

A FIVE YEAR STRATEGIC PLAN

2022 – 2026

Maintaining good
ethical standards



Sustainability



WATER & LAND
RESOURCE
CENTRE



Quality, Equity,
and Inclusion
Water & Land Resource Centre
Addis Ababa University

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**Water and Land Resource Centre,
Addis Ababa University
(WLRC, AAU)**

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Addis Ababa University
(WLRC, AAU)

STRATEGIC PLAN
2022—2026

February 2022

Addis Ababa

Ethiopia

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From Sahlite Mihret Mariam Church Roundabout to the road to Wosen

Behind the Ministry of Mines

Next to Belt Building

P.O.Box: 3880

Telephone: +251-11-661-22-36

Fax: +251-11-661-22-29

Email: info@wlrc-eth.org; gete.z.@wlrc-eth.org

<https://www.wlrc-eth.org>

Addis Ababa

Ethiopia

Recommended citation

Water and Land Resource Centre. 2022. *WLRC Strategic Plan 2022-2026*. Addis Ababa: WLRC, AAU.

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Acronyms and Abbreviations

AAU	Addis Ababa University
AGF	Agro-forestry
RARIs	Regional Agricultural Research Institutes
ATA	Agricultural Transformation Agency
AU	African Union
BT	Board of Trustees
CC	Climate Change
CDE	Centre for Environment and Development
COVID 19	Coronavirus Disease 19
CRGE	Climate Resilient Green Economy
CRV	Central Rift Valley
DAFNE	Decision-Analytic Framework to Explore the Water-Food-Energy Nexus in Complex and Transboundary Water Resource Systems of Fast-Growing Developing Countries
Devt.	Development
EFCCC	Environment, Forest and Climate Change Commission
EIAR	Ethiopian Institute of Agricultural Research
ESPAWM	Exit Strategy and Performance Assessment for Water Management
EthioGIS	Ethiopian Geographic Information System
FTC	Farmer Training Centres
GCRF	Global Challenges Research Fund – UKRI
GDP	Gross Domestic Product
GIS&RS	Geographic Information Systems and Remote Sensing
GoE	Government of Ethiopia
GHoA	Greater Horn of Africa
HR/POD	Human Resources/People & Organisational Development
HS&CC	Hydro-sedimentology and Climate Change
ICT& KM	Information Communication Technology and Knowledge Management
ILM	Integrated Landscape Management

ILM&ESS	Integrated Landscape Management and Ecosystem Services
IW&ES	Investment for Watershed and Ecosystem Services
IWLRM	Integrated Water and Land Resources Management
IWRM	Integrated Water Resource Management
KMIS	Knowledge Management System
KPIs	Key Performance Indicators
LogFrame	Logical Framework
LR&M	Landscape Restoration and Management
LUS&RS	Land Use Systems and Remote Sensing
LW	Learning Watershed
MEL	Monitoring, Evaluation and Learning
MoA	Ministry of Agriculture
MoWE	Ministry of Water and Energy
NBE	National Bank of Ethiopia
NRM	Natural Resources Management
PDC	Planning and Development Commission
R&D	Research and Development
RG&SE	Resource Governance and Socio-economic
RLLP	Resilient Landscape and Livelihood Project
SCRP	Soil Conservation Research Project
SDC	Swiss Development Cooperation
SDGs	Sustainable Development Goals
SLM	Sustainable Land Management
SNNPR	Southern Nations Nationalities and Peoples Region
SP	Strategic Plan
SWOT	Strengths, Weaknesses, Opportunities, and Threats
TYDP	Ten Year Development Plan
UN	United Nations
WALRIS	Water and Land Resource Information System
WaSH	Water Sanitation and Hygiene
WLRC	Water and Land Resource Centre

MESSAGE

FROM THE DIRECTOR GENERAL

*Dear Partners and Stakeholders of
WLRC, AAU,*

Dear Staff of WLRC, AAU

Dear readers,

My warmest greetings to you!



As you know, a well- thought-of well- designed strategic plan is one of the key requirements that guide organisations towards success. This is important as it requires them to make proper targeting by identifying and prioritising need- based strategic areas of engagement in alignment with the goals and missions of the organisation and those of the concerned partners and stakeholders; to consolidate the allocation of human, financial, logistical and technological resources around the key priorities; to avoid unnecessary duplication of effort; and hence cumulatively enables them to make meaningful contributions to the achievement of sectoral and national development goals. Aware of these vitalities of a strategic plan, WLRC, AAU had designed and implemented strategic plan for the period 2016 – 2020. Drawing on lessons learnt from the implementation of that plan, the research and/or development needs assessment results, the SWOT analyses that scanned internal and external situations, and the sectoral (water, land, agriculture, environment and natural resources management) and overall development policies and strategies of national (mainly AAU and the Ten Year (2021-2030) National Development Plan), continental (AU Agenda 2063), and global (UN SDGs 2030) institutions, WLRC has prepared its forward-looking Strategic Plan 2022 – 2026. I like to humbly brief you here about the key aspects of this five-year road map of the centre.

The Plan was prepared in iterative two-way (largely bottom-up but at times also top-down), stepped and participatory processes. As such, the preparation involved a senior professor who drafted an initial working document, an internal Strategic Planning Team of four senior management members that rigorously worked together for the completion and finalisation of the plan, a consulting firm with a team of experienced planners who provided useful guidance and technical advice, the senior management and entire staff of the secretariat who actively participated in the preparation and validation of the Strategic Plan, senior managers at the Embassy of the Kingdom of the Netherlands in Addis Ababa that financed the preparation of the Plan and shared their reflections on the semi-final Strategic Plan, and the Board of Trustees that gave vital inputs and finally approved the Strategic Plan.

Six strategic issues have been identified together with their concomitant strategic themes and objectives that are geared to WLRC's raisons d'être and its vision of becoming a leading knowledge-for-development hub on water and land resources in Ethiopia and the Greater Horn of Africa by 2030. Detailed activities, targets, key performance indicators and measurement levels to be achieved by translating the strategic plan into annual plans of each division and work unit are outlined in the Plan. The organisational structure of the Centre is revised in a way that would enable it pursue the Plan and meet its targets.

The Strategic Plan was shared with, and benefited from critical formative reflections of, members of the Board of Trustees to whom it was presented for approval at the Meeting that was held on Feb 7, 2022. The Plan was approved for implementation with those suggested refinements, which are captured in this final document.

I, therefore, call upon all the staff of WLRC to strictly implement and ensure the implementation of the WLRC Strategic Plan 2022 – 2026. The annual plans of each work unit and division have to be sliced from the Strategic Plan and performances have to be appraised at the end of each plan year as per the performance measurement targets and levels promised in the Strategic Plan. In fact, the Centre's 2022 annual plans are by and large consistent with the Strategic Plan and performances will be measured accordingly. At this juncture, I also cordially request our partners and stakeholders, including the communities in our project areas, to extend all the necessary support for a successful pursuit of the Strategic Plan.

Finally, I acknowledge the EKN in Addis Ababa for financing the WLRC institutional assessments and institutional capacity building measures which include the preparation of this Strategic Plan. I duly appreciate Members of the Board of Trustees, TWO EB Management Solutions plc, the WLRC Planning Team and the staff who participated differently in the preparation of the Strategic Plan.

Gete Zeleke, PhD

Director General, WLRC, AAU



Executive Summary

Ever since it started to exist in 1981 as the then Soil Conservation Research Project (SCRP) that was initiated jointly by the then Ethiopian Ministry of Agriculture and the Centre for Development and Environment (CDE) of the University of Bern, Switzerland, Water and Land Resource Centre has initiated, mobilised and implemented a number of research and development projects relating to sustainable management of natural resources, focusing on water and land. Through years of its engagements, it has generated useful knowledge and practices that inform and influence policy and practice in those areas. Data and knowledge generated from observatory watersheds, learning watersheds/landscapes, Exit Strategy, Performance and Sustainability Assessment Guideline and Software, EthioGIS, MapServer Ethiopia, the innovative knowledge management and sharing platforms like Water and Land Resource Information System (WALRIS), Knowledge and Information Management System for Sustainable Land Management (KMIS-SLM) and Resource Availability Assessment Methodological Framework (RAAMF) are some of the prominent outputs with far-reaching relevance for landscape and ecosystem management and benefit optimisation.

At present, WLRC has some nine research, development and capacity building projects of different scales and about 87 staff members (22 PhD and above) doing the management, research, development and administration activities. Its functions are organised under six divisions with 14 units and two on-call service units. This structure used to be lean but largely responsible and accountable.

To concretise the Centre's engagements and resource utilisation around its core mandate areas, WLRC prepares and implements five-year strategic plans. The recent one was the WLRC Strategic Plan 2016 – 2020. Learning from the implementation of that plan, the institutional SWOT analyses, assessment of internal and external situations, research and development needs assessment results, the policies and strategies of concerned sectoral (the water and agriculture sector policies), national (AAU Strategic Plan for 2020 – 2030, and FDRE Ten Year Development Perspective Plan), continental (AU Agenda 2063), and global (UN SDGs 2030) policies, strategies, and plans, WLRC has now prepared its forward-looking Strategic Plan for the period 2021/22 – 2025/26.

This Strategic Plan is anchored on six strategic pillars/issues that have six corresponding strategic themes and objectives which tend to garner all efforts and resources around the overarching vision of being a prominent knowledge-for-development hub on sustainable management of water and land resources in Ethiopia and the Greater Horn of Africa by 2030. The issues are the following:

Strategic Issue 1: Watershed degradation, declining per capita water availability, deteriorating water quality, biodiversity loss, and increasing climate variability and climate change are serious challenges in Ethiopia.

Strategic Issue 2: While general evidence abounds on water and land degradation, biodiversity loss and hydro-climatic risks in Ethiopia, there is scarcity of time-series empirical data at high spatial and temporal resolutions. This has constrained planning and implementation of water and land management initiatives.

Strategic Issue 3: Water and land resources-related knowledge and information in Ethiopia is not only scarce but also highly fragmented and inconsistent from one source to another. In consequence, there is significant knowledge gap on important issues and, in some cases, there is duplication of effort. There is no knowledge hub where researchers and development practitioners can access reliable database and information. This has weakened research-policy-practice linkage on sustainable water and land management in the country.

Strategic Issue 4: Water and land management research and development in the country is hindered by institutional capacity limitations.

Strategic Issue 5: Institutional performance capability is inadequate to deliver results that meet and preferably exceed expectations of stakeholders and partners.

Strategic Issue 6: Research and development efforts of multiple actors working across various scales of landscapes and across sectors lack partnership, collaboration and impact at scale.

Pursuing such strategic issues requires formulating high-level business pillars which form the basis of the centre's strategy. WLRC therefore drew the below strategic themes (corresponding to the issues:

- Generate data and knowledge products tailored to the needs of the different stakeholders;
- Develop innovative interventions and knowledge for learning and demonstration on biodiversity loss and hydro-climatic risks in Ethiopia;
- Maintain, develop, and scale-up the knowledge management systems and serve as a source of reliable knowledge;
- Become a centre of excellence for capacity building and technical backstopping services;
- Strengthen and institutionalize leadership and management capability and develop infrastructure; and
- Foment partnerships and collaboration with national and international organizations.

These strategic themes were developed by considering other strategic elements, such as the challenges, enablers, value propositions of stakeholders, and other components of the Plan. On top of that, the Centre articulated strategic goals and objectives based on the stakeholders' perspectives, internal processes, learning and growth, and availability of financial resources. The logical and causal connections between and among those perspectives and the strategic objectives are drawn into a strategy map that shows how the interplay would lead to the achievement of the Centre's vision and goals. Relatedly, the desired positive consequences which the Centre plans to realise at the end of the Strategic Plan period are depicted with a theory of change.

The six strategic issues are segmented into 14 strategic objectives, which are further specified into 34 key performance indicators (or key results), each with a baseline and target. Each target is in turn disaggregated/sliced into annual plans that serve as the main implementation strategy. To monitor the performance of each division and work unit against the predefined plans, five performance measurement levels are set. Those performance levels are designated by the counting numbers 1 through 5, where: 1 stands for scores $\leq 25\%$ (a performance level that will be rated "Below Satisfactory"); 2 stands for scores [25% - 50%) that will mean "Satisfactory" performance; 3 represents scores [50% - 70%) that will be considered "Good" performance levels; 4 represents scores [70% - 85%) which is a 'Very Good' performance; and 5 stands for scores $>85\%$ depicting a corresponding "Outstanding" performance level.

WLRC anticipates strategic initiatives or assumptions for implementing the Strategic Plan to the attainment of the desired targets. It also makes a rough indication of the resources required to implement the Plan.

The Monitoring, Evaluation and Learning (MEL) will be ensured by undertaking project level monitoring, evaluation and learning activities; doing annual performance reviews and measurements; and carrying out a mid-term evaluation and final evaluation of the implementation of the Strategic Plan. The main propositions in the Strategic Plan are summarised using a Results Framework, commonly known as a LogFrame. Finally, WLRC also projects strategic directions for the subsequent five years (2026 - 2030).

1. Introduction

1.1. General Background

In Ethiopia, water and land resources are the bases of agriculture, which generates over 40% of the national gross domestic product (GDP), about 32.7% (agriculture and allied activities in 2018/19) of the national foreign exchange earnings, 85% of the export earnings, and about 70% of raw materials for agro-processing industries (PDC 2021; NBE 2019/20). It is evident that water and land support the small-scale agriculture that provides employment to over 80% of the population, which is estimated at over 110 million. Thus, the resources can be considered as foundations of the Ethiopian economy. Aware of the roles of agriculture, the national development strategies that were pursued by the Government of Ethiopia (GoE) since the early 1990s consider agriculture as the most important source of wealth, poverty reduction, economic growth, and socioeconomic transformation.

Despite that significance, Ethiopia's agriculture is still dependent on rudimentary farm tools and natural rainfall. Mechanisation and use of modern inputs such as chemical fertilizers and improved seeds is the lowest in Ethiopia even by sub-Saharan African standards. Consequently, crop yields per hectare are the lowest in the world. As the population grew over time, the need to meet the increasing demands for food and incomes led to expansion of farmland through deforestation and conversion of grazing areas into farmlands. Deforestation was also practiced to meet wood demands of the growing population. Farming with backward implements, the limited use of modern inputs, expansion of croplands, deforestation and overgrazing cumulatively resulted in severe land degradation, which has affected most parts of the country.

Land degradation, which broadly leads to loss of productive and ecosystem services provided by land resources, is a major environmental problem in Ethiopia. It is one of the underlying causes of low agricultural productivity, ensuing food insecurity, rural poverty and vulnerability to climate change. Land degradation compounds effects of rainfall variability and adversely affects water availability. Subsequently, Ethiopian rivers for example, exhibit typical rainfall-dependent regimes, with hydrograph peaks in the middle of the wet season and lowest flow rates occurring towards the end of the dry months. Hence, rainfall variability generally governs water resource variability. Land degradation, however, plays an important role at catchment scales, because it affects rainfall partitioning patterns into infiltration, surface runoff and evapotranspiration losses. In other words, land degradation alters flow duration curves of streams and rivers towards increased wet season flows, or risk of flooding, and reduced dry season flows, or risk of hydrological drought. Water pollution is another growing problem around urban settlements and commercial farms.

Besides for agriculture and domestic uses, water is also the most important source of energy in Ethiopia, where over 95% of the electricity supply is produced from hydropower. As such, variability and change in water resources directly translates to fluctuations in power supply. Past events have shown that power disruptions negatively impact economic performance and constitute clear cases of systemic risks to the country. Water therefore stands at the centre of the challenges around land degradation, food and nutrition security, energy security, economic growth and resilience to hydrological and climate change risks.

Ethiopia's plans for economic growth call for effective use and sustainable management of water and land resources. In view of this, the government has designed policies and programs to address the interlinked problems of land and water degradation, climate change and loss of ecosystem services. Those directly relevant to water and land resources are the water resource policy and strategies, Sustainable Land Management Project/Resilient Landscape and Livelihood Project (SLMP/RLLP), Climate Resilient Green Economy (CRGE) and the Ten-Year National Development Plan (2021–2030). at the common thread that run through all of these strategies and plans is achieving sustainable development, and Ethiopia's vision of becoming a middle-income country by 2025. In addition, there are global plans like the Sustainable Development Goals (SDGs) and the African Union Agenda 2063. Let's briefly highlight the main ones.

1.2. Highlights of Main Policies and Strategies Relevant for WLRC

The WLRC Strategic Plan captures many of the strategic issues and concomitant goals identified in the Addis Ababa University Strategic Plan 2020 – 2030. One way or another, its pillars are in tandem with the following issues which are contained in the Addis Ababa University Strategic Plan 2020 – 2030: Issue 1 (institutional autonomy, governance and leadership); Issue 3 (research capability and prioritisation of agenda to stakeholders needs); Issue 4 (university-industry linkage, partnership and community engagement); Issue 6 (Centre of excellences and capacity development); Issue 9 (alignment to national, regional and global agenda); Issue 11 (internal revenue generation and resource mobilisation); and Issue 12 (home-grown and collaborative PhD programs).

Moreover, the thematic issues captured in the WLRC Strategic Plan are aligned also to the Ministry of Water and Energy's (MoWE) Policy on Water Resource Management. Water Resources Policy, Proclamation and Strategy which were enacted in 1999, 2000 and 2001, respectively follow principally the Integrated Water Resource Management (IWRM) principles. The policy and strategies generally consider water as both an economic and social good, and they demand that water resources should be managed using decentralization principle; we should follow participatory approach for water management. They prescribe integrated comprehensive approach for water resource use (integrate protection and conservation with all forms of development activities); and foresee the need to integrate with all sectors horizontally and vertically in all levels of organization; require to enhance private sector participation in the management of water; and recommend the need to follow hydrologic unit to plan. The water sector policy gives due regard for hydrologic unit as boundary than others which use other forms of boundaries, such as eco-region and jurisdiction. Interestingly, the thematic issues, objectives and stipulated core results of WLRC's Strategic Plan 2021/22–2025/26 and its approach of ILM are very much in line with the principles and strategies contained in the Water Resource Policy and Strategies.

The Strategic Plan is also largely consistent with the national development policies and strategies of Ethiopia, which recognize agriculture as a backbone of the economy and make provisions for a sustainable management and administration of water and land resources. For example,

the revised Agricultural and Rural Development Policy of Ethiopia (GOV, 2021) explicitly stipulates that any agricultural and resources development activities should be intertwined with agro-ecological and watershed/landscape-based resource management, conservation and development. More specifically, the policy has put emphasis on environmental health of watersheds during any agricultural operation; conserving and developing mountainous areas (biodiversity-rich sources of water resources) based on appropriate policy framework that would ensure their continued ecosystem functions and ecosystem services; ensuring protection and management of important ecosystem areas, including wetlands, forest ecosystems, and aquatic ecosystems; ensuring appropriate watershed management measures in urban and peri-urban areas; and ensuring appropriate land uses based on potentials of the land. The WLRC Strategic Plan 2022 – 2026 is purposively harmonised with the thematic foci and strategies of the Agricultural and Rural Development Policy.

Two of the pillars of the Ten Year Development Plan of Ethiopia (TYDP 2020 – 2030) (FDRE Plan and Development Commission, 2021) are directly relevant for WLRC. These are Strategic Pillars 5.1 (the Agriculture sector) and 6.2 (Water Resource Development sector). The thematic issues identified in the WLRC Strategic Plan 2022 – 2026 are thus aligned to those strategic issues. Implementation of the WLRC Strategic Plan will therefore directly contribute to the attainment of the two TYDP pillars, i.e. Economic Growth and Building Climate Resilient Green Economy. It would also indirectly contribute to the attainment of other goals.

The Strategic Plan is in neat harmony with the pillars and goals of the United Nations Sustainable Development Goals 2030 and the 20 goals of the African Union Agenda 2063. Both the UN SDGs and the AU Agenda 2063 focus on social, economic and environmental dimensions; but Agenda 2063 includes political and cultural dimensions. The WLRC Strategic Plan adopts one of the aspirations in the African Union Agenda 2063 in which the African Leaders aspire a prosperous Africa by 2063, with the means and resources to drive its own development, with sustainable and long-term stewardship of its resources (AU 2015). It also goes well with the aspiration that “Africa shall have equitable and sustainable use and management of water resources for socio-economic development, regional cooperation and the environment.” (AU 2015:4). It is aligned with the Leaders calls and commitment to speed-up actions to “... actively promote science, technology, research and innovation, to build knowledge, human capital, capabilities and skills to drive innovations” (AU 2015: 14); to act with a sense of urgency on climate change and the environment”, (page 16) and “take measures to ensure technology transfer, adaptation and support for innovation” (page 18).

In sum, implementation of the WLRC Strategic Plan, which is aligned to the AAU Strategic Plan and to the policies and strategies of the Water, Land and Agriculture sectors of Ethiopia will, resultantly, be responding to the Ten-Year National Development Plan (TYDP 2021-2030), to the African Union Agenda 2063, and to the UN SDGs 2030 as well.

1.3. The Water and Land Resource Centre (WLRC): Evolution, Organisational Structure and Core Mandate Areas

1.3.1. Evolution

The Soil and Water Conservation Project (SCRP) that evolved into Water and Land Resource Centre, Addis Ababa University (WLRC, AAU) was established in 1981. The SCRP was led by the Centre for Development and Environment (CDE) of University of Bern, Switzerland and Ethiopia's Ministry of Agriculture. Its aim was to generate knowledge on the technical, ecological, economic and social dimensions of land degradation, and thereby support the government's and other partners' soil and water conservation initiatives. The SCRP project was implemented in seven model watersheds that are distributed across the highland parts of the country. After it was implemented in the form of different projects and at different scopes for many years, in 2011 SCRP evolved into Water and Land Resource Centre (WLRC) through a bilateral agreement that was signed between the Government of Ethiopia and the Swiss Development Cooperation (SDC). The goal was to build on the decades of experience and efforts of SCRP and other agencies on water and land resources management and research in Ethiopia. Besides the six (i.e., minus the station in Eritrea) experimental watersheds that were established by SCRP, WLRC added the Gerda and two high-mountain (in Semen Mt.) hydro-sedimentology observatories in 2013. In 2012 WLRC also established additional six Learning Watersheds to demonstrate science-based SLM at watershed level and to serve as live learning platforms for various actors at all levels nationally and globally. In 2016, WLRC was officially affiliated to AAU with autonomous status. In 2017, the Centre, in collaboration with Farm Africa, established three stations in Bale eco-region and co-run them for two years. Recently, 18 learning watersheds and 7 hydro sedimentology stations are established at Kunzila and establishment of three stations in Waghimira Zone of Amhara Regional State was in progress until it was hampered by the war TPLF inflicted in the Zone. In the established observatories, WLRC monitors meteorological and hydrological data on sub-daily or daily time scales. In addition, in the six micro watersheds and the 18 new learning watersheds (aggregated in one hybrid meso-watershed called Kunzila area) where intensive participatory integrated watershed management and observatory functions are implemented with strong livelihoods improvement component. These are sites for action research, which are aimed at promoting live learning and feeding evidence into relevant national policy- and decision-making processes.

Since its establishment, the Centre has made outstanding contributions in the areas of water and land resources management. To name just a few, through empirical studies in its learning watersheds and observatories, and other research sites, WLRC has:

- generated extensive knowledge products and innovative water and land management approaches and shared them with partners and stakeholders in different forms of publications, databases. The studies cover a wide range of topics in water and land resources, such as national scale water and land resource assessments, watershed scale investigations of water and sediment dynamics, landscape management and ecosystem services, landscape transformation, and climate change impact studies;
- extensively applied and promoted Integrated Landscape Management (ILM) and Integrated Water and Land Resource Management (IWLRM) at watershed/landscape levels;

- designed and developed innovative platforms like EthioGIS, MapServer Ethiopia, Exit Strategy, Performance Sustainability Assessment for Watershed Management (guideline and software);
- established state-of-the art knowledge management system on water and land resources, named Water and Land Resource Information System (WALRIS) to support cross-scale policy making, policy dialogue and design of resource-based development interventions;
- developed Knowledge Management and Information System for Sustainable Land Management (KMIS_SLM) for the National SLMP Programme;
- provided professional and community services, technical backstopping and capacity building to the agriculture and water sectors, including on how to improve sustainability of the GERD, community-based organizations and other agencies dealing with sustainable natural resource development; and
- established effective partnerships and collaborated with many other like-minded research organizations, universities and sources of research finance in undertaking its research activities.

WLRC is now heading to becoming a recognised centre of excellence with knowledge-for-development hub on sustainable management of water and land resources.

1.3.2. Organisational Structure

WLRC is organized into six divisions containing 14 units, two on-call/outsourced services, and avenues for ensuring ethical conduct of duty, whistleblowing concerns and handling complaints, as well as regional offices with research/development site offices at the grassroots level. The detailed organogram is presented in Figure 1.

Presently, WLRC has research, administrative, and field staff. In 2021, WLRC had 87 staff members engaged in various research and development activities as well as support functions. Of those, 22 hold PhD and above, 25 are with Masters degrees, and the rest hold BSc or below. Each research division leads research projects and activities, but there is a seamless internal collaboration in executing multidisciplinary projects. Leadership and executive management are provided by a Director-General who is assisted by a Deputy Director-General for Programmes.

Remaining a fully autonomous entity, WLRC was affiliated with Addis Ababa University (AAU) and it also has a strong working relationship with the Centre for Development and Environment (CDE) of the University of Berne in Switzerland, which is its international partner and co-manager. At the top level of its governance, institutional oversight is provided by a Board of Trustees which is constituted of the State Ministers of the Ministries of Agriculture, Water and Energy, Finance, Innovation and Technology, Ethiopian Environmental Protection Authority, one senior academic staff of the AAU, and the Director of CDE-University of Bern. The Board is chaired by the AAU Vice President for Research and Technology Transfer. The WLRC Director-General is a Member and Secretary to the Board of Trustees. Project Steering Committees and Advisory Groups play technical quality assurance and advisory roles. The Director-General, supported by the Deputy and Directors of the Divisions, is the Head of the Executive Management of the Centre. The new detailed organizational set up of WLRC is shown in Figure 1.

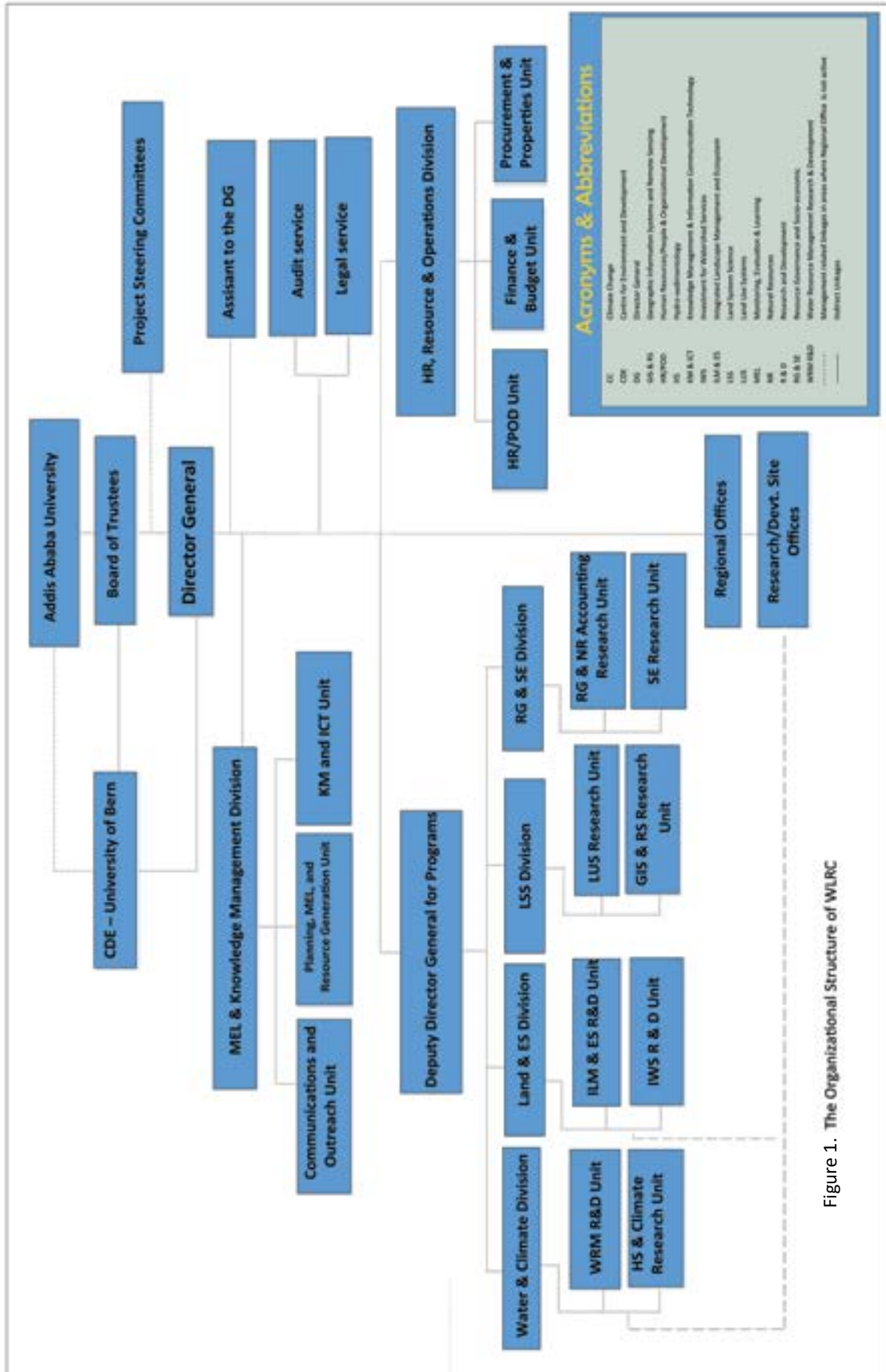


Figure 1. The Organizational Structure of WLRC

1.3.3. Core Mandates, Objectives and Functions and Responsibilities of WLRC

WLRC has the following core mandates emanating from Articles 4 and 5 of the Statutes of Affiliation of WLRC with AAU:

- putting into effect programmes on improved natural resources management and on conservation of important biodiversity reserves, habitats and ecosystems as well as programmes to promote sustainable use of water for agriculture and energy as well as land for agriculture and infrastructure for sustainably producing goods and services;
- realising the positive and constructive role the Addis Ababa University can play in addressing these problems and in contributing to sustainable development and environmental conservation, and thereby to the prevention of conflicts that may emerge around access to natural resources; and
- enhancing the knowledge generation and knowledge management missions of AAU and CDE- University of Bern in the areas of hydro-sedimentology, climatology, sustainable water and land management and sustainable development.

These mandates can be summarised into the following: generating, developing and sharing knowledge and useful innovative practices on water and land resource management; designing knowledge management systems; setting up and developing live learning and reflection/sharing (through learning watersheds for demonstrating ILM and IWRM and implementation of development projects) and long-term scientific monitoring (through observatories); and doing capacity building and learning.

WLRC also has objectives of engagement along its core mandate areas that ultimately and cumulatively contribute to improving ecosystem health and livelihoods of people by improving the productivity of water and land resources through knowledge, policy and practices that support sustainable water and land management. To realise those objectives, the Statute entrusts the Centre, inter alia, with the following functions and responsibilities:

- initiate, propose and acquire autonomous funding for strengthening and implementing programmes that improve management of land and water resources in major basins of Ethiopia;
- conduct research programmes on hydro-sedimentology, climatology and sustainable water and land management in cooperation with other University organs and associated organizations at national and international levels;
- provide backstopping services to institutions being active in sustainable water and land management by providing advice and carrying out components of their programmes, such as monitoring and evaluation;
- cooperate with line ministries (e.g., of Water, Irrigation and Energy; Agriculture; Tourism and Culture; Education; Science and Innovation) and other institutions by acquiring mandates for monitoring and backstopping their programmes and initiatives in sustainable water and land management in Ethiopia and beyond and serve as an outreach venue for AAU;

- stimulate the development of new value chains for producing sustainable goods and services in agriculture and related sectors, including the development of water and land for energy and other development purposes;
- enhance and maintain, through different means of information generation, collection and dissemination, the existing geospatial database and documentation system, i.e. Water and Land Resources Information System (WALRIS) that can be accessed and used by students of AAU and other universities, its associate organizations and the public;
- initiate and/or facilitate the formulation and implementation of transdisciplinary partnership programmes with associated organizations, government agencies, other universities, research institutions and groups that conduct works in related areas;
- support advocacy groups campaigning to preserve essential land functions and ecosystem services as well as habitats for wild animals;
- conduct and promote programmes designed to build the capacity of associated organizations and governmental institutions working in similar spheres;
- run a website, including the WALRIS, and initiate and/or facilitate the production of relevant publications and other resource materials; and
- support graduate and post-graduate studies and use its observatories and learning watersheds as live learning platforms for research, development and policy making.

For a focused pursuit of its objectives and functions, WLRC had a Strategic Plan for the years 2016 – 2020. And to inform the preparation of the new strategic plan, the Centre needs to draw lessons from the implementation of that previous plan.

2. Reflections on WLRC's Previous Strategic Plan 2016 - 2020

It is important that organisations which had previous strategic plan inform their subsequent plans with results of evaluation of implementation of that previous plan. Accordingly, implementation of the WLRC Strategic Plan 2016 – 2020 was evaluated internally.

The implementation of the strategic plan has left both strong and weak points to learn from. On the positive aspects (strengths), the Evaluation Team noted that the Centre has registered substantial institutional growth compared to what it had been in 2015. The growth manifested in increases in the volume of work, number of projects and activities, number of publications, as well as the number and quality of its human capital. During the period of that plan, WLRC has attracted and implemented a large number and volume of projects and programmes, and that was in fact considered an over achievement. It has carried out baseline surveys, scientific researches and evidence-based development interventions in more areas than stipulated in the SP. It has updated and shared Exit Strategy and Performance Assessment for Watershed Management - A guideline for sustainability, and extended substantial capacity development support to partner institutions including the MoA, MoWIE, EFCCC, regional governments,

and universities that implement, teach and research on water and land resources management. The knowledge generated has been shared widely through different live fora and knowledge-sharing and knowledge management platforms, such as WALRIS, EthioGis, and Land-Scale. The knowledge and experience shared has earned WLRC good trust and image from partner and stakeholder institutions.

On the other hand, the Team noticed important areas that needed improvement in the implementation of the previous strategic plan. The SP preparation process was not, but should have been, adequately participatory. Although its contents were inbuilt priorities of the Centre, the SP lacked key performance indicators (KPIs); and it focused much on land degradation; while implementation of the SP addressed the broader natural resource management (NRM). Besides, the strategic objectives and activities were framed mainly by considering core-funding that used to be accessed from CDE; but, much of the budget for project-based activities that were implemented during the planning period was mobilized from diverse other sources. Cost recovery for some products such as thematic maps and hydro-sedimentology data (service charge) was not considered while relevant. The SP did not embed in it documentation, communication and uptake strategies; it also lacked scaling-up and scaling out/dissemination strategies. Documentation and communication of products of the Centre was inadequate given the large number of knowledge products. The Centre's annual plans and performance appraisals were not adequately aligned to the SP as specific project goals and objectives (as well as donors' interests) tended not to go with the Strategic Plan.

There were limitations to translate lessons learnt into a kind of material that encourages and ensures community engagement like curricula and capacity-building materials, such as training manuals on natural resource management communication. Drawing on the results of the evaluation, issues recommended to be considered in the WLRC Strategic Plan 2022 – 2026 include the following ones: WLRC shall ensure the knowledge generated and encouraging management practices adequately inform the national sustainable NRM policies and programmes. At the same time, there is need to translate knowledge products and lessons learned into capacity-development manuals, guidelines and curricula (e.g. for FTC, for mid-career experts, university-level trainees). Existing observatories and learning watersheds (LWs) are WLRC's icons and identifiers that are worth strengthening. The Centre should also devise and implement scaling up, up-take and scaling out strategies and strengthen documentation and sharing of knowledge, processes, promising practices and services. The Centre has developed very useful products such as EthioGis, LandScale, and WALRIS. WLRC has to work toward securing patents for these products and it has to follow business model to support core activities (for example, introduce cost-recovery mechanisms). It was advisable for WLRC to devise mechanisms to generate resources in areas that may not fall under the interests of funding organisations. Works to enhance WLRC's image and presence in the different parts of the country, mainly lowlands and pastoral areas and in the Greater Horn of Africa deserve attention.

3. The Operating Environment: Situation and Stakeholder Analyses

3.1. Situation Analyses

As part of the strategic planning process, WLRC assessed its operating environment using the Strengths, Weaknesses, Opportunities and Threats (SWOT) tool. The strengths and weaknesses pertain to the internal operating environment, while the opportunities and threats relate more to the external environment. The summary of the SWOT analysis is presented in Tables 1 and 2.

Table 1. Internal environment scanning (strengths and weaknesses of WLRC)

Strengths	Weaknesses
WLRC has highly qualified and experienced staff	Absence of core funding for core activities and operations
WLRC has extensive experience of implementing water and land resources management research and development projects	Incurring substantial expenses for office rent
It has rich experience of establishing and monitoring hydro-sedimentology observatory stations	Absence of hydrological and sediment monitoring stations at larger river scales
State-of-the-art equipment for weather, hydrological and sediment monitoring are available at the watershed monitoring sites	Lack of own vehicles for field work and supervision of watershed monitoring and learning sites
The Centre has comprehensive geospatial database and geospatial laboratory and facilities; it is the lead organisation in the EthioGIS initiatives	Absence of institutionalised data sharing and usage policy
WLRC's having extensive networks and partnerships with many international and local universities and research institutions	Lack of mechanisms for real-time data transfer from the watershed monitoring sites to the secretariat office
WLRC's having strong functional relationships with several institutions at the levels of Federal, Regional and Local governments in the country	Difficulty to engage in long-term plans and activities due to unpredictability of funding opportunities
The Centre has accumulated experience and capability of doing rigorous scientific researches and implementing, or facilitating the implementation of, key recommendations in the sense of action research	Inadequacy of attention given to translating lessons learned into capacity development and curriculum for different levels of education and training
Availability of ample knowledge products and lessons for sharing	Inadequate communication of the products and services of the Centre
Its having leadership, management and staff altogether with high senses of ownership and responsibility	Doing business based on lean organisational structure where much is based on understanding more than by institutional mechanisms
The Centre's having an enabling governance and organisational structure	Incomplete institutionalisation processes

Table 2. External environment scanning (opportunities and threats for WLRC)

Opportunities	Threats
Political commitment at national, regional and international levels for green growth and sustainable natural resource management	Poor culture of data sharing to enrich the geospatial database; weak complementarity between research and policy
Presence of clear national policies and strategies for engagement in research and development for sustainable environmental and natural resource management	Weak coordination of sectors working on water and land resources; inadequate commitment to implementation of key research recommendations
Availability of structures, policies and structures dealing with water and land resources	Fast turnover of decision-makers at the different levels of government, necessitating reintroduction of the Centre and its activities to successors
Increasing global attention to sustainable development and opportunities for competitive funding schemes	Inconsistency to harness the essential prerequisites for inducing sustainable development
Stature of WLRC as a research partner on water and land issues becoming increasingly international	Inadequate tapping of opportunities accruing from partnerships
The stay home, travel and gathering restrictions imposed as means of responding to the COVID 19 pandemics offered the opportunity for increased concentration on data analysis, writing and sharing	Impact of COVID 19 on funding opportunities and the Centre's operations; group interaction, review and reflection hampered
Rapid developments in geospatial science and technologies	Volatility of the peace and security situation in the country
Availability of many calls for competition for grants and pull funding	Unpredictability of international finance sources; lack of core funding opportunities
Presence of structures on water and land from the federal to the grassroots (wereda and kebele) levels	Fast turnover of zonal and wereda level decision-makers and experts making it difficult to ensure sustainability of initiatives started at experimental and learning watersheds
Local communities handing-in learning watersheds that were established and supported by WLRC	Poor follow-up/handling of established hydro-sedimentology stations that were transferred to regional institutions (inadequate ownership at local level)

3.2. Stakeholder Analysis

Stakeholder refers to the various entities that directly or indirectly influence the work and success of WLRC. WLRC's principal stakeholders, their expectations and what WLRC needs to do to meet the expectations are presented in Table 3.

Table 3. Summary of WLRC’s stakeholders, their expectations, consequences of failure to meet those expectations, and level of impacts of each stakeholder

Stakeholders	Stakeholders’ Expectations	Consequences if expectations are not met	Level of impact or influence	Stakeholder management strategy
Communities in the research and development watersheds	New technologies and inputs of agricultural production and water and land management introduced to their areas; community capacity development works that improve their livelihoods undertaken; to be protected from any potential adverse effects from the project/ intervention	Lack of trust and participation in research and development projects; withdrawal of support and voluntary participation in the Centre’s activities; unfavourable attitudes towards WLRC;	High	Meet expectations as much as possible and ensure stakeholders’ participation in all phases of project; Ensure the communities and the environments are safeguarded from potential adverse effects.
Development partners (both governmental and non-governmental organizations) in Ethiopia	Development, promotion and sharing of technologies, knowledge, skills, capacity development support and services on water and land management, rural livelihoods improvement and integrated landscape management	Declining demand for technical and capacity development services and withdrawal of institutional support for the Centre’s research and development activities	High	Proactively work to keep existing partnerships strong and create new partnerships
Local and international research institutions and universities	Joint research works and publications, access to the geospatial database, and organizing joint scientific forums	Reduced collaborative research projects and funding opportunities	Medium	Work proactively to keep existing partnerships strong and create new partnerships
Private sector	New technologies, technical support services and capacity development support	Limited demand for technological and technical services	Low	Proactively engage with potential private sector and industry clients
Local, regional and international research and project grant providers	Implementation of the project/ programme as per the Project Implementation Manual (PIM); New/ updated knowledge and innovations on NRM	Cut of funding/terminating grant	High	Keep the research promises; deliver results on time and with high quality

4. Strategic Plan 2022 – 2026

4.1. Rationales for the Strategic Plan

An outstanding challenge to effective implementation of Ethiopia’s vision for a sustainable and inclusive development relates to the shortage of evidence about the nature, extent and dynamics of changes in and management of water and land resources; the potential adverse impacts of mismanagement and degradation of these resources disaggregated by ecosystems, sectors and social groups; and evidence about possible, feasible and effective planned responses to water and land resource related challenges. Along this overarching challenge, the significance of the WLRC Strategic Plan 2022 – 2026 is grounded on the following rationales:

- (i) water and land resources of the country are facing undue pressure from the increasing human and animal populations, natural disasters, and climate change;
- (ii) the resultant degradation is causing continuous reduction of agricultural production and deterioration of ecosystem health deterioration;
- (iii) generating, testing and scaling up implementation of useful knowledge and practices on water and land resources is an outstanding prerequisite to improve agricultural production and development by improving measures to productivity and sustainability of the resources;
- iv) there is cognisance that sustainable natural resource management measures, such as Integrated Water Resources Management (IWRM), Integrated Landscape Management (ILM), and Sustainable Land Management (SLM) are vital to counter the challenges;
- (v) useful knowledge and practices on water and land resources of the country are not well documented, are scattered or highly fragmented with some duplication of effort, not adequately shared, and thus developing and maintaining useful knowledge management systems is a necessity;
- (vi) linkages between research, policy and development practice are weak;
- (vii) accessibility of available research results to the wider public is generally poor and a weakness manifestation in poor support of policy to research and inadequate impact of research on policy and practice relating to NRM management has been one of the factors contributing to the inadequate use of research outputs in policy formulation and program design;
- (viii) the SWOT analysis on the implementation of the previous strategic plan and the needs assessment, and internal and external situation analyses results showed the need to pursue a number of strategic issues which necessitate having a strategic plan;
- (ix) there is need to gear resource allocation, including human resources assignments, along the core mandate areas of the Centre and to align the Centre’s programs and actions to the relevant sectoral, national, regional and global development programs and priorities; and
- (x) it is thus imperative to have a strategic plan that would gear efforts and priorities of the Centre towards meeting its goals and vision.

The Water and Land Resource Centre aims at contributing to addressing these major gaps and challenges. The WLRC Strategic Plan 2022 – 2026 is designed to serve as a generic framework and provide key courses of action on how WLRC shall relate with its key partners and stakeholders.

4.2. WLRC's Vision, Mission and Values

Vision

WLRC aspires to become the leading national and regional knowledge-for-development hub on sustainable water and land resources management in Ethiopia and the Broader Horn of Africa (BHOA) by 2030.

Mission

The mission of WLRC is to generate, develop, manage and disseminate scientific knowledge and innovations that inform policies and programs on sustainable water and land resources management and thereby contribute to increase the productivity of water and land resources to realise sustainable development in Ethiopia and the Broader Horn of Africa.

Values

The institutional values WLRC upholds are ethics, scientific rigor, partnerships, open access and inclusiveness.

Maintaining good ethical standards: WLRC believes that its activities should be conducted observing the highest ethical standards and in compliance with all applicable national laws, agreements with donors and other stakeholders, and socio-cultural values of society in Ethiopia.

Scientific rigor: WLRC adheres to applying state-of-the-art tools, models, equipment, methods and approaches in its research and development undertakings.

Honouring partnerships: WLRC upholds co-creation and co-management of knowledge, innovations, experiences and development jointly with its key stakeholders by reaching out to them proactively in its research and development endeavours.

Open access: WLRC shares the rapidly growing position that knowledge and innovations should be shared with partners, stakeholders, and beneficiaries in open access modality keeping to pertinent laws.

Equality, Equity, and Inclusion: WLRC observes the principles of equality, equity, and inclusion with respect to sociocultural diversity, gender and disability in its activities and interactions with stakeholders.

Sustainability: ensuring a safe future while contributing to betterment of current socio-ecological conditions is the core priority of WLRC; thus, it ensures that sustainability is embedded in all it does, be it alone or with partners and stakeholders.

4.3. Strategic Issues, Themes, Goals and Objectives

4.3.1. Strategic Issues

Based on lessons learnt from implementation of the previous strategic plan (2016 - 2020), internal reviews of the implementation of that strategic plan, preparatory brainstorming consultations and the SWOT analysis, the following six strategic issues were identified to be considered as with the staff and stakeholders rallying priorities for the Strategic Plan 2022 – 2026.

Strategic Issue 1: Degradation of watershed, declining of per capita water availability, declining of land productivity, deteriorating of water quality, biodiversity loss, and increasing climate variability and climate change are serious environmental challenges in Ethiopia.

Strategic Issue 2: While general evidence abounds on water and land degradation, biodiversity loss and hydro-climatic risks in Ethiopia, there is scarcity of time-series empirical data at high spatial and temporal resolutions. This has planning and implementation of water and land management initiatives.

Strategic Issue 3: Knowledge and information on and relating to water and land resources in Ethiopia is not only scarce but also highly fragmented and inconsistent from one source to another. Consequently, there is significant knowledge gap on important issues and, in some cases, there is duplication of effort. There is no one knowledge hub where researchers and development practitioners can get reliable database and information. This has weakened research-policy-practice interactions on sustainable water and land management in the country.

Strategic Issue 4: Water and land management research and development in the country is hindered by institutional capacity limitations.

Strategic Issue 5: Leadership and institutional performance management capability and infrastructure development are not adequately institutionalised to enable deliver results that meet, or preferably exceed, expectations of stakeholders and partners.

Strategic Issue 6: While research and development for impact at scale requires efforts of multiple actors working in well-coordinated harmonious manner across various scales of landscape and across different sectors, coordination, harmonisation, and integration of efforts of the different actors are far inadequate.

In view of pursuing these issues, there is need to formulate strategic themes corresponding to the strategic issues.

4.3.2. Strategic themes

Along the above-mentioned strategic issues, the strategic themes WLRC intends to focus on are:

- generating and sharing data and scientific and applicable knowledge products and innovations tailored to the needs of the different stakeholders as a requisite to restore degraded watersheds, improve water quantity and quality, avert biodiversity loss, improve land productivity and build socio-ecological resilience to climate variability and climate change.
- generating time-series empirical data at high spatial and temporal resolutions to inform planning and implementation of water and land management initiatives;
- maintaining, developing and scaling-up state-of-the-art knowledge management system and becoming a knowledge hub serving as a source of consolidated, reliable, and consistent knowledge on sustainable water and land management in the country and thereby avoid duplication of efforts, vitalise research-policy-practice interactions and contribute to the attainment of sustainable development in Ethiopia;
- vitalising capacity-building and technical backstopping services to partners and stakeholders with a view to becoming a centre of excellence for capacity building and technical backstopping on water and land management;
- strengthening institutionalisation of leadership and performance management capability and infrastructure development to enable deliver results that meet, or preferably exceed, expectations of stakeholders and partners; and
- creating, building and maintaining strong partnerships and collaborations with multiple national and international organisations to improve working in well-coordinated, harmonised and integrated manner across various scales of landscape and sectors.

These strategic themes driven also have corresponding strategic results. Those expected strategic results are presented in Table 4.

Table 4. The strategic results corresponding to the strategic themes

S. N.	Strategic theme	Corresponding result
1	Generating water and land resources-related data and knowledge products that are tailored to the needs of the different stakeholders	Water and land resources-related data and knowledge tailored to the needs of different stakeholders made available and disseminated. Responsive, and reliable knowledge hub for water and land resources developed and promoted.
2	Generating time-series empirical data at high spatial and temporal resolutions to inform planning and implementation of water and land management initiatives	Time-series empirical data generated at high spatial and temporal resolutions and made available to users to inform planning and implementation of water and land management initiatives; live learning, demonstration and dissemination of promising practices made possible.
3	Developing, maintaining, and scaling-up state-of-the-art knowledge management system and serving as a source of reliable knowledge about water and land resources	State-of-the-art knowledge management system developed, maintained, and scaled up; WLRC becomes a source of reliable knowledge on water and land resources.
4	Vitalising capacity building and technical backstopping services towards making WLRC become a centre of excellence in capacity building and technical backstopping services	Body providing capacity building and technical backstopping services created and capacitated; WLRC becoming a centre of excellence for capacity building and technical backstopping services in water and land resources management
5	Strengthening institutionalisation of leadership and management capability and infrastructure development	Leadership and performance management capability and infrastructure development institutionalised.
6	Creating, building and maintaining strong partnerships and collaborations with multiple national and international organisations by mobilising knowledge, experiences and resources.	Improved coordination, harmonisation and integration of efforts of multiple institutions working across various scales of landscape and different sectors.

4.3.3. Goal

The goal of WLRC is to contribute to achieving sustainable water and land management, enhanced ecosystem services, climate-resilient green growth and improved human wellbeing in Ethiopia by facilitating use of proven innovative implementation approaches and evidence-based policy making and implementation.

4.3.4. Strategic Objectives

Strategic objectives are broad statements which bridge between WLRC's vision and the annual activity plans needed to realise the vision. They gear the focus of the organisation towards achieving the vision and goal. The strategic objectives of WLRC formulated by factoring into stakeholders, internal processes, learning and growth, and financial considerations, are presented below:

Stakeholders

Considering stakeholders' needs, WLRC aims to:

- provide demand-driven and tailor-made capacity building and technical backstopping services to governmental and non-governmental organisations and communities engaged in undertaking sustainable water and land management research and development activities;
- increase accessibility of research results to researchers, academics, practitioners and policy and decision-makers by using open access modality within the limits of national laws;
- strengthen the existing partnerships and enter into new ones with national and international research and development organisations that are engaged in water and land resources management research and development; and
- ensure increased support and participation from communities, local leaders and other partners in the targeted research and development watersheds.

Internal processes

Taking into account the internal processes, WLRC aims to:

- generate reliable data and knowledge products on water and land resources through monitoring and participatory action research in learning and observatory watersheds;
- engage in problem-solving, adaptive development and research interventions in selected watersheds and basins;
- enhance introduction of new or improved technologies and practices to the communities in the targeted research and development watersheds;
- develop, maintain, and scale up database and knowledge management platforms that could serve as a national knowledge and information hub on water and land resources to support cross-scale policy making, policy dialogue and design of resource-based development interventions; and
- improve communication management.

Learning and Growth

From the perspectives of Learning and Growth, WLRC's plans to:

- strengthen internal institutional capacity for improved performance that targets at exceeding expectations of stakeholders and partners; and
- equip its staff and associate staff with tools on latest developments to facilitate implementation of the strategy.

Financial

From financial perspectives, WLRC aims to:

- improve and diversify financial resources to support the water and land resources research and development interventions, for demonstration and up-/out-scaling; and
- ensure effective and efficient utilisation of resources.

4.4. Objective Commentary

The explanations to each strategic objective are summarised in Table 5, as objective commentaries.

Table 5. Objective commentary about each strategic objective

Perspectives	Strategic objective	Commentary
Stakeholders	Provide capacity building and technical backstopping services to governmental and non-governmental organisations and communities engaged in sustainable water and land management through demand-driven and tailor-made activities	This is about enhancing the capacity of governmental and non-governmental organisations and communities that may be in need of knowledge and capacity development on sustainable water and land management.
	Increase accessibility of research results to researchers, academics, practitioners and policy- and decision-makers by using open access modality within the limits of national laws	This is intended to enable researchers, academics, practitioners and policy- and decision-makers to easily obtain the research results for their further actions.
	Strengthen the existing partnerships and enter into new ones with national and international research and development organisations engaged in water and land resources research and development	This is to create synergy for the research and development activities and ensure more research and development undertakings as well as creating accessibility to data required.
	Ensure increased support and participation from the communities, local leaders and other partners in the target research and development watersheds	This is about increasing attention and effort to maintaining and increasing the participation of and support from communities, local leaders and other partners and thereby help the Centre meet its goal.

Perspectives	Strategic objective	Commentary
Internal Processes	Generate reliable data and knowledge products on water and land resources through high resolution monitoring and participatory action research in learning and observatory watersheds	This refers to increasing both the quantity and quality of data and knowledge products that the Centre plans to generate on water and land resources.
	Engage in problem-solving, adaptive development and research interventions in selected watersheds and basins	As a result of this objective, WLRC will contribute to improving sustainable land and water resources management and thereby improving agricultural productivity.
	Increase introduction of new technologies and practices to the communities in the target research and development watersheds	This implies that the more new technologies and practices the centre introduces, the more effective it will be in implementing its plans.
	Develop, maintain, and scale up database and knowledge management platforms that could serve as a national information hub on water and land resources to support cross-scale policy making, policy dialogue and design of resource-based development interventions	This is meant to vitalise knowledge management systems and platforms whereat scientific research findings and lessons learnt from interventions will be systematically developed, collected, organised, and availed for wider use.
	Improve communication of knowledge and information resources on water and land resources	This includes the organization and dissemination of new communication directives connected with the Centre.
Learning and Growth	Strengthen internal institutional capacity for improved performance that targets at exceeding expectations of stakeholders and partners	This is about enhancing the Centre's capacity and capability in terms of equipment, structure and systems.
	Equip staff and associate staff with tools on latest developments to facilitate for implementation of the strategic plan	This indicates the determination of the Centre to enhance the capability of its staff and associate staff with latest technologies and methods.
Financial	Improve and diversify financial resources to support the water and land resources research and development;	This pertains to working towards ensuring availability of funds to support the execution of the Centre's strategies through maintaining the existing sources and creating new ones.
	Ensure effective and efficient utilisation of financial resources	This is about using financial resources for strategically important areas and activities in order to optimise returns from investments.

4.5. Strategy Map

A strategy map is a diagram that describes how an organization creates values by connecting strategic objectives in explicit cause and effect relationships with each other. It shows the logical connections (cause-effect relationships) among the objectives. Accordingly, Strategy Map of the strategic objectives of WRLC is presented in Figure 2.



Figure 2. WRLC Strategy Map for the period 2022–2026

4.6. Theory of Change

The goal of the Strategic Plan is to contribute to sustainable water and land resources management, enhanced ecosystem services, climate-resilient green growth and improved human wellbeing in Ethiopia. This will be achieved through the following strategic objective areas: data generation and knowledge production; implementing development activities and learning from them; vitalising knowledge management (accessibility of research products, communication management, etc.); community participation; capacity building; internal institutional capacity development; internal staff development; partnerships; and financial resources.

The desired changes towards the goal of WLRC will be achieved by pursuing multiple strategies and activities which will be facilitated by effective and efficient organisational enablers, as highlighted under the section on implementation. The theory of change underpinning this strategic plan is shown in Figure 3.

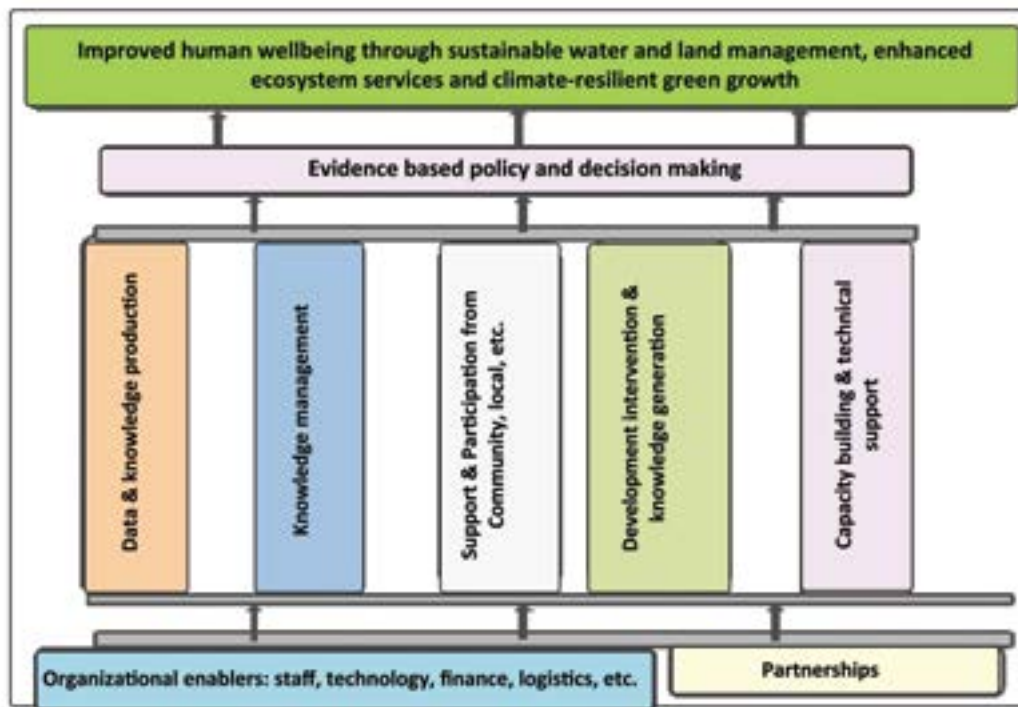


Figure 3. Theory of change of WLRC's Strategic Plan, 2022 – 2026

4.7. Performance Measurement

Measurements are indicators to track both an organisation's effectiveness and operational efficiency in implementing planned activities and strategies, and thus they enable the organisation to determine whether and to what extent it is meeting its objectives. A Key Performance Indicator (KPI) is a quantifiable measurement that shows how well an organisation is performing against a predetermined objective. Some of the KPIs that have been identified with their respective targets for each strategic objective defined for WLRC are presented in Table 6.

Table 6. KPIs identified with their respective targets for each strategic objective

Perspectives	Strategic objective	KPIs	Baseline	Target	Year					Remarks
					1	2	3	4	5	
Stakeholders	Provide capacity building and technical backstopping services to governmental and non-governmental organisations and communities in sustainable water and land management through demand-driven and tailor-made activities;	Percent of beneficiaries that properly applied the capacity building and backstopping services and research results provided by the Centre in sustainable water and land resources	NA	75					75	Final checking requires conducting a tracer study
		Number of thematic areas in which capacity building and backstopping services are delivered per year	NA	52	10	11	10	11	10	Geo-informatics (10), IWM (5), hydro-climate modelling (5), IWRM (5), hydro-met monitoring and instrumentation (5), survey and data analysis (10), awareness creation (10), NR governance (2) Number of people capacitated in the above trainings
		Number of people (farmers, DAs, experts, policy-makers) that received capacity-building interventions at different levels on different themes	NA	1560	300	330	300	330	300	52*30=1560
		Number of organisations (federal and regional) provided with technical backstopping services	11	20	20	20	20	20	20	Continuous activities in each of the organisations that may seek technical backstopping services

Perspectives	Strategic objective	KPIs	Baseline	Target	Year					Remarks
					1	2	3	4	5	
	Increase accessibility of research results, in open access modality, to researchers, academics, practitioners and policy and decision-makers within the limits of national laws	Percent increase in number of users of the Centre's research products	157,400 viewers/year	50	10	10	10	10	10	Proxied by number of viewers of WLRC Website, WALRIS, MapServer, databases, and on any other recorded dissemination lists, including printed mailing list, visitors to observatories and learning watersheds, media engagements
	Strengthen the existing partnerships and enter into new agreements with national and international research and development organizations engaged in water and land resources research and development	Number of partners retained with the Centre	30	26	28	28	27	26	26	Some partnerships may get lose as projects phase out
		Number of new partnerships established	0	10	2	2	2	2	2	
	Ensure sustainable support and participation from the communities, local leaders and other partners in activities implemented in the target research and development watersheds	Number of communities, leaders and institutions that support and participate in the activities implemented in the target research and development watersheds	0	30	6	6	6	6	6	Where community is equivalent to the intervention unit required by the intervention
Internal processes	Generate reliable data and knowledge products on water and land resources through increased monitoring and participatory action research in learning watersheds and observatories	Type and number of data books produced	NA	21					21	Time –series data
		Number of EthioGIS versions released	2	2 New	-	1	-	-	1	EthioGIS III & IV
		Number of national state of the environment report produced	0	1	-	-	-	-	1	
		Number of new stations established	16	9	-	3	3	3	0	If adequate financial and human resources allocated
		Number of knowledge products produced	100	347	60	65	70	75	77	

Perspectives	Strategic objective	KPIs	Baseline	Target	Year					Remarks
					1	2	3	4	5	
Internal process	Engage in problem-solving, adaptive development and research intervention in selected watersheds and basins;	Number of learning sites maintained and developed	18	18	Cont.	Cont.	Cont.	Cont.	Cont.	Different interventions like upscaling will continue in those same 18 learning sites
		Type and number of new learning sites established	NA	11	3	2	3	3	-	1 Abbay Basin; 3 Awash Basin; 3 Waghimra; 3 Omo-Gibe; 1 Indigenous AGF site in SNNPR
		Type and number of knowledge products produced	NA	27	6	4	6	6	5	11 baseline reports; 11 research reports; 5 policy briefs
	Increase introduction of new technologies and practices to the communities in the target research and development watersheds	Set of new technologies and practices introduced	13	13	Cont.	Cont.	Cont.	Cont.	Cont.	SWC; Homestead development; improved crop varieties and agronomic practices; grazing land management and animal feed; home-economics; rural saving and investment; fish-cage; marketing infrastructure; agro-processing and value-addition; livelihood diversification; post-harvest technologies; WaSH; rural infrastructure
	Develop, maintain, and scale up database and knowledge management platforms that could serve as part of a national hub on water and land resources to support cross-scale policy making, policy dialogue and design of resource-based research and development interventions;	Number of existing databases maintained and kept functional	5	5	Cont.	Cont.	Cont.	Cont.	Cont.	Hydro-sedimentology; DAFNE; GCRF/Water Security (AwashWare, CRV, Abbay Ware/CAMEL); SLM; Kunzila
		Number of new project-based databases created	NA	5	1	1	1	1	1	
		Number of existing databases updated	NA	1				1		
		Number of knowledge management platforms maintained	NA	5	1	1	1	1	1	WALRIS, MapServer, WatershedTool, SLM-KMIS, ESPAWM
		Number of existing platforms customised	NA	3	1		1		1	LandScale, Document Management System (Repository), DAFNE
Number of new project based knowledge management platforms created		NA	6	1	2	1	1	1	AwashWare, CRVWare, WaterAudit, MobileApp, Invasive Species, Academy 2030	

Perspectives	Strategic objective	KPIs	Baseline	Target	Year					Remarks
					1	2	3	4	5	
	Design and put to use Programme MEL	Number of monitoring, evaluation and learning (MEL) platforms designed and put to use	NA	3	1	1	1			1 Automated MEL for WLRC, 1 for LWs, 1 for Observatories and projects
	Improve communication management	Number of infographics produced	NA	10	2	2	2	2	2	
		Number of communication platforms managed and harmonised	NA	8	Cont	Cont	Cont.	Cont.	Cont	Managing and harmonising WLRC's communication platforms: <ul style="list-style-type: none"> • Website (monthly) • YouTube (quarterly) • twitter (weekly) • LinkedIn (quarterly) • Researchgate (bi-annual) • Print materials (like infograph, Bi-lingual annual magazine, articles, reports,) • Seminars/Workshops • Media tours
		Types and number of communication materials produced	NA	See Remark	See Remark	See Remark	See Remark	See Remark	See Remark	<ul style="list-style-type: none"> • Website posts (monthly) • YouTube audio-visuals, (quarterly) • Twitts, (weekly) • Linklidan, (quarterly) • Researchgate (bi-annual) • 10 infographics for water quality, SLM, Knowledge for decision making, CRV, Awash, Abbay, for students, and WASH) • Bi-lingual magazine, (Annual) • press releases 20 • Seminars/webinars 20 • Workshops 10 • Media tours 10

Perspectives	Strategic objective	KPIs	Baseline	Target	Year					Remarks
					1	2	3	4	5	
Learning and Growth	Strengthen internal leadership and institutional capacity for improved performance that targets exceeding expectations of stakeholders and partners;	Number of leadership capacity building opportunities created	NA	8	4	2	2			<ul style="list-style-type: none"> • Top Management: on Strategic management, performance planning and management, change management • Mid-level leadership: performance planning and management • Expert-level (research/project leadership): implementation quality, monitoring • Support staff level
		Number of initiatives to strengthen the governance system (protocol for the Board of Trustees, project steering committees, management team, performance evaluation system)	NA	4	2	2				They may be trained on corporate governance, for example
		Types and numbers of policies, manuals and procedures developed and put to use	4	7	4	3				
	Equip staff and associate staff with tools on latest developments to support the strategy implementation;	Number of capacity building areas organised and given to staff and associate staff	NA	12	3	3	3	2	1	Areas: IT; GIS&RS tools; modelling; data analyses; software; instrumentation; watershed tools; financial management systems; programme management
		Number of staff and associate staff trained (given capacity building services)	NA	120	30	30	30	20	10	

Perspectives	Strategic objective	KPIs	Baseline	Target	Year					Remarks
					1	2	3	4	5	
Financial	Improve and diversify financial resources to support the Water and Land Resources Centre research and development undertakings	Number of income-generating areas practiced	NA	15	Cont.	Cont.	Cont.	Cont.	Cont.	Project grants (10), short-term training; data processing fee; thematic maps; consulting services (on MEL); establishing cross-sections
		percent of financial resources obtained versus required	150mln ETB	750mln ETB	165mln	181.5 mln	199.65 mln	219.62 mln	241.6 mln	Baseline is 150mln ETB; Target includes project grants
	Ensure effective and efficient utilisation of resources;	percent reduction in expense to work done ratio	NA	NA	NA	NA	NA	NA	NA	NA

5. Implementation Strategy

The Strategic Plan will be implemented by translating it into annual work plans, which will be guided by each project's goal and objectives, overall plan, activity plans, milestones and budget plans. The annual work plans will be prepared by each work unit coordinated by the respective division heads and project leads and then reviewed at the Centre level. Annual plans will be discussed with direct stakeholders to ensure they capture evolving issues. The plans will be drawn in close consultation with partners and key stakeholders in the respective projects or programmes, including communities in the areas where the projects or programmes are implemented. Annual work plans will contain project-specific details on activities, milestones, budgets, outputs and implementing partners. As such, annual plans will be useful also for monitoring, evaluation and learning.

5.1. Planned Performance Levels

For organisations to conduct performance evaluations at regular intervals or at the end of the strategic plan period, it is necessary to set performance levels for each KPI. Accordingly, WLRC has set five performance levels. These are: 1= Below satisfactory, 2=Satisfactory, 3=Good, 4=Very good, and 5= Outstanding. These performance levels will be used in the performance measurements that will be done every year. We assume performance levels will assumed to improve from year to year, as well as in the final summative evaluation which will be undertaken at the end of the Strategic Plan period. During evaluation, the actual performance will be evaluated assuming all KPI's have equal weights. The performance level designators and corresponding cut-off points are the following:

- 1 stands for accomplishments $\leq 25\%$, designating a 'Below Satisfactory' performance level;
- 2 stands for accomplishments $>25\% - 50\%$, representing "Satisfactory" performance level;
- 3 stands for accomplishments $>50\% - 70\%$, "Good" performance level;
- 4 stands for accomplishments $>70\% - 85\%$, "Very Good" performance level; and
- 5 stands for accomplishments $> 85\%$, considered "Outstanding" performance level.

The planned performance levels expressed in terms of key performance indicators for the different strategic objectives are presented in Table 7.

Table 7. Planned performance levels represented by key performance indicators

Strategic objective	KPIs	Baseline	Target	Performance levels					Result
				1	2	3	4	5	
Perspective: Stakeholders									
Provide demand-driven and tailor-made capacity building and technical backstopping services on sustainable water and land management to governmental and non-governmental organisations and communities	Percent of beneficiaries that properly applied the lessons they learnt from the capacity building and backstopping services and research results provided by the Centre	NA	75	≤18.8	(18.8 – 37.5]	(37.5 - 52.5]	(52.5 - 63.8]	>63.8	75% represents a 100% accomplishment of the plan
	Number of thematic areas of capacity building and backstopping services delivered per year	NA	52	≤13	13 – 26	27 – 36	37 – 44	>44	
	Number of people (farmers, DAs, experts, policy-makers) that received capacity-building services at different levels on different themes	NA	1560	≤390	390– 780	781 – 1092	1093 – 1326	>1326	
	Number of organisations (federal and regional) provided with technical backstopping services	11	20	≤5	5 – 10	11 – 14	15 – 17	>17	
Increase accessibility of research results, in open access modality, to researchers, academics, practitioners and policy and decision-makers	Percent increase in number of users of the Centre’s research products	157,400 viewers/yr	50%	≤12.5	(12.5 – 25.0]	(25.0 – 35]	(35 – 42.5]	>42.5	WLRC Website Viewers/year (as a proxy)

Strategic objective	KPIs	Baseline	Target	Performance levels					Result
				1	2	3	4	5	
Strengthen the existing partnerships and enter into new agreements with national and international organisations engaged in water and land resources research and development	Number of partners retained with the Centre	30	26	≤6	6 – 13	14 – 18	19- 22	>22	The relationship with 5 of the partners may be scaled down as projects phase out
	Number of new partnerships established	0	10	≤3	4 – 5	6 - 7	9	10	
Maintain support and participation from communities, local leaders and other partners in the target research and development watersheds	Number of communities, local leaders and other partners that support and participate in the interventions	0	30	≤7	8 - 15	16 - 21	22 - 26	>26	
Perspective: Internal process									
Generate reliable data and knowledge products on water and land resources through monitoring and participatory action research in learning watersheds and observatories	Number of data books produced	NA	21	<5	6 – 11	12 – 15	16 – 18	>18	
	Number of EthioGIS versions released	2	2 New		On progress	On progress	1	2	
	Number of national state-of-the environment report produced	0	1					1	
	Number of new stations established	16	9	<2	2- 5	6	7 – 8	9	
	Number of knowledge products produced	100	347	<87	87 – 173	174 – 243	244 – 295	>295	
Engage in problem-solving, adaptive development and research undertakings in selected watersheds and basins	Number of learning sites maintained and developed	18	18	<5	5 – 9	10 – 13	14 - 15	>15	
	Number of new learning sites established	NA	11	<3	3 – 6	6 - 8	9 – 10	11	
	Number of knowledge products produced	NA	27	≤7	7 – 14	15 – 19	20 – 23	>23	
Enhance introduction of new technologies and practices to the communities in the target research and development watersheds	Set of new technologies, and practices introduced	13	13	≤3	3- 6	7 – 9	10 - 11	>11	

Strategic objective	KPIs	Baseline	Target	Performance levels					Result
				1	2	3	4	5	
Develop, maintain, and scale up database and knowledge management platforms that could serve as a national hub on water and land resources	Number of existing databases maintained and made functional	5	5	1	2	3	4	5	
	Number of new project-based databases created	NA	5	1	2	3	4	5	
	Number of existing databases updated	NA	1	0	On progress	On progress	On progress	1	
	Number of knowledge management platforms maintained	NA	5	1	2	3	4	5	WARLIS, MapServer, Watershed Tool, SPAWN
	Number of existing platforms customized	NA	3	0	On progress	1	2	3	
	Number of new project based knowledge management platforms created	NA	6	2	3	4	5	6	
Design and put to use Programme MEL	Number of monitoring, evaluation and learning (MEL) platforms designed and used	NA	3	0	On progress	1	2	3	
Improve communication management	Number of infographics produced	NA	10	<3	3-5	6 – 7	8 – 9	10	
	Number of communication channels managed periodically	NA	8	<2	2- 4	5 – 6	7	8	Website (monthly) YouTube (quarterly) twitter (weekly) LinkedIn (quarterly) Researchgate (bi-annual) Print materials (like infograph, Bi-lingual annual magazine, articles, reports.) Seminars/Workshops Media tours
	Types and number of communication materials produced	NA							Website posts (monthly) YouTube audio-visuals (quarterly) Twitts (weekly) LinkedIn (quarterly) Researchgate (bi-annual) infographics 10: for water quality, SLM, Knowledge for decision making, CRV, Awash, Abbay, for students, and WASH) Bi-lingual magazine (Annual) press releases 20 Seminars/webinars 20 Workshops 40 Media tours 10

Strategic objective	KPIs	Baseline	Target	Performance levels					Result
				1	2	3	4	5	
Perspective: Learning and Growth									
Strengthen internal institutional capacity for improved performance that targets exceeding expectations of stakeholders and partners	Number of leadership capacity building opportunities initiated	NA	8	<2	2- 4	5 – 6	7	8	
	Number of initiatives to strengthen the governance system (protocol for the BoT, project steering committees, management team, performance evaluation system)	NA	4	0	1	2	3	4	
	Types and number of policies, manuals and procedures developed and put to use	4	7	1	2	3-4	5-6	7	
Equip staff and associate staff with tools on latest developments to support implementation of the strategic plan	Number of capacity building areas identified and given to staff and associate staff	NA	12	<3	3 – 6	7 – 8	9 - 10	11 – 12	
	Number of staff and associate staff that got capacity building services	NA	120	<30	30 -60	61 – 84	85 – 100	>100	
Perspective: Financial									
Improve and diversify financial resources to support the Water and Land Resources Centre research and development	Number of income-generating areas practised	NA	5	1	2	3	4	5	
	Percent of financial resources obtained versus required	NA	NA	≤4	[4-8]	[8-11]	Cont. (11-13)	Cont. ≥13	Baseline is 150mln/year
Ensure effective and efficient utilisation of resources	Percent reduction in expense to work done ratio	NA	NA	NA	NA	NA	NA	NA	Employees are multi-tasked; shared office facilities; little printing needs

5.2. Strategic Initiatives

Strategic initiatives are conditions or actions defined, designed and fulfilled as pre-requisites to enable an organisation to achieve the goals/strategic objectives promised in its strategic plan. It is obvious that an initiative may do well for more than one strategic objective. Accordingly, for WLRC to be able to pursue and achieve its strategic objectives during the strategic plan period, the following strategic initiatives are expected to be in place. These are:

- WLRC having in place organisational structure that allows it implement the strategic plan;
- having in place standard HRM policies and procedures for WLRC;
- having in place up-to-date financial policies and procedures;
- having in place enabling procurement policies and procedures;
- having in place institutionalised communication and data sharing policy;
- motivation mechanisms like incentives, rewards to outstanding performance, refresher and business-demand-driven capacity building trainings given to staff;
- practising effective performance planning and management;
- leadership and management commitment to support implementation of the strategic plan;
- project proposals written to raise fund for the planned research and development activities;
- carrying out effective income-generation and resource mobilisation activities;
- ensuring availability and timely release of funds needed for implementing the planned activities;
- ensuring adequate collaboration and participation of partners and stakeholders;
- retaining the present human resource and timely recruitment for newly required job assignments;
- ensuring availability and accessibility of required laboratory, equipment and facility to the WLRC staff and associate staff; and
- enabling socio-political environment.

The Strategic Plan is founded on the premise that these strategic initiatives will be designed and fulfilled as pre-requisites per the schedule presented in Table 8.

Table 8. Strategic initiatives needed for implementing the Strategic Plan and schedule to fulfil them

Strategic Initiative	Year																			
	1				2				3				4				5			
	Quarter				Quarter				Quarter				Quarter				Quarter			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
WLRC having organisational structure that allows it implement the strategic plan		1																		
WLRC having in place standard HRM policies and procedures				1																
WLRC having up-to-date financial policies and procedures				1																
WLRC having appropriate procurement policies and procedures				1																
Having in place institutionalised communication and data sharing policy					2															
Practising effective performance planning and management		1		1		1		1		1		1		1		1		1		1
Practicing continued MEL																				
Knowledge, skills, and experience sharing and reflection opportunities created for staff and key partners and stakeholders				1			1				1				1					1
Leadership and management commitment to support implementation of the strategic plan																				
Motivation mechanisms like incentives, rewards to outstanding performers, refresher and business-demand-driven capacity building trainings given to staff																				
Writing project proposals for fund raising																				
Income generation and resource mobilisation activities																				
Ensure availability and timely release of funds needed for implementing the planned activities																				
Ensure adequate collaboration and participation of partners and stakeholders																				
Retaining the present human resource and timely recruitment for new required job assignments where needed																				
Ensuring availability and accessibility of required laboratory, equipment and facility to the WLRC staff and associate staff																				
Enabling socio-political environment																				

6. Resource Requirements

It is apparent that people and organisational development are at the core of the performances and achievements of organisations like WLRC. For the effective pursuit of the strategic objectives drawn in this strategic plan, WLRC will thus retain the existing staff and try to fill critical staffing needs as per the organogram but within the limits of resources available.

The Centre relies on project-based financing that is obtained from different sources of support or collaborative activities and from income-generating activities. Hence, also implementation of this strategic plan will be financed by project-based budgets. Projects that are currently under implementation and continuing to be implemented into part or all of the strategic plan period have earmarked budgets. New projects that will be initiated during the plan period will mobilize the required resources by approaching potential donors, responding to competitive calls for support, or collaborative activities such as capacity building service provision to relevant stakeholders.

The Centre's reputation as an emerging centre of excellence in research and development on water and land resources in the country, its strong technical and institutional capacity, and the wide network of existing and potential partners give leverage for a successful resource mobilisation. The Centre will work towards broadening its sources of fund by approaching diverse sources, including the Ethiopian government, intergovernmental agencies, bilateral donors, foundations, and non-governmental organizations as well as through collaboration with different universities and research organisations.

7. Monitoring, Evaluation and Learning (MEL)

The implementation of WLRC's strategic plan will be monitored regularly through project level MEL activities. Hence, quarterly, bi-annual and annual monitoring and reporting will be done for each project. The reports will be produced against plans and then consolidate together for sharing at different fora, including review meetings at the Centre level.

Overall assessment of implementation of the strategic plan will be made through three evaluations that will be undertaken in the life of the plan period: annual performance evaluations, mid-term evaluation (at the end of the second year of the Strategic Plan), and final evaluation. The annual evaluation considers the extent the operational plans are derived from the strategic plan and the level of performances. The mid-term evaluation will be undertaken with involvement of some key stakeholders. The final evaluation, at the end of the plan period, will be undertaken by an independent professional from outside the Centre. Generally, the monitoring and evaluation will be guided by the Results Framework of the Strategic Plan shown in Annex 1 and the respective annual plans.

8. Assumptions, Risks, and Risk Management Strategies

There are certain important assumptions, risks and risk management strategies required for a successful implementation of the WLRC Strategic Plan 2022 - 2026.

8.1. Assumptions

Further to the Strategic Initiatives presented in section 5.2, it is assumed that: 1) current projects continue to be funded and funding will be obtained for new projects; 2) the security situation in the country would allow smooth running of observatories, learning watersheds, and implementation of development activities; and 3) knowledge development and knowledge sharing platforms like WALRIS and LandScale will inform planning and policy making and hence win the support of the government and its development partners. Many other important assumptions are framed as elements of the Strategic Initiatives considered in this plan.

8.2. Risks and Risk Management Strategies

The major risks to the effective implementation of the strategic plan relate to the assumptions turning out contrary to the expected favourable conditions. Failure to fulfil the strategic initiatives may also translate to proliferation of different risks.

As risk management strategies, WLRC will establish and maintain good working relationships with relevant governmental organisations, funding agencies, local communities, its development partners including other CSOs and the private sector. WLRC believes it has actual as well as potential indispensable roles to the attainment of development goals of the country. Thus, WLRC's partners and stakeholders will also play active roles in co-managing risks. And to catch up with unforeseen developments, WLRC will update the Strategic Plan where evolving dynamics may necessitate doing so.

9. Strategic Directions for the Subsequent 5 Years (2026-2030)

This strategic plan is for the years 2022 – 2026. However, as a strategic plan is a forward-looking roadmap, some elements of it may continue to be relevant even beyond 2026. Yet, it is important to indicate generic strategic directions for the years 2026 - 2030. The following areas of strategic objectives may still continue with some modifications: data generation and knowledge production; development interventions in the form of action-research ; knowledge management and platforms development; issues community participation; capacity building; internal institutional capacity development; sustainable landscape management; resource accounting; livelihoods improvement; internal staff development; partnerships and resource mobilisation, with focus on own income generating activities.

Annex 1. Results Framework

Goals/ Objectives	Major Activities	Indicators/ Performance Measures	Targets	Means of Verification	Assump- tions
Goal: Contribute to sustainable water and land management, enhanced ecosystem services, climate-resilient green growth and improved human wellbeing in Ethiopia		<ul style="list-style-type: none"> Knowledge and evidence used to inform policy-making and development planning Regional and national NRM policies and strategies informed by WLRC products 		Conducting rapid assessments, auditing of ecosystem services	Political stability, favourable peace and security, fund availability
Outcome 1: Data and knowledge generated and disseminated; policies and decisions informed by empirical evidence					
Objective 1. Data generation and knowledge production	1.1. Maintain long-term monitoring sites or observatories and generate time-series data	Number of data books produced	<ul style="list-style-type: none"> Data book per station; All-inclusive station-wide synthesis Data book per thematic area (element of observation) yearly for all stations (semi-synthesised) 	Checking for databases and data books from LWs & monitoring sites	Adequate financial and human resources allocated
	1.2. Process and develop regional, national, and basin-level data on water and land resources from ground-based stations, Earth observatories and other sources	<ul style="list-style-type: none"> Number of EthioGIS versions released; A national State of the Environment report produced 	<ul style="list-style-type: none"> EthioGIS 3 and EthioGIS 4 released; Data and report on the State of the Environment produced every fifth year 	Looking for those contents in MEL reports and SOE reports; searching for those versions of EthioGIS	Adequate financial and human resources allocated
	1.3. Establish new climate and hydro-sedimentology stations	Number of new stations established	6 stations established (3 in Awash, 3 in Omo-Gibe (upper, middle, lower catchments))	Visiting the stations; financial reports; MEL reports	Adequate financial and human resources allocated
	1.4. Generate socio-economic and institutional panel data books from observatories and learning watershed	Type and number of data books produced	<ul style="list-style-type: none"> Data book per station; All-inclusive station-wide synthesis Data book per thematic area (element of observation) yearly semi synthesis for all stations 	Examining MEL reports and data books for institutional panel data	Adequate financial and human resources allocated
	1.5. Produce different knowledge products through analysis of data from the observatories, learning watersheds, earth observation and ground observation	Type and number of knowledge products produced	A total of 347 knowledge products (6 manuals; 10 guidelines; 100 journal articles; 90 working papers and reports; 20 policy briefs; 1 Atlas; 10 thematic maps; 100 posters, etc.) produced	Checking availability and accessibility of those knowledge products in MEL reports	Adequate financial and human resources allocated
Outcome 2: Live learning, demonstration and dissemination of promising practices made possible for sustainable development					
Objective 2. Development intervention and knowledge generation	2.1. Maintain and further develop the existing Learning Watersheds (LWs)	Number of learning sites maintained and developed	18 LWs sites maintained and further developed	Visiting LWs; Checking in MEL reports	Budget will be available; Local peace and security ensured
	2.2. Establish new learning landscapes (LLs) in new representative socio-ecological sites (SES)	Type and number of new learning sites established	11 LLs established in new SES sites (1 in indigenous agroforestry site, 1 Abbay basin, 3 in Awash basin, 3 in Omo-Gibe basin, 3 in Waghimra)	<ul style="list-style-type: none"> Visiting LWs MEL reports Financial reports Data generated from the LLs 	<ul style="list-style-type: none"> Budget will be available Local peace and security ensured
	2.3. Produce knowledge in existing and new LLs and develop upscaling and out scaling mechanisms	<ul style="list-style-type: none"> Type and no. of knowledge products produced Up & out-scaling mechanisms 	27 knowledge products produced [11 baseline reports, 11 research reports on SES, 5 policy briefs (governance, landscape/environ change, ecosystem services, livelihoods, value chain)]	<ul style="list-style-type: none"> Auditing produced knowledge products Looking for up-scaling and out-scaling strategies 	<ul style="list-style-type: none"> Budget will be available

Goals/ Objectives	Major Activities	Indicators/ Performance Measures	Targets	Means of Verification	Assump- tions
Outcome 3: State-of-the-art knowledge management system developed and maintained					
Objective 3. Knowledge management	3.1. Establish and maintain knowledge database (project-level database, SCRP database, EthioGIS, Learning Watershed database, Water Audit database)	Type and number of knowledge databases maintained, newly created and put functional	<ul style="list-style-type: none"> • Maintain and ensure the functioning of 5 existing databases; • Create 5 new project-based databases; • Upgrade 1 database 	Functionality of existing databases; Visiting the databases created and upgraded	Existing staff retained
	3.2. Maintain and establish knowledge management platforms (MapServer, Document management (publications), WaterAudit web-based application software, Projects-based knowledge management platforms (such as mobileApps - mobile -based data collection applications)	Type and number of knowledge management platforms maintained, newly created and put functional	<ul style="list-style-type: none"> • Create 6 new project-based knowledge management platforms (e.g. AwashWare, CRVWare, WaterAudit, mobileApps, invasive species, Academy 2030) • Maintain and upgrade 5 existing knowledge management platforms (WALRIS, MapServer, WatershedTool, SLM-KMIS, ESPAWMGS) • Customise 3 existing platforms (LandScale, document management system, DAFNE) 	Auditing the new project-based KM platforms; maintained KM platform; customised platforms	<ul style="list-style-type: none"> • Existing staff retained • Budget available
	3.3. Design and put to use automated programmatic MEL (Monitoring, Evaluation and Learning) systems	Type and number of MEL platforms designed and put to use	Design and implement three automated MEL platforms (1 for the Centre; 1 for LLS; 1 for observatories and projects)	Programmatic MEL becoming simple and enjoyable	<ul style="list-style-type: none"> • Existing staff retained • Budget available
	3.4. Produce and disseminate communication and dissemination materials	Type and number of communications materials produced and disseminated	<ul style="list-style-type: none"> • Consolidate and harmonise WLRC's communication platforms, such as Website (Monthly), YouTube (quarterly), twitter (weekly), LinkedIn (Quarterly), Research gate (bi-annual), produce 10 infographics for water quality, LSM, Knowledge for decision making, CRV, Awash, Abbay, for students, and WASH); Bi-lingual annual magazine, ; 20 press releases; 20 Seminars/webinars, 40 Workshops, 10 Media tours 	WLRC knowledge products available in different avenues	<ul style="list-style-type: none"> • Existing staff retained • Budget available
Outcome 4: Decisions and development planning improved by adaptive research and water and land resources sustainably managed and utilised					
Objective 4. Capacity building	4.1. Deliver demand-driven and tailor-made capacity building services	Type and number of capacity building services provided	<ul style="list-style-type: none"> • Geo-informatics (10); IWM (5); hydro-climate modelling (5); IWRM (5); hydromet monitoring and instrumentation (5); survey and data analysis (10); awareness creation (10); NR governance (2); • Number of people capacitated with the above trainings 	Inspecting the strength of demand received from GOs, NGOs, CSOs and CBOs	<ul style="list-style-type: none"> • Existing staff retained • Budget available
	4.2. Delivered technical backstopping services	<ul style="list-style-type: none"> • Type and number of technical backstopping services provided; • Number of organisations supported 	<ul style="list-style-type: none"> • Technical backstopping services provided (10); • Organisations supported 	<ul style="list-style-type: none"> • High technical capability of staff and other actors • Improved performance of supported organisations 	Demand will be received from GOs, NGOs, CSOs and CBOs

Goals/ Objectives	Major Activities	Indicators/ Performance Measures	Targets	Means of Verification	Assump- tions
Outcome 5: Responsive, reliable and promoted knowledge hub for water and land resources					
Objective 5. Strengthened internal institutional capacity	5.1. Institutionalized leadership growth and sustainability	Number of leadership capacity building initiatives to strengthen the governance system	<ul style="list-style-type: none"> Various leadership capacity building initiatives to strengthen the governance system 	Checking for continued good governance	Finance and human capital available
	5.2. Improve existing working manuals and procedures and design new ones	<ul style="list-style-type: none"> Types and numbers of policies, manuals and procedures developed and put to use 	<ul style="list-style-type: none"> Policies and manuals produced on Financial, HR, ICT, Communications, Research Ethics, gender, research, procurement, grievance (one each) 	MEL reports / MEL operational report with % of performance improvement	<ul style="list-style-type: none"> Existing staff retained Budget available
	5.3. Integrate resource mobilisation work into the Centre's regular functions	Number of project proposals prepared and integrated to the Centre's functions	<ul style="list-style-type: none"> 10 proposals developed and grants secured 	New grants secured	<ul style="list-style-type: none"> Regular grant writing Staff trained in grant writing
	5.4. Increase visibility of the Centre through improved communications tools and products	Number of new networking and partnership MOUs or agreements signed	<ul style="list-style-type: none"> Five new networking and partnership MoUs signed and operationalised; Seven (five annual, one mid-term, one end-term) MEL reports; five new networking and partnership MOUs or agreement reached 	WLRC' becomes more visible than in 2022	<ul style="list-style-type: none"> Existing staff retained Budget available
	5.5. Improve performance monitoring, documentation and reporting	Type and number of performance measurement and indicators identified	<ul style="list-style-type: none"> Documents detailing efforts and achievements of the Centre prepared Performance monitoring improved 	MEL reports; MEL Report with additional measurement parameters	<ul style="list-style-type: none"> Performance management expert recruited Budget available
Outcome 6: Integration and alignment of multiple institutions for a widened scope of research and development by mobilising knowledge, experiences and resources					
Objective 6. Partnerships	6.1. Strengthen existing partnerships with local and international research and development organisations	Number of partnerships strengthened	10 existing and relevant partnerships strengthened	MEL reports	Willingness of existing partners to continue the partnership
	6.2. Establish new partnerships with local and international research and development organisations	Number of new partnerships established	5 new and relevant partnerships established	MEL reports	Potential new partners exist and are willing to enter into partnerships with WLRC



WATER & LAND
RESOURCE
CENTRE



Water & Land Resource Centre
Addis Ababa University

Water and Land Resource Centre, Addis Ababa University (WLRC, AAU)
From Sahlite Mihret Mariam Church Roundabout to the road to Wosen
Behind the Ministry of Mines
Next to Belt Building
P.O.Box: 3880
Telephone: +251-11-661-22-36
Fax: +251-11-661-22-29
Email: info@wlrc-eth.org; gete.z.@wlrc-eth.org
<https://www.wlrc-eth.org>
Addis Ababa
Ethiopia

