2012). Through the MoEPP, it is responsible for granting concessions for economic activities using waters from surface and groundwater bodies, adopting river basin management plans, preparing and adopting programs of measures for each river basin district, setting standards on water quality, and identifying water protection zones.

Despite this framework, the existing institutional capacity of the MoEPP, particularly in the water sector, is insufficient to implement all requested activities and obligations, especially in alignment with the principles of LNOB and GE (UNECE, 2019).

Other key institutions involved include:

Ministry of Agriculture, Forestry and Water Economy: Responsible for irrigation functions and protection from agricultural water pollution (nitrate pollution).

Administration for Hydro-Meteorological Activities: Responsible for monitoring water quality as part of the state monitoring network.

Ministry of Transport and Communications: Handles communal infrastructure issues, water supply, wastewater drainage, and construction and management of water facilities.

Ministry of Economy: Manages groundwater, use of mineral and thermal resources, and hydro-electricity generation.

Ministry of Health (MH): Identifies water bodies suitable for human consumption and recreational purposes, ensuring water safety and health (WHO, 2021).

Within MH, the Food Directorate controls water bodies intended for human consumption, and the State Sanitary and Health Inspectorate (SSHI) oversees recreational and bathing waters.

Additionally, the Hydro-Biological Institute monitors the three main natural lakes in Macedonia.

At the local level, Local Self-Government (LSG) units are responsible for water pollution protection, drinking water supply, wastewater collection and treatment. They operate through their own local infrastructure and public enterprises. LSG units also maintain local monitoring networks.

PRINCIPLES OF GOOD GOVERNANCE ON WATER MANAGEMENT IN NORTH MACEDONIA

Governance refers to the processes by which public policy decisions are made and implemented. It encompasses not just institutions or actors in the public and private realms, but also the complex set of interactions, relationships, networks, and power dynamics among them, ultimately determining resource distribution (UNDP, 2010).

At the local level, governance impacts are even more pronounced.

Local governance can significantly influence Groundwater Management (GWM) through improved land use planning, disaster response planning, poverty reduction strategies, and diversification of livelihoods. Many of these responsibilities fall under local government

competencies and necessitate broad participation and negotiation with diverse actors and stakeholders.

According to the UNDP's Source Guide on Local Governance:

"Good governance at the local level denotes quality, effectiveness, and efficiency of local administration and public service delivery; the quality of public policy and decision-making procedures; inclusiveness, transparency, accountability; and the exercise of power and authority."

The more widely accepted principles of good governance and their relevance for GWM.

The details are in the following table 1, principles of good governance and their relationship with water management:

Principle	What does it mean?	Relationship with national or local action on GWM
Effectiveness	The ability of institutions to plan for their communities, deliver services, respond to community concerns and generally fulfil their assigned responsibilities. Includes issues of subsidiarity and effective predictability.	How well-equipped are local and national institutions on the issue of GWM? Are their responsibilities clearly defined? Do they have the powers and capacities to they able to plan in advance and allocate resources?
Equity	Inclusiveness with unbiased access to basic necessities	Are all sections of society equally vulnerable to GWM impacts? Are some groups (e.g., poorer communities living in precarious conditions, or the elderly who are vulnerable on account of their health conditions), more vulnerable than others? Are there any measures to reduce such vulnerability to give them special attention, e.g. during disaster response?
Participation	Strong local democracy complemented by participatory decision-making processes, with consensus orientation and citizenship	Do all stakeholders have a voice and choice in decision-making processes? To what extent is civil society involved in plan-formulation as well as implementation? Are they well-informed about GWM, its implications for their daily lives, and how they can contribute to mitigation and adaptation?
Transparency and accountability	Transparency and rule of law in the operational functions of the local government, responsiveness towards higher levels of governments as well as to civil society, and mechanisms to control corruption.	Are rules and regulations related to GWM communicated, adhered to, and strictly enforced? Does corruption undermine the efforts to enforce standards and norms?

Issues of gender, governance, and water management must not be seen only as "women's issues," but rather as broader concerns of power relations and equitable access to resources (UN Women, 2020).

Policymakers and organizations have agreed on major principles to guide Integrated Water Resources Management (IWRM), including:

- Treating water as an economic, social, and environmental good.
- Managing water resources holistically, not just focusing on water supply.
- Governing water at the lowest appropriate administrative level.
- Recognizing women's central role in water provision, management, and safeguarding.
- Inadequate engagement of both women and men hinders sustainability interventions.

Community participation is crucial to address the needs of those with different levels of power, wealth, and influence, particularly marginalized groups.

INSTITUTIONAL GAP ON GE AND SOCIAL INCLUSION

The research utilized a structured online questionnaire distributed in April 2023 to 20 institutions involved in groundwater management (GWM) in North Macedonia. Institutions were selected using purposive sampling, ensuring representation from both central and local government levels (50% each). The survey comprised both closed and open-ended questions addressing gender equality, social inclusion, and institutional practices related to the Leave No One Behind (LNOB) principle. Data was anonymized and analyzed using descriptive statistics, with selected qualitative responses integrated to contextualize findings.

In order to assess the capacity, willingness and adherence to the principle of GE and LNOB, a questionnaire was prepared (See Annex of document) and 20 institutions responsible for GWM responded to the survey. In terms of vertical responsibility 50% of the institutions are central level and 50% are local level institutions (See the following Figure).

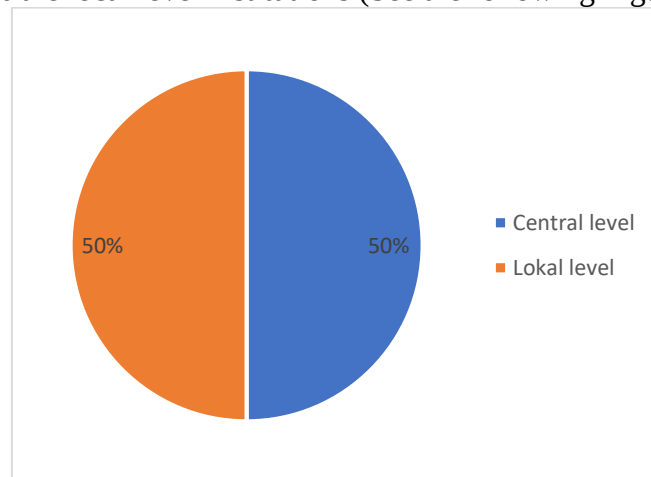


Figure 1. Type of institution (Scope- Central/Local)

Source: online survey on gender equality and social inclusion institutions related to (ground)water (April 2023).

In terms of gender representation, in the institutions that responded 63 % of the employees are men and only 37% women (Figure 2). The finding shows that gender parity in GWM in terms of employees is yet to be achieved.

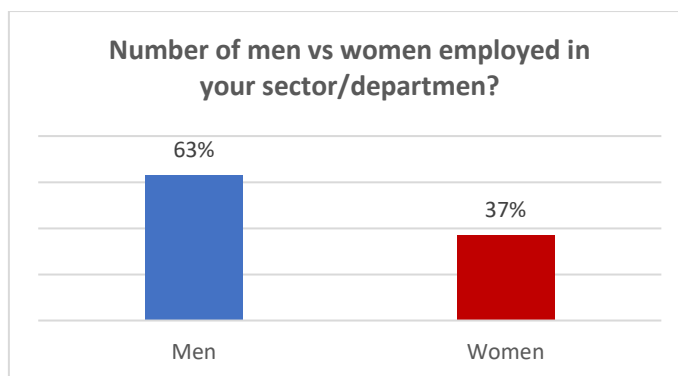


Figure 2 Percentage of W/M

One of the questions in the survey was related to access of people with disabilities. Of the 20 institutions only 3 have employees with disabilities.

GAP shows that only 16 per cent of institutions have women in management positions.

Even though according to the LEO appointing, a coordinator for equal opportunities is a legal obligation, only 10 per cent of the 20 institutions in GWRMi have an appointed coordinator for equal opportunities. Gender mainstreaming, GRB and social inclusion is an illusion without investing in gender machinery.

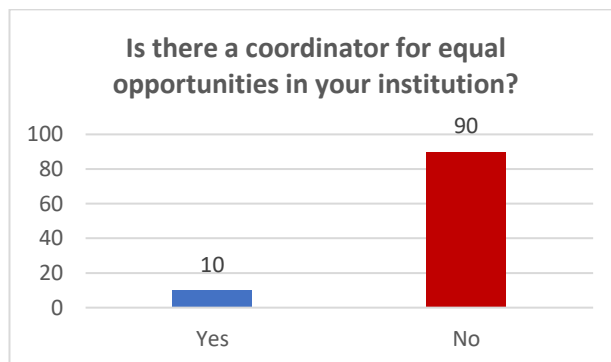


Figure 4. Coordinator for EO

Source: online survey on gender equality and social inclusion institutions related to (ground)water (April 2023)

Practice shows that gender mainstreaming is inherently correlated with efforts on capacity building not only of gender machinery but all the personnel in the institutions, hence gender equality is a horizontal issue for every organization. The findings show that only 20 per cent of the institutions invest in capacity building of their staff on gender.



Figure 5. Gender and social inclusion trainings in my institution

Source: online survey on gender equality and social inclusion institutions related to (ground)water (April 2023)

Identified shortcomings with lack of obligatory consultative process in the legal assessment is validated with the institutional assessment. According to the survey only 30 per

cent of the institutions organize consultative process with citizens. But 75 per cent of organizations that have consultative process have no rules on consultations and obligation to carry out gender or vulnerability statistics nor adherence to the criteria of gender balance or involvement of under-represented (youth, rural women, ethnic minorities, people at poverty risks etc.) groups of the society.

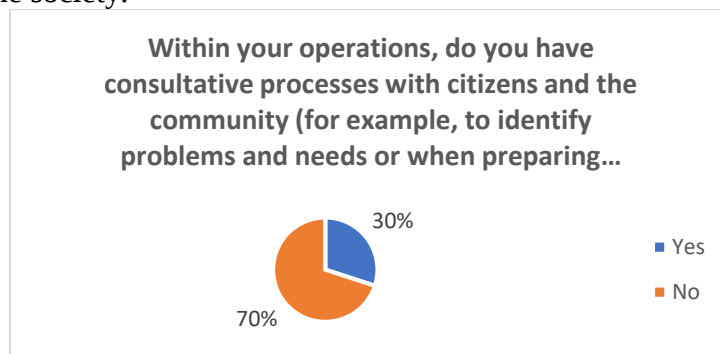


Figure 6. Consultative process

Source: online survey on gender equality and social inclusion institutions related to (ground)water (April 2023)

Only one institution (Institute for Public Health), from 20, applies special measures for access of vulnerable groups in planning of the program activities. In terms of gender equality, the institute of public health carries out the program, Wash in School, with gender sensitive measure of toilets to address the need for menstrual hygiene of girls in the schools.



Figure 7 Special measures to access vulnerable groups

Source: online survey on gender equality and social inclusion institutions related to (ground)water (April 2023)

Institutions in GWM attest that gender equality and social inclusion are not mainstreamed in their policy and decision-making process. Only 10 per cent of the institutions have stated that have taken into account gender equality and social inclusion when designing policies. The findings validate legislative assessment and reiterate the need for support for gender machinery at institutional level and increase the capacities in GE, GRB, gender analysis and gender and vulnerability statistics as a prerequisite for gender mainstreaming in GWM.

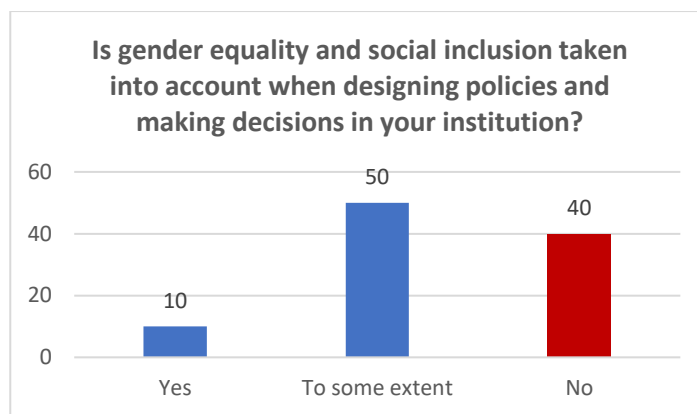


Figure 8. GE and social inclusion in designing policies and making decisions

Source: online survey on gender equality and social inclusion institutions related to (ground)water (April 2023)

Only 50 per cent of institutions in GWM agree that there is a need or lot of need to apply special approach in communication and or service delivery to improve access of the vulnerable categories of the community. Every 5th institution in GWM considers that there is no need to apply tailor made approach even though this is legal obligation stipulated in GE and LNOB legislation. The findings attest to the need for capacity building efforts of the personnel on GE and LNOB approach.

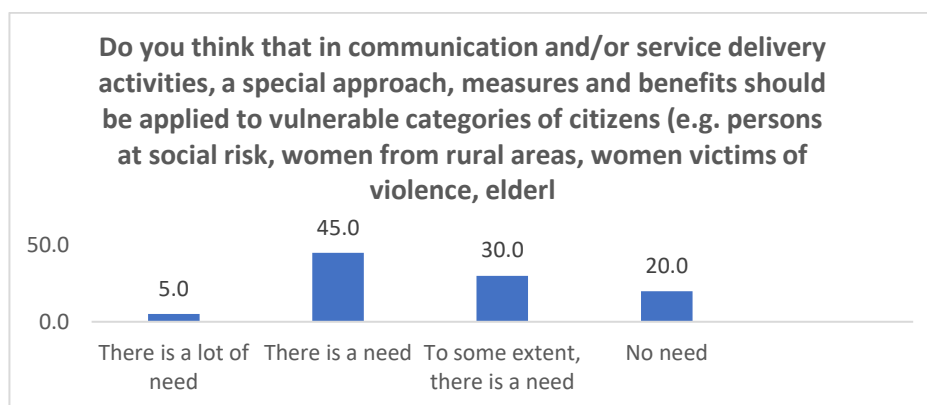


Figure 9. Special approach, measures and benefits for vulnerable categories of citizens

Source: online survey on gender equality and social inclusion institutions related to (ground)water (April 2023)

More than half of the institutions have not introduced complaints and appeal mechanisms. In terms of accountability, responsiveness and monitoring of the quality of services in GWM, establishment of complaint and appeals mechanisms are indispensable to address the needs of vulnerable groups. Moreover, digitalization of this mechanisms as alternative approach with adequate information campaign can increase % of women, women from rural communities, people with disability to appeal and submit complains if the traditional approach is not user friendly and reachable for these segments of society.

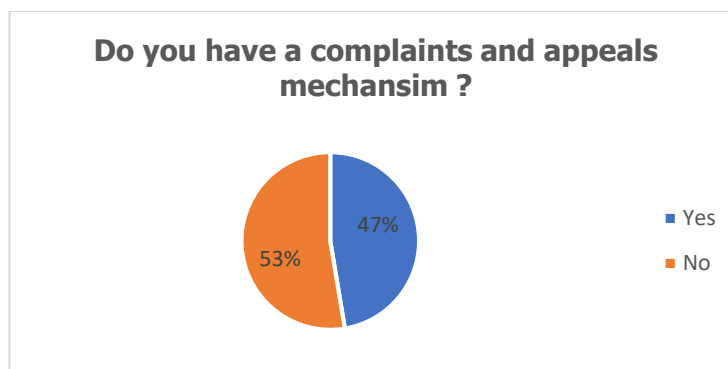


Figure 10. Mechanism for complains and appeals

Source: online survey on gender equality and social inclusion institutions related to (ground)water (April 2023)

Regarding the importance that inside the institutions is given to the topic related to GW, social inclusion and LNOB, again the highest frequency is given to ethnicity $f=108$, followed by the inclusion of people with disabilities $f=94$, then the inclusion of elderly people $f=90$ and in the end of the are gender equality issues $f=85$ and social inclusion $f=81$. The result shows the importance of awareness raising especially for the topic of gender equality and social inclusion and other topic related to vulnerability in the institutions that are dealing with ground water management.

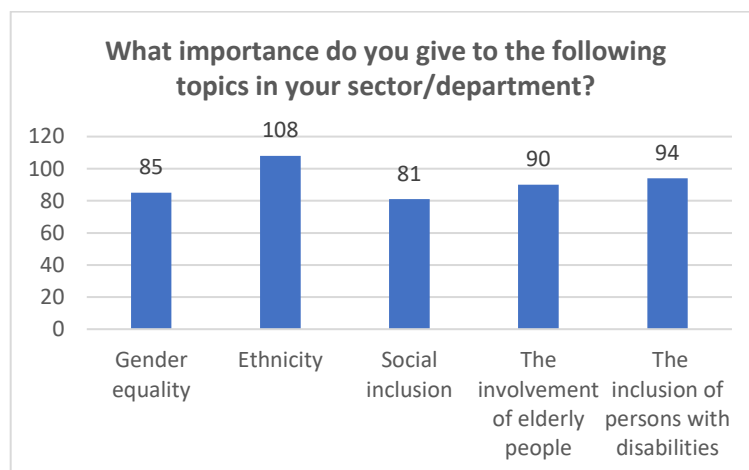


Figure 11. Importance given to the vulnerability topic in the institutions

Source: online survey on gender equality and social inclusion institutions related to (ground)water (April 2023)

Regarding the recruitment of new staff in the institutions, the idea was to find out whether in procedures for new employment in institutions dealing with ground water management, apart from the conditions stipulated in the competition (appropriate education, experience, skills, etc.), are other criteria related to vulnerability are taken into account. 65 per cent of the institutions in GWM stated that take into account other criteria and 35 per cent said No. A sub question was, for what criteria was paid attention to. 50 per cent of the institutions in GWM said that the Ethnic representation is the main criteria other than conditions in the competition, 30 per cent said none of the listed alternatives (this are the institutions that are not taking into account other criteria in the procedure of new recruitment) 10 per cent said that political affiliation is the main criteria for new employment in GWM institution and unfortunately only 5 per cent said that gender equality and social inclusion is taken into account as a criteria for new recruitment. This result shows the importance of putting gender equality, social inclusion and LNOB as a criteria equal to appropriate education, experience and skills for new employment in the institutions that are dealing with ground water management.

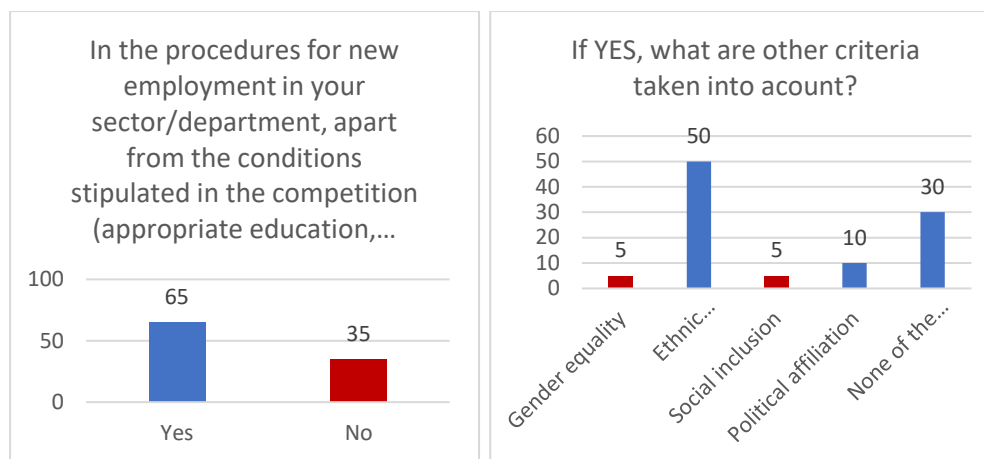


Figure 12.3 GE, social inclusion and LNOB as criteria for employment in GWM institutions.

CONCLUSION AND RECOMMENDATIONS

This document presents a sectoral analysis of Leave No One Behind (LNOB), gender equity, and social inclusion in the context of groundwater management (GWM) in North Macedonia.

The analysis was based on consultations with relevant stakeholders, legislative and policy review, and a situational assessment identifying bottlenecks and opportunities for action.

Main conclusions:

Progress:

North Macedonia has made significant legislative efforts in the last decade to promote gender equality and social inclusion. However, effective incorporation of these principles in groundwater management legislation and policy remains insufficient.

Gender Gaps:

There is still very low representation of women in decision-making positions in both national and local governance related to water management. For example, only 2 out of 80 mayors are women.

At the institutional level, women remain underrepresented among employees and managers in GWM institutions.

Intersectionality:

Policies largely ignore how gender intersects with other vulnerabilities — such as disability, minority status, age, or rural residence. This intersectionality must be addressed to ensure equitable access to water resources and governance.

Capacity Gaps:

Institutions tasked with promoting gender equality (gender machineries) face severe limitations in human, technical, and financial capacity, making mainstreaming efforts very challenging.

Statistics and Data:

There is a lack of reliable gender and vulnerability-disaggregated data.

Introducing new indicators and strengthening statistical systems in GWM institutions is crucial.

Consultative Processes:

Public consultations in groundwater management are rare, informal, and not inclusive of vulnerable and marginalized groups.

Institutional Culture:

Government institutions involved in groundwater governance still exhibit low gender sensitivity in planning, budgeting, and program delivery.

Recommendations:

Adopt targeted affirmative measures, such as quotas or gender parity systems, especially in decision-making bodies in water governance.

Strengthen institutional capacities by investing in gender-sensitive training and resource allocation.

Establish complaint mechanisms and promote the digitalization of citizen engagement processes to ensure broader access, especially for women, people with disabilities, and rural communities.

Mainstream gender and social inclusion in all GWM planning, policymaking, and monitoring processes.

Enhance public awareness campaigns to build societal support for inclusive water governance.

North Macedonia has a strong legislative framework but must accelerate practical implementation to truly achieve inclusive governance in water management.

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