

ROADMAP

TO IMPLEMENTATION

NATIONAL WATER

RESOURCE STRATEGY

2021-2025

**MINISTRY OF ENERGY
AND WATER RESOURCES**





Federal Government of Somalia

Ministry of Energy and Water Resources

National Water Resource Strategy

2021-2025

Final Roadmap

August 2021

FOREWORD

The critical economic and social importance of water in the Somali society is immeasurable. This means that there are opportunities to use access to water as a key steppingstone for socio-economic development as well as an entry point to wider peace building. These aspirations can only be realised through fast-tracking the strengthening of water governance instruments such as through this maiden National Water Resource Strategy (NWRS) and developing sound institutions at federal and member state levels. This will provide the much-needed impetus for holistic water sector reforms as well as priority projects to address key sector challenges that hinder growth and development.



This NWRS has been developed through a meticulous stakeholder engagement process, to underpin and support Somalia's developmental objectives of the National Development Plan 2020-2024 (NDP-9). In essence, the NDP-9, whose aim is to eliminate poverty and the impacts of poverty experienced by the people of Somalia, will be the key driver for the NWRS over the next 5 to 10 years. Water is central to this, needing to ensure sustainable water resource management and development, provision of water services that support economic sectors, and investment in infrastructure to improve water security whilst managing the ravages of floods and droughts. The NWRS has been intentionally designed to provide synergy with NDP-9's four pillars. Each of these pillars has a set of strategies and interventions that the NWRS mirrors.

Ultimately, all the above strategies and actions reiterate the Federal Government of Somalia's priorities on the importance of supporting communities to have improved livelihoods through better services. Therefore, this is a call to action to all stakeholders, to join hands in providing their continuous invaluable support and cooperation to realise this NWRS. Together, we will safeguard Somalia's water resources and work towards ensuring water security for Somalia's future generations.

Hassan



H.E. Hassan Abdinur Abdi

Minister of Energy and Water Resources

Federal Government of Somalia

ACKNOWLEDGEMENTS

The National Water Resource Strategy (NWRS) is the culmination of various contributions from a range of stakeholders representing government ministries, international cooperating partners and external stakeholders (private sector and civil society). These stakeholders are thanked for their contributions. The Ministry would like to also thank UNDP and UNICEF for their support.

EXECUTIVE SUMMARY

Introduction

For Somalia, water it is the backbone of social, economic and environmental growth and prosperity. Yet, the growing demands for water and its increasing scarcity is a growing concern. Somalia is a water scarce country with approximately 411 m³ of renewable fresh water per capita as of 2017 (World Bank, 2020). This is a staggering decline over time from 2 087 m³ in 1962 (*ibid*), and far below the UN recommended threshold of 1 000 m³ per capita per year. With rapid population growth, the current per capita levels will decline further in coming decades. This continuous decline in freshwater availability has resulted in fierce competition over water resources and conflicts in some regions of Somalia. The deteriorating quality of groundwater resources as a result of overexploitation, increasing population and pollution is another challenge. Further, these challenges will be exacerbated by climate change which has been manifested through recurrent floods and droughts. With the mean annual rainfall expected to increase by 1%, 3% and 4% by 2030, 2050 and 2080, respectively (using the 1981-2000 reference period) (FGS, 2015) and coupled with increasing variability, more severe periods of drought and floods are expected in future periods.

The global COVID-19 pandemic has interrupted Somalia's growth trajectory with the economy contracting by 2.5% in 2020 (World Bank, 2020). More importantly, the pandemic has raised the water, sanitation and hygiene agenda that has become a key element in the defence against the disease's spread. This has highlighted the urgency of strengthening water infrastructure, water resources management and governance, equitable water supply, and enhanced water quality standards as over 47% of the Somali population does not have access to safe water, sanitation and hygiene (WASH) services.

Within this context, water governance in Somalia is impacted by limited horizontal and vertical coordination between water sector institutions and those sector institutions supporting socio-economic development. In many instances these institutions have limited resources and stretched capacity. These institutions play a key role in supporting the evolving policy, legal and institutional framework, in strengthening water resource management based upon improved scientific data and information, and in developing infrastructure to support development and address climate extremes.

The Imperative to Act

Cognisant of the myriad of challenges facing Somalia's declining water resources, the Federal Government of Somalia continues to make progressive strides to safeguard its water resources. This includes progressive efforts to develop a sound constitutional framework to solidify its political settlement and state-building reforms and enact legislative and regulatory instruments to anchor the institutional development process, and this is particularly the case for the water sector.

The need to develop the economy of Somalia to address high levels of poverty is outlined in the National Development Plan 2020-2024 (NDP-9), which also notes that water is a key natural resource that needs to be effectively managed and sustainably developed to support the growth and development the country needs.

Availability of water, of sufficient quality, has a direct bearing on Somalia’s ability to meet the Sustainable Development Goals (SDGs): 1, 2, 3, 5, 6, 8, and 13, in terms of ending poverty, ending hunger and achieving food security, ensuring healthy lives, ensuring gender equality, access to clean water and sanitation, promoting sustainable economic growth, and taking climate action respectively.

The complexity of managing Somalia’s water resources requires a strategic national approach that involves the engagement of key government actors, the private sector, civil society, as well as the support of a range of international cooperating partners and development financing institutions.

The Strategic Response

This NWRS provides a suite of strategies, objectives, and actions for the water sector for the 2021-2025 period. However, some of the outcomes will only be realised in the longer-term. The NWRS targets to unlock key actions and align with the Provisional Constitution (2012), Sustainable Development Goals and sectoral policies and laws. The NDP-9 will be the key driver for the NWRS over the next 5 to 10 years.

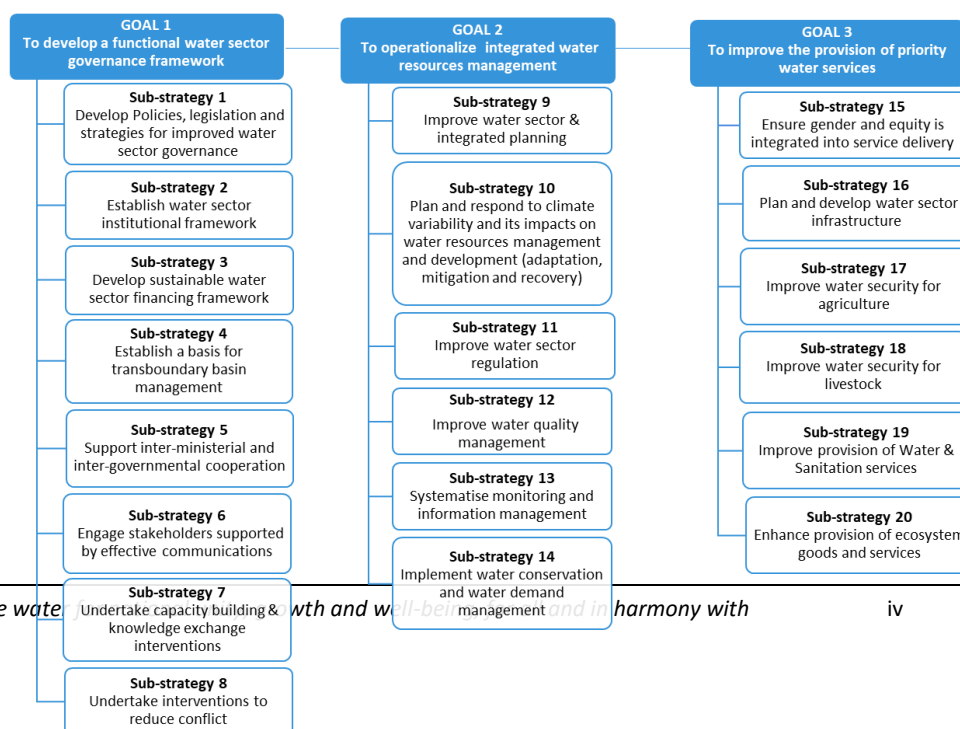
“Sustainable, equitable and secure water for national unity, growth and well-being, for all and in harmony with nature”

The Vision of the NWRS is:

Under the NWRS, there are three Strategic Goals for this first edition that provides the basis for future water sector developments: **Goal 1: Establishing a Functional Water Sector Governance Framework** - Provides the strategic approach and actions towards strengthening water sector governance; **Goal 2: Operationalising Integrated Water Resources Management** – Provides the strategic approach and actions towards improved and integrated water resource management as a basis for ensuring sustainable water resource development and the provision of sanitation services. **Goal 3: Improving the Provision of Priority Water Services** – Provides the strategic approach and actions to guide the development of water resources to realise improvements in the various services.

During the assessment phase of the strategy development, many issues and challenges were identified. These were collated into clusters, resulting in twenty sub-strategies

During the assessment phase of the strategy development, many issues and challenges were identified. These were collated into clusters, resulting in twenty sub-strategies

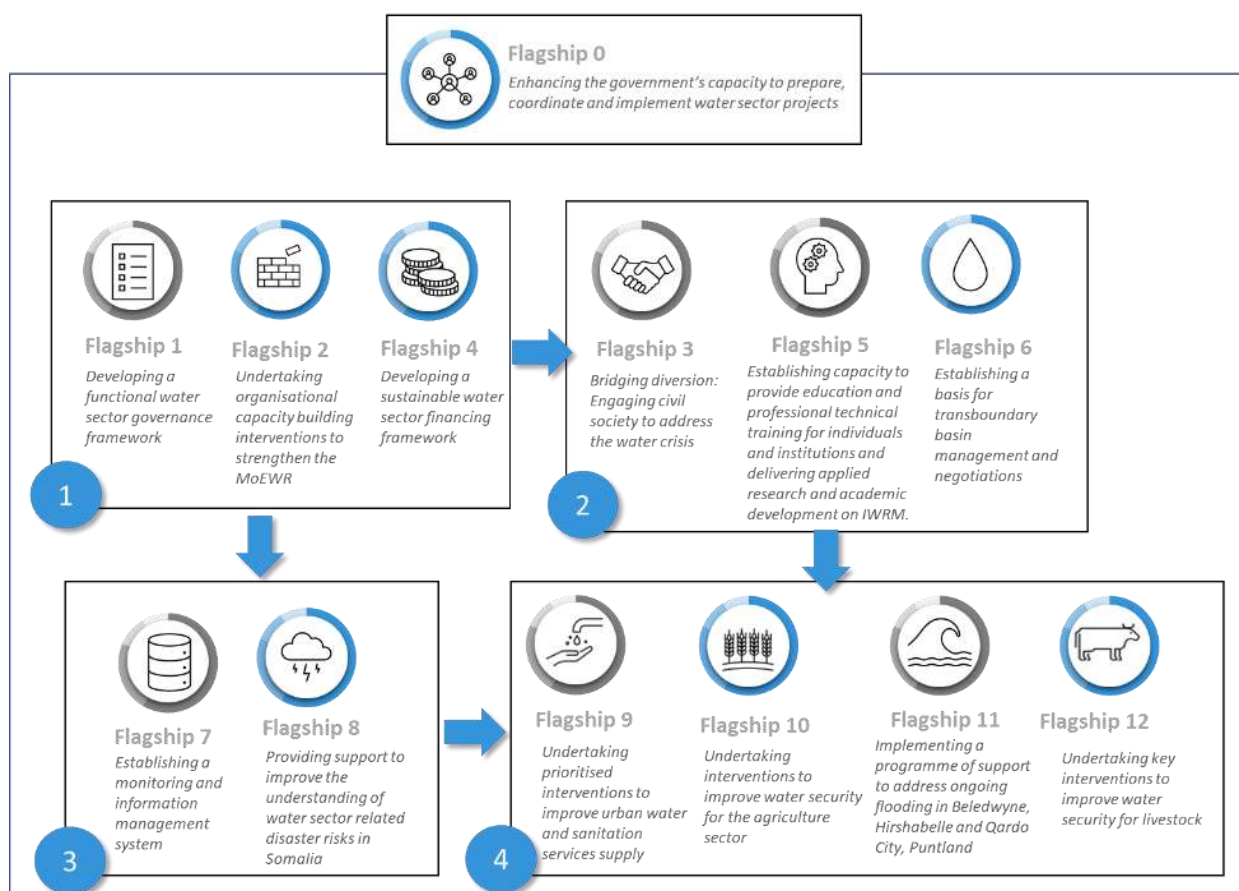


that will collectively realise the three Goals. The entire NWRS is underpinned by best practice principles and values that follow thematic relevance throughout the document.

Towards Implementation

To respond to the suite of strategies, objectives, and actions provided in this NWRS, there is a realisation that the attainment of longer-term objectives will take a phased and progressive, developmental approach that enables Somalia to pragmatically attain sustainable outcomes. This needs to be supported by relevant institutional arrangements, cooperating partners and a monitoring and evaluation framework that will enable the MoEWR to monitor and report on progress.

Complimenting the NWRS, this **NWRS Roadmap** provides clarity on key priorities and supporting actions, roles and responsibilities as well as milestones and targets has been developed. The roadmap outlines the establishment of appropriate cooperative platforms to support and guide the programming of actions as well as to oversee and evaluate progress. Importantly, this Roadmap outlines 13 project charters that describe Flagship Projects that will facilitate interventions to support the implementation of the NWRS in a phased and progressive manner. These Flagship Projects will be undertaken with the broad leadership of the FGS in partnership with the FMS, working in conjunction



with International Cooperating Partners.

TABLE OF CONTENTS

FOREWORD	I
ACKNOWLEDGEMENTS	II
EXECUTIVE SUMMARY	III
LIST OF FIGURES.....	VII
LIST OF TABLES.....	VII
LIST OF ACRONYMS	VIII
1. INTRODUCTION	1
1.1 Country context.....	1
1.2 The need for the National Water Resource Strategy (NWRS).....	1
1.3 The approach and purpose.....	2
1.4 The NWRS strategic framework.....	3
1.5 Ensuring effective implementation	4
2. THE IMPLEMENTATION IMPERATIVE	6
2.1 Lessons in Implementing NWRS and IWRM	7
3. ENSURING IMPLEMENTATION	13
3.1 Phase 1 – Laying the Foundation	13
3.2 Phase 2 – Building Capacity	19
3.3 Phase 3 – Driving Growth	24
4. DRIVING FLAGSHIP PROJECTS	27
4.1 Focusing delivery through Flagship Projects.....	27
4.2 Flagship Project Charters	28
4.3 Principles that underpin the Flagship Projects	45
5. FAST TRACKING IMPLEMENTATION	47
6. REFERENCES	50

LIST OF FIGURES

Figure 1-1: Drainage basins of Somalia 1

Figure 1-2: Objectives of NWRS 2

Figure 1-3: Strategic goals of the NWRS 3

Figure 1-4: The NWRS Goals and supporting Strategies 4

Figure 1-5: IWRM planning and implementation cycle 4

Figure 2-1: The progressive process towards building back better 6

Figure 3-1: Summary of the phased implementation of the NWRS 13

Figure 4-1: Key factors to underpin focused NWRS implementation 27

Figure 5-1: Potential phasing for the initiation of Flagship Projects 49

LIST OF TABLES

Table 3-1: Phase 1 Implementation Tables..... 16

Table 3-2: Phase 2 Implementation Tables..... 21

Table 3-3: Phase 3 Implementation Tables..... 25

LIST OF ACRONYMS

Abbreviation	Meaning
COVID-19	Novel Corona Virus 2019
FGS	Federal Government of Somalia
FMS	Federal Member State
IWRM	Integrated Water Resource Management
MoAI	Ministry of Agriculture and Irrigation
MoE	Ministry of Education
MoEWR	Ministry of Energy and Water Resources
MoF	Ministry of Finance
MoHADMM	Ministry of Humanitarian Affairs and Disaster Management
MoL	Ministry of Livestock
MoPIED	Ministry of Planning, Investment and Economic Development
NAPA	National Adaptation Programme of Action
NDP	National Development Plan
NWRS	National Water Resource Strategy
SDGs	Sustainable Development Goals
SWALIM	Somalia Water and Land Information Management
WASH	Water, Sanitation and Hygiene
WSS	Water and sanitation services

1. INTRODUCTION

1.1 Country context

Located on the Horn of Africa, Somalia is emerging from a prolonged period of conflict for approximately 30 years. Towards this end, the Federal Government of Somalia (FGS) is working hard to realise the objectives of growth and development as laid out in the National Development Plan 2020 - 2024 (NDP-9). Water resource management and development is essential to the country's growth and development, hence, the development of a National Water Resource Strategy (NWRS) becomes an important component of realising the country's development agenda.

Somalia can be divided into nine major water basins with the Juba and Shabelle rivers being very important in Somalia, the latter having been described as the breadbasket of Somalia (Jama & Mourad, 2019).

Climate change, environmental degradation and increasing competition for scarce water, stressed rangelands and other natural resources are major drivers of fragility, displacement, extreme poverty, and food insecurity. This poses significant challenges in enabling access to water for Somalia's estimated population of approximately 15 million in 2020, growing at a rate of 3% per year (United Nations Department of Economic and Social Affairs, 2019) with an estimated population of 35 million by 2050.

As pressures on these limited resources increase, the need for improved water sector governance, strengthened water resource management and increase water security will impact on the country's ability to ensure sustainable growth and development.

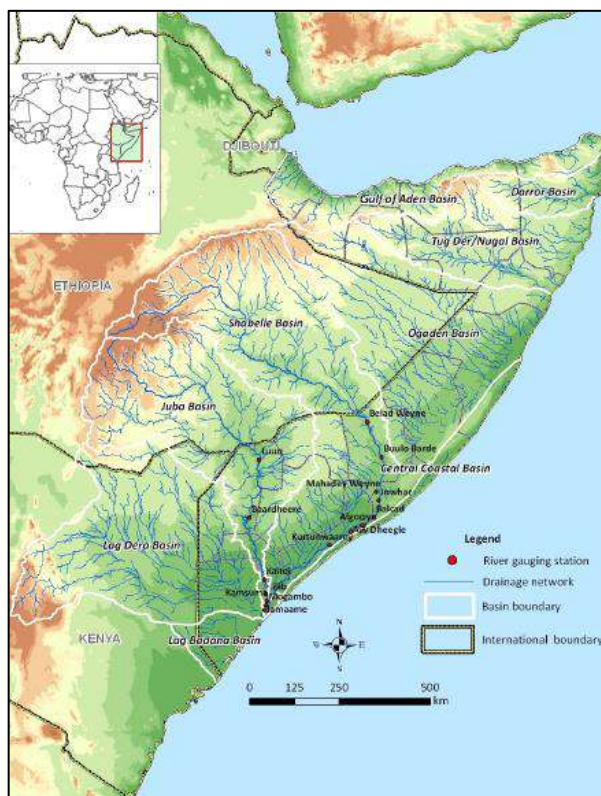


Figure 1-1: Drainage basins of Somalia

1.2 The need for the National Water Resource Strategy (NWRS)

Restarting institutional activity and strengthening water resources governance in the aftermath of a prolonged conflict era is challenging. Recent and recurrent environmental disasters as well as the ongoing Covid-19 pandemic serve to underline the dramatic recovery that is required. This places emphasis on the need for addressing social, economic and environmental aspects that results in green growth and is inclusive in ensuring that nobody is left behind. Therefore, the reconstruction that is required provides a significant opportunity to put in place approaches that ensure more social and economic resilience for the future.

Currently, the Somalian government is creating and modernizing institutions, seeking to restore services to a struggling and distressed population. Whilst much has been achieved to date, there are still many challenges that the government face in improving water resource management and development across the country.

One of these challenges is the limited horizontal and vertical coordination between water sector institutions and those sector institutions supporting socio-economic development. In many instances these institutions have limited resources and stretched capacity, which impacts their ability to support evolving policy, legal and institutional frameworks, strengthen water resource management, and develop infrastructure to support development and address climate extremes.

The critical economic and social importance of water in Somali society means that there are opportunities to use access to water as an entry point to wider peace building as well as a key steppingstone for socio-economic development. These aspirations can only be realised through fast-tracking the strengthening of water governance instruments, such as the Strategy, and developing sound institutions at federal and member state levels to provide impetus for holistic water sector reforms as well as priority projects to address key sector challenges that hinder growth and development.

1.3 The approach and purpose

The NWRS has therefore been developed to underpin and support the developmental objectives of the NDP-9. Water is central to this, needing to ensure sustainable water resource management and development and the provision of water services that support economic sectors. This must be underpinned by sound strategic governance and operational clarity.

The Somalian water sector is in the process of updating its core legal instrument i.e. the Water Act. Alongside this is the prioritisation of the development of the NWRS as there is the recognition for the need to strategically plan for the range of activities that are needed in the short-term, whilst working towards longer-term objectives (see Figure 1-2).

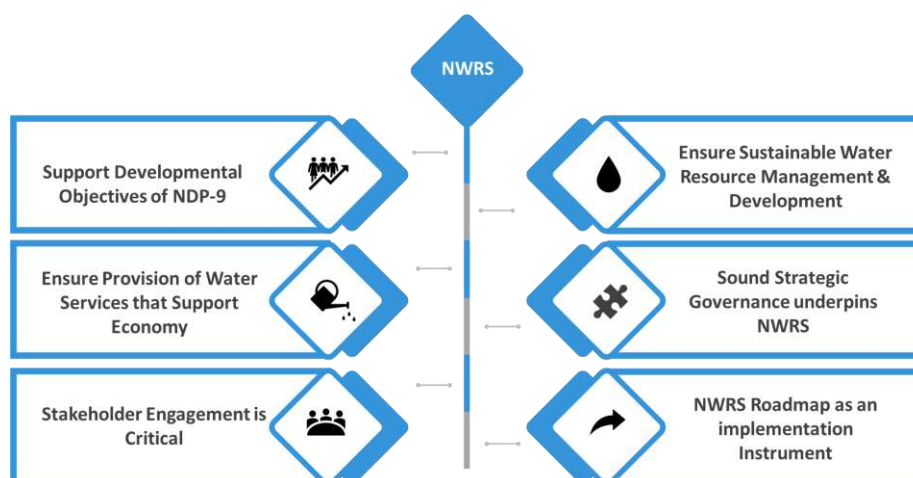


Figure 1-2: Objectives of NWRS

In this regard, the process to regularise the Somalian water sector will require structured action over time. This first NWRS cannot achieve all that the Federal Government of Somalia needs to do in support of water sector reforms, but rather it is an indication of the government’s commitment to undertaking incremental activities that demonstrate progressive realisation of the country’s developmental objectives.

Water resource management and development is inherently complex, noting that water impacts other sectors and ministries at different tiers of government. Engagement in the development of this strategy has therefore been critical. Despite the complexities of the COVID-19 outbreak, the MoEWR has ensured ongoing stakeholder engagement and participation. The support of partner Ministries as well as key international cooperating partners has been instrumental in developing the NWRS and in understanding the key linkages and interfaces between sectors to develop an integrated, developmental approach.

1.4 The NWRS strategic framework

In March 2020, the first consultative workshop for the development of the NWRS deliberated on the

“Sustainable, equitable and secure water for national unity, growth and well-being, for all and in harmony with nature”

intent for the strategy and a vision for the NWRS was developed and subsequently refined.

This NWRS Vision is brought to life through four core mission statements of intent, namely:

- To enhance the role of water in unity, growth, and well-being.
- To enhance integrated water resources management.
- To build resilience by promoting sustainable development.
- To ensure equity, productivity, and sustainable services.

These four mission statements were translated into three Strategic Goals for this first NWRS that provides the basis for future water sector developments (Figure 1-3).

During the assessment phase of the strategy development, many issues and challenges were identified. These were collated into clusters, resulting in twenty sub-



strategies that will collectively realise the three Goals, as provided in Figure 1-4 below.

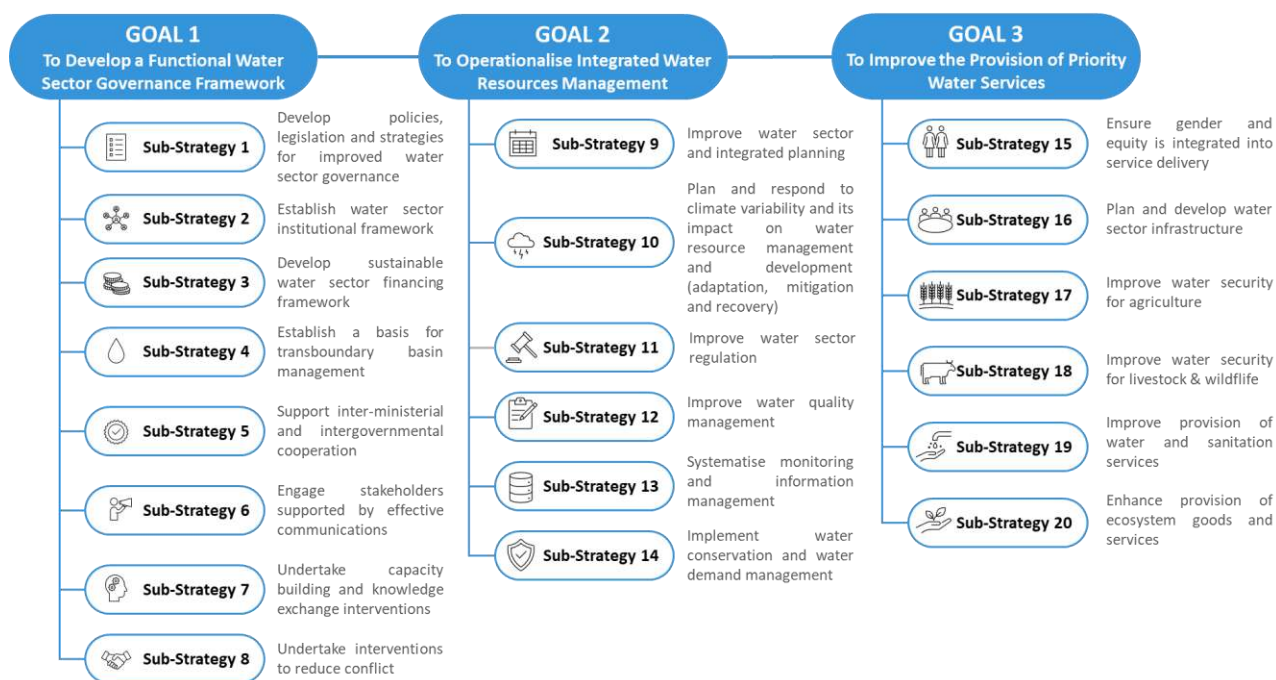


Figure 1-4: The NWRs Goals and supporting Strategies

1.5 Ensuring effective implementation

The challenges in achieving sustainable water resource management to support growth and development are many. Countries across the planet are striving to improve the implementation of various interventions towards integrated water resource management (IWRM) and the attainment of the Sustainable Development Goals (SDGs). Somalia’s approach is based upon the IWRM planning and implementation cycle that recognises the importance of the enabling environment, the institutional frameworks and structures, the management instruments and the development of infrastructure that supports the management, control and use of water resources (Figure 1-5).



Figure 1-5: IWRM planning and implementation cycle (after Global Water Partnership Technical Committee (2004))

However, despite IWRM being on the agenda for many years there are in many cases a range of political, social, economic and governance challenges that hinder progress (UN Environment, 2018). Internationally, the obstacles often indicated include:

- Institutional aspects related to mandates, roles and responsibilities often resulting in poor cooperation and often conflicts in approach;
- Insufficient capacity to ensure effective implementation of key instruments especially those that are more regulatory in nature, particularly at more localised levels; and
- Funding shortages linked either to limited national government support, revenue shortfalls or challenges related to international and donor support (UN Environment, 2018).

Somalia equally faces these challenges in its efforts to ensure ongoing and sustainable growth and development. However, progress is required in support of NDP-9 and to address the levels of poverty and economic insecurity that Somali citizens face. This requires a phased and progressive approach that pragmatically implements the NWRS whilst developing the competency, capability, and capacity of government to sustainably manage and develop national, state and local level water resources.

The NWRS Roadmap will be the guiding instrument that provides clarity as to key priorities and supporting actions, roles, and responsibilities as well as milestones and targets so that progress can be monitored and evaluated.

2. THE IMPLEMENTATION IMPERATIVE

The imperative to act is underpinned by a significant range of challenges that require structured and strategic redress. Water is a key natural resource that needs to be effectively managed and sustainably developed to support the growth and development Somalia needs. Yet these and associated natural resources are stressed with natural resource quality being significantly degraded (Federal Government of Somalia, 2019).

Whilst Somalia emerges from decades of conflict, the ongoing impacts of flood and droughts, as well as the current Covid-19 pandemic all underline an ongoing fragility that NDP-9 and supporting sector strategies aim to address. Undertaking efforts to ensure development within a fragile state context from which Somalia emerges, is complex and requires strategic interventions supported by impact-oriented implementation that supports development, protects lives, and improves livelihoods. This will require a comprehensive approach that is realised through a phased and progressive implementation plan that is cognisant of the difficulties of realising integration that supports sustainable solutions.

Noting the concepts behind “building back better” there is a need to work coherently and smartly, noting the important linkages with many sectors (such as energy, agriculture, livestock, disasters etc) to realise a more inclusive and resilient future, built upon a green economy. The support of the international community will be essential in assisting this transition, with support progressively moving from humanitarian aid to development support that uses country systems and thereby building governance capacity (Figure 2-1).

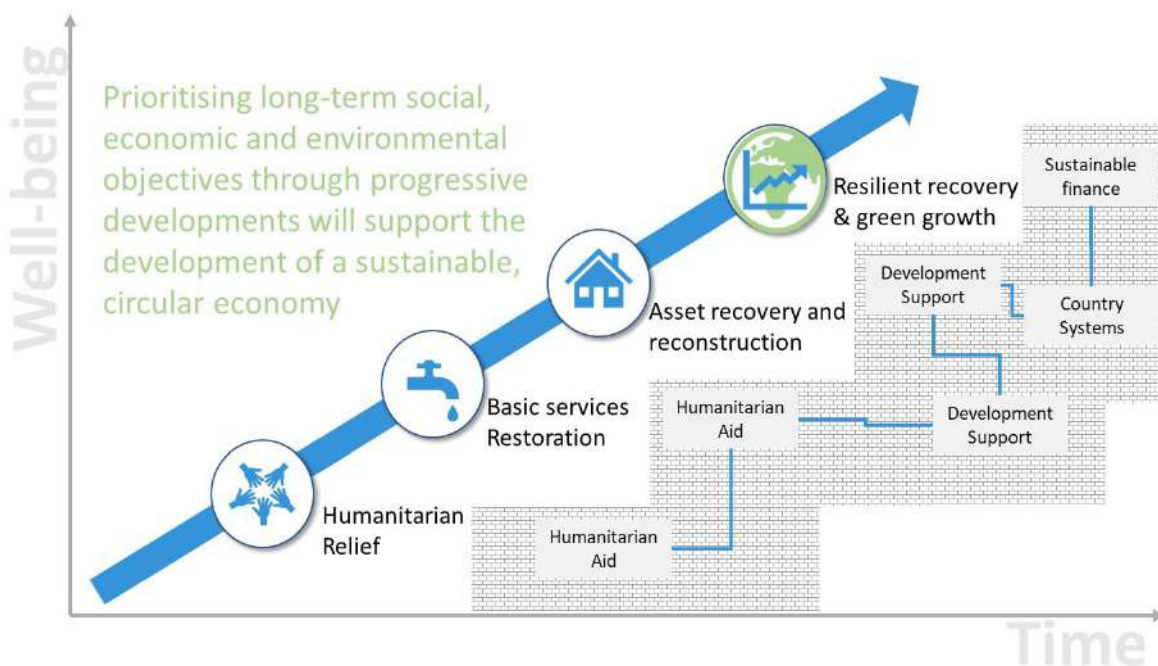


Figure 2-1: The progressive process towards building back better (adapted from Hallegate, Rentschler, & Walsh, 2018)

Additionally, it is of considerable importance to note that whilst there is a need to improve and strengthen the enabling, institutional and managerial environment, there is also an as important imperative to ensure that water development challenges are addressed to ensure livelihoods. This means that Somalia will be needing to “build the car whilst driving it”. This is not easy when “build back better” strategies are requiring that recovery from disasters (whatever the nature of the disaster) involves building faster, building stronger and building more inclusively (Hallegate, Rentschler, & Walsh, 2018). These approaches will result in reducing disaster impact, in building resilience and in ensuring that no one gets left behind.

The Somalian context is therefore complex, but nevertheless provides an opportunity to develop a more resilient future. This is aligned to many countries of the world that are realising that recovery from the Covid-19 pandemic provides the opportunity to pursue a greener, more inclusive, and resilient recovery that supports the attainment of the SDGs. Part of this realisation is that climate shocks and the resultant hazards will increasingly exacerbate social and political shifts as well as economic shocks, with the ability to manage the impacts across sectors becoming increasingly complex (UNICEF, 2020). This will require government at various levels to play a stronger role in leading change, in driving policy and in securing investments to address an increasingly complex suit of social, economic, and environmental challenges. This will require the ongoing support of the international development community as well as that of the private sector and civil society.

Therefore, the approach towards building back better will be based upon several key premises that will provide for a structured implementation of the NWRS whilst support the national imperative to develop a resilient future. This will focus upon improving the governance of water and related natural resources, whilst undertaking sustainable water sector developments that improve societal well-being and reduce livelihood vulnerabilities.

In shaping the approach to implementing the NWRS, it is useful to draw from the experience of implementing such strategies in other contexts.

2.1 Lessons in Implementing NWRS and IWRM

The experiences of other countries in putting IWRM into practice can provide useful lessons for the approach to be used in Somalia. Whilst it must be understood that the approach and success of processes within each country are influenced by political, social, economic, and cultural conditions of each country, nevertheless they do provide important themes for consideration and some key recommendations.

Theme 1: Failure to take up the sector leadership role

In many countries there has been failure to really understand the role of being the water sector lead and how this role is key in not only pulling the sector together to drive implementation but also to act as the project sponsor in unlocking challenges and in promoting the importance of consolidated effort. As a result, implementation efforts get stalled by a range of complex intergovernmental challenges and limited or poor coordination in sector strategies resulting in inefficiencies and reduced

effectiveness. The complexity of implementing the NWRS in conjunction with other sector development processes requires strong strategic leadership that pulls the sector together and fosters alignment with other sectors.

Theme 2: Balance technical solutions with improved governance

Whilst there are a range of technical dimensions to water resource management and development (e.g. hydrological modelling, ecological flow requirements, water quality analyses, climate modelling etc) that are indeed very important as part of understanding and managing resources, these need to be balanced with addressing the softer issues of governance, intersectoral engagement and coordination, stakeholder engagement and other enabling and institutional elements. There has often been a drive by national water ministries to drive hard on technical studies under the banner that “we do not know enough” and not dealing with possibly the more complex political economy and issues of governing the water sector.

Theme 3: Best practice versus appropriate practice

There is across the continent a desire to use the best possible practices to support water resource management and development. In some instances, or in some aspects of IWRM, this is possible correct. However, this needs to be measured against the competencies and capabilities of the country as well as a range of other institutional, environmental, social, and political aspects. It is good to strive for best practice, but it is often pragmatic to develop these in phased and progressive ways that are most appropriate for the country. The support of international partners in developing the needed competencies and capacity, supported by appropriate systems and technology is important.

Theme 4: Data and information management as a key building block

Noting the above, the technical studies are important but are often undermined by having sufficient data and information to support these studies that support decision making. The improvement of monitoring networks and the development of data and information management systems should be a “no-regrets” option. However, these aspects are often not prioritised or afforded sufficient funding to develop the networks and systems needed. These need to be supported by a range of institutional and stakeholder processes which are often not addressed as comprehensively as required. Additionally, these are not solutions that are realised swiftly and therefore need to be initiated early in the roll-out of strategies.

Theme 5: Understanding sector support and regulation

The implementation of IWRM strategies often face challenges of balancing sector support with the need to improve regulatory approaches. This requires a phased and progressive approach noting that the more historic approaches of “command and control” are no longer useful. For the water sector this means working progressively with water use sectors to progressively develop and implement regulatory instruments. This ultimately results in better levels of regulatory adherence as

well as more effective empowerment to enable these sectors to apply approaches that support the goals of these instruments.

Theme 6: Failure to develop a prioritised implementation plan

Many NWRS instruments fail to develop a prioritised implementation plan. In some instances, this results in poorly coordinated attempts to implement the entire strategy without clarity as to whether all elements of the strategy are to be realised within the five-year timeline that strategies most typically use. This is sometimes exacerbated by the sense that pragmatism and phased delivery is politically unpalatable. This results in a level of complexity that often prevents meaningful progress and attempts to deliver on strategies that are beyond the capacity of the sector.

Theme 7: Failure to link NWRS to developmental objectives

Water can catalyse or constrain growth, but often the linkages between water resource management and development and developmental objectives are not fully understood or effectively translated in the way that strategies are developed or implemented. For example, the requirements for hydropower development may need adjustments to the regulatory approach within a system, or the water quality of irrigation water may require different regulatory approaches to support the export market for fruits and vegetables. Similarly, if we are driving economic growth through industrial development, this will have implications for the policies and strategies for water quality management. These require the water sector to approach IWRM from an objective perspective and will require ongoing engagements and more effective integration between sectors (see below) to better understand these sector interfaces. However, this can also be unlocked by pathfinder projects that explore new and innovative ways of supporting these developmental objectives. The lessons gleaned from such projects can assist in shaping policy and further implementation approaches.

Theme 8: Poor integration with other sectors

Many NWRS instruments are seen purely from the perspective of the water sector and fail to effectively integrate the needs of those sectors that are dependent on water. This often despite extensive engagement with these sectors. This is sometimes driven by the regulatory mindset that in order to ensure sustainability the water sector should not be seen to be supportive of water use sectors, in other instances there is limited understanding of the needs of each sector and how to effectively interface strategic instruments and plans. These are often complex to address and therefore requires ongoing engagement and exchange to develop approaches and support more integrated decision making between the sectors. This is important in ensuring that water and environmental considerations are adequately reflected in these developmental sector strategies and plans.

Theme 9: Centralised decision making and lack of transparency

In many instances despite the desire to decentralise water resource management activities, decision making is often centralised and not transparent. This is not supportive of empowering other sector

institutions or fostering integration between sectors, often resulting in poor coordination and inefficiencies in the use of resources. This can create implementation bottlenecks that translate into poor delivery.

Theme 10: Inconsistent stakeholder engagement

The importance of stakeholder engagement is broadly understood and is often a pillar of processes to develop strategies, however, this engagement often falters during the implementation phases. This results in a failure to engage with and support key aspects of delivery, often limiting the finding of joint solutions to challenges. In some instances, this creates a lack of transparency that results in limited trust. This is further exacerbated by weak communications and knowledge exchange strategies, noting that in many government ministries these skills are often limited and stretched.

Theme 11: Limited focus on realising impact

Often NWRS instruments place significant focus on the core elements of IWRM with often a strong emphasis on ensuring that the technical building blocks of IWRM are in place to ensure sustainable water resource management. This is understandable as this is often led by technically strong water ministries. However, there is often limited focus upon the outcomes from these strategies and how this supports sustainable societal and economic development. In addition, it is important to note that between countries the systems of governance, legal frameworks, institutional frameworks, and decision-making processes can differ considerably. Thus, the notion of a singular IWRM paradigm is flawed. This means rather developing appropriate outcomes-based strategies that progressively strengthen water resource management and development according to the needs and country context.

From the above, several recommendations can be outlined.

Recommendation 1: Address sector governance frameworks early on

Effective delivery of the NWRS does need to be underpinned by clarity regarding institutional mandates and the roles and responsibilities that these institutions will play. Noting the complexity of the Somalian context together with the need to embed IWRM and drive integrated sector development, it will be imperative to start addressing the water sector governance frameworks at an early stage. In so doing it is imperative that the water sector Ministry takes on board the roles and responsibilities of water sector leadership, thereby providing a clear strategic steer for sector.

Recommendation 2: Develop effective coordination platforms

While resources are often constrained there are a complex suite of actions to be taken across sectors at different spatial and administrative levels. Integration requires interaction and therefore the establishment of a coordination platform is an important step to support the roll-out of the NWRS and act as a conduit for more effective intersectoral synchronisation and better transparency. In the Somalian context with considerable levels of support being channelled through international cooperating partners, the need for these platforms become imperative in terms of enabling

government to coordinate these inputs and ensure that these interventions support government priorities.

Recommendation 3: Build institutional and sector capacity

In the developmental state the need to be developing capacity is imperative and must be understood as an ongoing process. These need to be understood through two lenses. Firstly, developing organisational capacity and ensuring that there are the necessary line functions, staff complements with appropriate skills and supporting systems to ensure delivery of the strategy. Secondly, developing the pipeline of students and skills-pool from which the broader water sector can obtain staff. These do complement each other and are both equally important and as with other sector development interventions do need to be initiated early noting that the impacts of these are only realised in the medium-term.

Recommendation 4: Prioritise key projects to realise impact

The requirements of the water sector are many and complex. Certainly, the resources available do not match the level of investment needed to achieve a sustainable water future. This can only be achieved progressively over time. There are “no-regrets” interventions that will realise longer-term impact and do need to be initiated (as mentioned above), but equally there is a need to ensure that projects are delivered in a way that continually strives to provide shorter-term impact. It is therefore important to design and implement projects that provide an optimal balance between programmatic costs, benefits, and priorities looking across economic, social, and environmental needs. These projects show success that generates lessons to be taken into future projects that result in more success.

Recommendation 5: Enable adaptive management

The experiences of many countries demonstrate the importance of enabling adaptive management that supports delivery aligned to the evolving context. This means making timely adjustments and changes to activities to ensure that effective and efficient implementation can continue. These changes can be quite profound but are made in the interest of attaining the overall objective. It is important to have a plan and to strive towards attaining the set goals and objectives, but emerging issues will influence the approach and will result in adjustments to the programme. This ability is underpinned by an engagement process that supports transparency and the ready exchange of information, as well as support from senior management that will enable the re-direction of resources when needed.

Recommendation 6: Ensure ongoing stakeholder engagement

The ongoing engagement with stakeholders is critical in the implementation phase of strategies. Often ministries believe that once the strategy is developed the delivery phase of projects no longer requires this engagement. However, there needs to be a realisation that this engagement may need to take different and appropriate forms but must nevertheless continue. Often the success of

projects can be measured against the degree to which stakeholder engagement has been successful. This will require the development of principles and guidance materials that will ensure projects undertake these important processes and in so doing address issues such as gender imbalances, socio-economic differences, and other power differentials. This engagement in projects will be the platform upon which successful implementation is built.

Considering these lessons and recommendations and translating these into the Somali context provides guidance on how to structure the implementation approach.

3. ENSURING IMPLEMENTATION

During the validation workshop held in December 2020, government officials shared their knowledge and insights to reach an agreed-upon suite of priorities for the implementation of the NWRS. This is not to say that the many other elements that make up the NWRS are not important or will not be addressed. Rather this recognises the importance of phasing actions noting that some actions provide the building blocks for future interventions. This prioritisation also recognises that Somalia has limited resources and a developing government sector that is steadily building its capability, competency, and capacity to implement the NWRS at FGS and FMS level.

As it stands, there is still a significant suite of actions and to realise the impact needed a phased and progressive approach is required to guide implementation. In considering the approach, it is also important to factor in causality (*we need to do certain things first before we can do the next*) and connectivity (*we need to do some things in conjunction with others things*) so that we pragmatically provide an implementation journey (Figure 3-1).

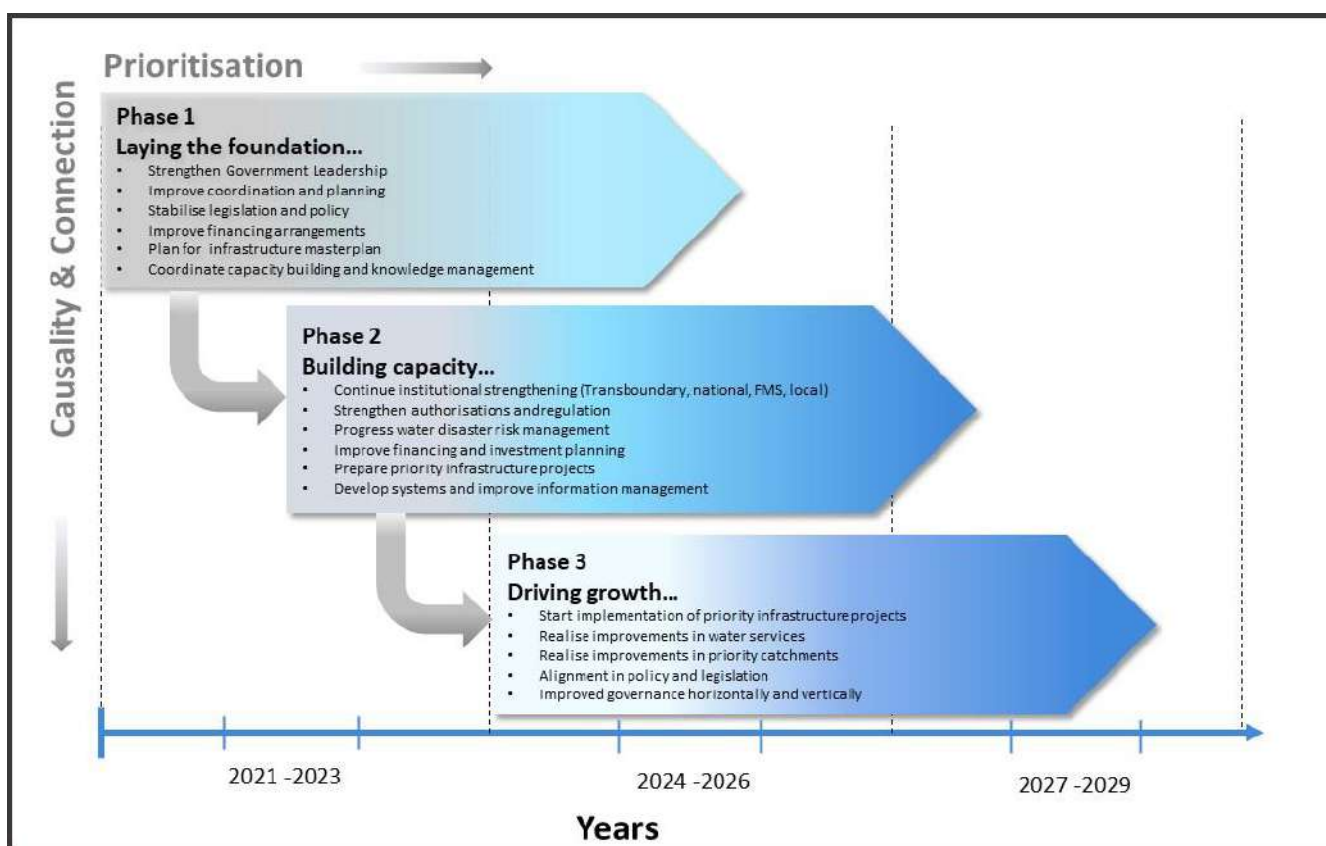


Figure 3-1: Summary of the phased implementation of the NWRS

The implementation scheduling and details of actions to be undertaken under these phases are provided below.

3.1 Phase 1 – Laying the Foundation

There is a significant focus in the NWRS on strengthening the water sector governance frameworks and developing a cooperative government approach that progressively improves the FGS and FMS

ministries approach to water resource management and development. Efforts to develop the role of government as water sector leader will be important and will be progressively strengthened through the development of governance frameworks and supporting policy, legal and regulatory instruments.

A key element will be the further development of coordination and facilitation platforms such as the task forces and clusters.

These coordination platforms will be improved and developed over time and will see government actors leading and coordinating focused interventions.

Efforts to develop and improve the legal and policy frameworks will need to be continued and realised. These take time to see through to implementation noting the administrative and political processes that need to be followed, hence they need to be started at this early stage.

Improving the coordination of financing arrangements will be a longer-term intervention but does need to be initiated at this stage knowing that this will develop over time. The use of country systems and shifting international support to use these systems, where possible, will be imperative. This will assist in transitioning towards country-led development rather than agenda-led support, thereby enabling the water sector to effectively channel financial resources to sectoral and developmental priorities.

During this phase there will be interventions initiated to plan for larger projects and infrastructural solutions. Projects of this nature take time to develop, finance and implement and therefore initiating this planning step will be catalytic in terms of seeing longer-term infrastructure projects implemented.

Lastly, this phase will have a strong focus on the development of capacity with government institutions, this will be linked to the development of the water sector governance framework so that appropriate capacity is in place to support the developing institutional mandates. It will also be important to start improving the broader societal awareness of water sector issues and processes, and as such the development of knowledge products and communications materials will be developed over time.

The core actions that have been identified and prioritised during Phase 1 include:

- A3 – Undertake required legislative amendments
- A4: - Enactment of Water Bill
- A5 – Develop a water sector regulatory framework
- A15 – Develop water sector development scenarios and identify priority projects
- A17 – Develop funding and resource mobilisation strategy
- A21 - Promote trust building activities towards transboundary basin management across the region
- A22 – Establish inter-ministerial cooperation structures
- A23 – Establish inter-governmental cooperation structures

- A24 - Develop an engagement strategy and plan that enables more active participation of stakeholders at transboundary, national, federal state and catchment levels
- A27 - Undertake water sector capacity needs assessment
- A28 - Develop water sector capacity building framework and plan
- A30 - Identify specific water sector interventions to diffuse and prevent conflict situations
- A31 - Establish an emergency conflict response team
- A32 - Develop a water sector planning framework
- A35: - Develop a national water masterplan
- A38 - Develop integrated water resource management and development plans for the Juba and Shabelle basins
- A49 - Establish Permanent Flood Task Force/ Committee to coordinate governmental action
- A50 - Determine water sector priorities for strengthened climate planning
- A68 - Develop a national water conservation and water demand management (WCWDM) strategy
- A71 - Develop a water sector gender strategy and implementation plan
- A72 - Ensure gender representation in sector processes, institutions, and committees
- A77 - Undertake a water sector infrastructure asset assessment study and develop a national asset register
- A78 - Identify priority infrastructure improvements and developments to support economic development, assure supply and manage disaster risk
- A81 - Assess infrastructure development requirements as inputs into national masterplan and investment framework

Table 3-1: Phase 1 Implementation Tables

PHASE 1: LAYING THE FOUNDATION															
Goal	Sub-Strategy	Strategic Objective	Action	Timeframe					Champion	Collaboration and Sector Support					
				2021	2022	2023	2024	2025		Federal Govt.	Federal Member State	District Level	Private Sector	Civil Society	ICPs
1: To develop a functional water sector governance framework	Sub-strategy 1 Develop policies, legislation, and strategies for improved water sector governance	SO1b: National water sector legislation enacted	A3: Undertake required legislative amendments						MoEWR						
			A4: Enactment of the Water Bill						MoEWR						
		SO1c: Appropriate regulatory framework & instruments developed	A5: Develop a water sector regulatory framework						MoEWR						
	Sub-strategy 3 Develop sustainable water sector financing framework	SO3b: Sustainable water sector investment framework developed	A15: Develop water sector development scenarios and identify priority projects						MoEWR						
			SO3c: Water sector development funding and resources are mobilised	A17: Develop a funding and resource mobilisation strategy						MoEWR					
	Sub-strategy 4 Establish a basis for transboundary basin management	SO4b: Principles for transboundary WRM & cooperation developed and agreed	A21: Promote trust building activities towards transboundary basin management across the region						MoEWR						
	Sub-strategy 5 Support inter-ministerial and inter-governmental cooperation	SO5a: Structures to support cooperative government are established and operationalised	A22: Establish inter-ministerial cooperation structures						MoEWR						
			A23: Establish inter-governmental cooperation structures						MoEWR						
	Sub-strategy 6 Engage stakeholders supported by effective communications	SO6a: Stakeholder engagement strengthened	A24: Develop an engagement strategy and plan that enables more active participation of stakeholders at transboundary, national, federal state and catchment levels						MoEWR						

PHASE 1: LAYING THE FOUNDATION															
Goal	Sub-Strategy	Strategic Objective	Action	Timeframe					Champion	Collaboration and Sector Support					
				2021	2022	2023	2024	2025		Federal Govt.	Federal Member State	District Level	Private Sector	Civil Society	ICPs
	Sub-strategy 7 Undertake capacity building & knowledge exchange interventions	SO7a: Water sector capacity is progressively built	A27: Undertake water sector capacity needs assessment						MoEWR						
			A28: Develop water sector capacity building framework and plan						MoEWR						
	Sub-sub-strategy 8 Undertake interventions to reduce conflict	SO8a: Conflict regarding access to water is reduced	A30: Identify specific water sector interventions to diffuse and prevent conflict situations						MoEWR						
		SO8b: Coordination of humanitarian efforts	A31: Establish an emergency conflict response team						MoHADM						
2: To operationalise integrate water resources management	Sub-strategy 9 Improve water sector & integrated planning	SO9a: Water sector planning framework formalised	A32: Develop a water sector planning framework						MoEWR						
		SO9b: National Water Masterplan developed	A35: Develop a national water masterplan						MoEWR						
	SO9c: Water sector planning instruments at national and federal state levels are developed and implemented	A38: Develop integrated water resource management and development plans for the Juba and Shabelle basins						MoEWR							
	Sub-strategy 10 Plan and respond to climate change and its impacts on water resources management	SO10b: Flood and drought risk management strategies and plans developed	A49: Establish Permanent Flood Task Force/ Committee to coordinate governmental action						MoEWR						
		SO10c: Water priorities are mainstreamed into the national climate planning	A50: Determine water sector priorities for strengthened climate planning						MoEWR						
	Sub-strategy 14 Implement water conservation and water demand management	SO14a: National water conservation and water demand management strategy and guidelines developed	A68: Develop a national water conservation and water demand management strategy						MoEWR						

PHASE 1: LAYING THE FOUNDATION															
Goal	Sub-Strategy	Strategic Objective	Action	Timeframe					Champion	Collaboration and Sector Support					
				2021	2022	2023	2024	2025		Federal Govt.	Federal Member State	District Level	Private Sector	Civil Society	ICPs
				1	2	3	4	5							
3: To improve the provision of priority water services	Sub-strategy 15 Ensure gender and equity is integrated into service delivery	SO15a: Water sector gender strategy and plan developed	A71: Develop a water sector gender strategy and implementation plan						MoEWR						
			A72: Ensure gender representation in sector processes, institutions, and committees						MoEWR						
	Sub-strategy 16 Plan and develop water sector infrastructure	SO16a: Improved understanding of the water sector infrastructure asset base is developed	A77: Undertake a water sector infrastructure asset assessment study and develop a national asset register						MoEWR						
			SO16b: Water sector infrastructure improvement and development plan is developed	A78: Identify priority infrastructure improvements and developments to support economic development, assure supply and manage disaster risk						MoEWR					
	Sub-strategy 17 Improve water security for agriculture	SO17b: Water security for rainfed and irrigated agricultural is improved	A81: Assess infrastructure development requirements as inputs into national masterplan and investment framework						MoAI						
3: To improve the provision of priority water services	Sub-strategy 18 Improve water security for livestock & wildlife	SO18a: Water security for livestock and wildlife sectors is improved	A88: Assess infrastructure rehabilitation and development requirements for water storage and supply for livestock management as inputs into national masterplan and investment framework						MoL						
	Sub-strategy 20 Enhance provision of ecosystem goods and services	SO20a: Integrated environmental management framework is established	SA97: Undertake a situation assessment of the country's fresh-water ecosystems and related ecological infrastructure						DoE						

3.2 Phase 2 – Building Capacity

This second phase will build upon the gains of Phase 1 and seeks to embed the approaches developed and to further develop these towards realising developmental impact. Building capacity puts a clear emphasis upon institutional strengthening, understanding that this will take place at various levels and will require a prioritised approach. This would include the ongoing development of institutional capabilities and capacities, as well as institutional establishment processes such as a hydro-meteorological service centre.

Efforts to improve the legal and policy environments would continue and will be translated into the development of an agreed upon approach to water sector regulation and water use authorisation.

The coordination and planning undertaken in Phase 1, will start to realise impacts in the water sector response to the management of climate hazards. This will include the sharing of hydrological, flood and drought data and information that will assist MoHADM in its role as lead agent in disaster management, as well as the ongoing (longer-term) interventions to develop infrastructure.

Ongoing efforts to coordinate the financing to support interventions will continue and a process to start developing an investment framework to support the infrastructure masterplan will be initiated. This will progressively take place whilst the planning for infrastructure projects will be translated during this phase into project preparation.

A key element of Phase 2 will be interventions to strengthen the data and information management and will involve undertaking improvements in supporting systems.

The core actions that have been identified and prioritised during Phase 2 include:

- A9 - Develop institutional policies and strategies that set out the water sector institutional framework
- A10 - Develop an institutional establishment and development plan that is phased, progressive and innovative
- A16 - Develop a water sector investment framework
- A29 - Implement priority aspects of the capacity building framework and plan
- A40 - Conduct scientific research and studies on climate change impacts on water sector nationally, locally and for prioritised areas
- A43 - Undertake flood and drought risk assessment studies to identify priority risks nationally
- A44 - Develop long-term water sector disaster risk management strategy
- A45 - Develop flood mitigation strategy together with flood mitigation infrastructure development plans
- A53 - Develop of a national water use permitting system
- A54 - Develop strategy for the phased implementation of a national water use permitting system
- A55: -Develop a compliance monitoring and enforcement strategy
- A61 - Develop a plan for the strengthening of hydrological and environmental monitoring

- A63 - Establish a national hydro-meteorological service
- A80 - Develop improved system management approaches to improve water security for agriculture
- A83 - Support innovative and alternative approaches towards irrigation and agriculture development that support improved water use efficiency and enable sector growth
- A87 - Develop improved system management approaches to improve water security for livestock management
- A91 - Develop improved WSS monitoring and information exchange
- A92 - Develop WSS delivery standards, procedures and guiding regulations
- A96 - Monitor and report on achievement of WSS delivery standards and adherence to regulations

Table 3-2: Phase 2 Implementation Tables

PHASE 2: BUILDING CAPACITY																	
Goal	Sub-Strategy	Strategic Objective	Action	Timeframe					Champion	Collaboration and Sector Support							
				2021	2022	2023	2024	2025		Federal Govt.	Federal Member State	District Level	Private Sector	Civil Society	ICPs		
1: To develop a functional water sector governance framework	Sub-strategy 2 Establish water sector institutional framework	SO2a: Water sector institutional framework developed	A9: Develop institutional policies and strategies that set out the water sector institutional framework						MoEWR								
		SO2b: Water sector institutions established and developed	A10: Develop an institutional establishment and development plan that is phased, progressive and innovative						MoEWR								
	Sub-strategy 3 Develop sustainable water sector financing framework	SO3b: Sustainable water sector investment framework developed	A16: Develop a water sector investment framework						MoEWR								
	Sub-strategy 7 Undertake capacity-building & knowledge exchange interventions	SO7a: Water sector capacity is progressively built	A29: Implement priority aspects of the capacity building framework and plan						MoEWR								
2: To operationalise integrate water resources management	Sub-strategy 9 Improve water sector & integrated planning	SO9c: Water sector planning instruments at national and federal state levels are developed and implemented	A38: Develop integrated water resource management and development plans for the Juba and Shabelle basins						MoEWR								
	Sub-strategy 10 Plan and respond to climate change and its impacts on water resources management	SO10a: Advance under-standing of climate impacts on extreme events is promoted	A40: Conduct scientific research and studies on climate change impacts on water sector nationally, locally and for prioritised areas						MoEWR								
		SO10b: Flood and drought risk management strategies and plans developed	A43: Undertake flood and drought risk assessment studies to identify priority risks nationally						MoEWR								

PHASE 2: BUILDING CAPACITY															
Goal	Sub-Strategy	Strategic Objective	Action	Timeframe					Champion	Collaboration and Sector Support					
				2021	2022	2023	2024	2025		Federal Govt.	Federal Member State	District Level	Private Sector	Civil Society	ICPs
				1	2	3	4	5							
3: To improve the provision of priority water services			A44: Develop long-term water sector disaster risk management strategy						MoEWR, MoHADM						
			A45: Develop flood mitigation strategy together with flood mitigation infrastructure development plans						MoEWR, MoHADM						
	Sub-strategy 11 Improve water sector regulation	SO11a: Water permitting system developed and implemented	A53: Develop of a national water use permitting system						MoEWR						
			A54: Develop strategy for the phased implementation of a national water use permitting system						MoEWR						
		SO11b: Compliance monitoring and enforcement strategy developed and implemented	A55: Develop a compliance monitoring and enforcement strategy						MoEWR						
	Sub-strategy 13 Systematize monitoring and information management	SO13a: Hydrological and environmental monitoring networks are developed	A61: Develop a plan for the strengthening of hydrological and environmental monitoring						MoEWR						
		SO13b: Institutional frameworks for data and information management are improved	A63: Establish a national hydro-meteorological service						MoEWR						
	Sub-strategy 17 Improve water security for agriculture	SO17b: Water security for rainfed and irrigated agricultural is improved	A80: Develop improved system management approaches to improve water security for agriculture						MoEWR, MoAI						
		SO17c: On-farm irrigation technologies and water use management im-proved	A82: Develop strategy and plans to introduce climate smart approaches, improve water use efficiency and minimise water losses within the irrigation and agricultural sectors						MoEWR, MoAI						

PHASE 2: BUILDING CAPACITY															
Goal	Sub-Strategy	Strategic Objective	Action	Timeframe					Champion	Collaboration and Sector Support					
				2021	2022	2023	2024	2025		Federal Govt.	Federal Member State	District Level	Private Sector	Civil Society	ICPs
				1	2	3	4	5							
			A83: Support innovative and alternative approaches towards agriculture development that support improved water use efficiency and enable sector growth						MoEWR, MoAI						
	Sub-strategy 18 Improve water security for livestock & wildlife	SO18a: Water security for livestock and wildlife sectors is improved	A87: Develop improved system management approaches to improve water security for livestock and wildlife management						MoEWR, MoL						
	Sub-strategy 19 Improve provision of water and sanitation services (WSS)	SO19a: Sustainable frameworks for the provision of WSS is developed	A91: Develop improved WSS monitoring and information exchange						MoEWR						
			A92: Develop WSS delivery standards, procedures and guiding regulations						MoEWR						
		SO19b: Delivery of sustainable and safe WSS is improved	A96: Monitor and report on achievement of WSS delivery standards and adherence to regulations						MoEWR						

3.3 Phase 3 – Driving Growth

This phase will be focused upon translating the efforts of the initial two phases into delivery impact. During this phase priority infrastructure projects will be initiated and improvement in the levels of water services to key social and economic sectors will be started. During this phase improvements in the levels of WSS will be realised in priority urban centres. Equally, improvements in priority catchments will be initiated if not realised. These will result in improved water security for priority agricultural projects as well as livestock and wildlife priorities. These projects will be integrated in approach and will further cement the cooperative government partnerships that have been fostered.

The longer-term efforts to ensure coordination across the different government ministries will start to translate into alignment in policies and even key legislative instruments. This will start to realise alignment across the various sectors that will underpin ongoing and sustainable development outcomes.

The core actions that have been identified and prioritised during Phase 3 include:

- A 39: Monitor implementation of planning instruments to support adaptive management
- A46: Develop and implement national drought emergency response strategy and action plan
- A83: Support innovative and alternative approaches towards agriculture development that support improved water use efficiency and enable sector growth
- A84: Introduction and application of modern irrigation technologies to avoid water losses
- A85: Improve rainfed agriculture system through conjunctive water use and develop rainfed water harvesting
- A86: Develop agriculture water management and improve the drainage system
- A87: Develop improved system management approaches to improve water security for livestock and wildlife management
- A89: Develop strategy and plans to introduce climate smart approaches, improve water use efficiency and minimise water losses within the livestock and wildlife sectors
- A93: Improve WSS delivery levels through enhanced private sector participation in rural and urban water supply and sanitation services
- SA99: Identify priority systems for improved ecosystem management and rehabilitation
- SA100: Develop and implement plans for the management of prioritised ecological infrastructure

Table 3-3: Phase 3 Implementation Tables

PHASE 3: DRIVING GROWTH																		
Goal	Sub-Strategy	Strategic Objective	Action	Timeframe					Champion	Collaboration and Sector Support								
				2021	2022	2023	2024	2025		Federal Govt.	Federal Member State	District Level	Private Sector	Civil Society	ICPs			
2: To operationalise integrate water resources management	Sub-strategy 9 Improve water sector & integrated planning	SO9c: Water sector planning instruments at national and federal state levels are developed and implemented	A 39: Monitor implementation of planning instruments to support adaptive management						MoEWR, MoPIED									
	Sub-strategy 10 Plan and respond to climate change and its impacts on water resources management	SO10b: Flood and drought risk management strategies and plans developed	A46: Develop and implement national drought emergency response strategy and action plan						MoEWR, MoHADM									
3: To improve the provision of priority water services	Sub-strategy 17 Improve water security for agriculture	SO17c: On-farm irrigation technologies and water use management improved	A83: Support innovative and alternative approaches towards agriculture development that support improved water use efficiency and enable sector growth						MoAI									
			A84: Introduction and application of modern irrigation technologies to avoid water loses						MoAI									
		SO17d: Dryland agriculture developed and improved	A85: Improve rainfed agriculture system through conjunctive water use and develop rainfed water harvesting							MoAI								
			A86: Develop agriculture water management and improve the drainage system							MoAI								

PHASE 3: DRIVING GROWTH															
Goal	Sub-Strategy	Strategic Objective	Action	Timeframe					Champion	Collaboration and Sector Support					
				2021	2022	2023	2024	2025		Federal Govt.	Federal Member State	District Level	Private Sector	Civil Society	ICPs
	Sub-strategy 18 Improve water security for livestock & wildlife	SO18a: Water security for livestock and wildlife sectors is improved	A87: Develop improved system management approaches to improve water security for livestock and wildlife management						MoL						
			A89: Develop strategy and plans to introduce climate smart approaches, improve water use efficiency and minimise water losses within the livestock and wildlife sectors						MoL						
	Sub-strategy 19 Improve provision of water and sanitation services (WSS)	SO19b: Delivery of sustainable and safe WSS is improved	A93: Improve WSS delivery levels through enhanced private sector participation in rural and urban water supply and sanitation services						MoEWR, District						
	Sub-strategy 20 Enhance and develop the provision of ecosystem goods and services	SO20b: Management strategy for prioritised ecosystems and ecological infrastructure is developed	SA99: Identify priority systems for improved ecosystem management and rehabilitation						DoE						
			SA100: Develop and implement plans for the management of prioritised ecological infrastructure						DoE						

4. DRIVING FLAGSHIP PROJECTS

4.1 Focusing delivery through Flagship Projects

With the three phases of NWRS implementation there is still so much to achieve, and a significant amount of effort is required to drive this. Whilst the MoEWR has large responsibilities for the NWRS and its implementation, the NWRS requires a “whole government” response that will see other Ministries leading certain aspects of the NWRS, with a considerable amount of coordination being required.

As noted earlier, experiences across the continent are informative and help to guide an approach that will realise progressive implementation and successive impact for Somalia and its citizens. The six factors when applied to the key priorities outlined above start to provide not only the basis for putting the Somali Government at the centre of efforts to coordinate and facilitate projects, but in so doing assists the Government to strengthen its capacity, its systems and its intersectoral coordination to realise impact (Figure 4-1).

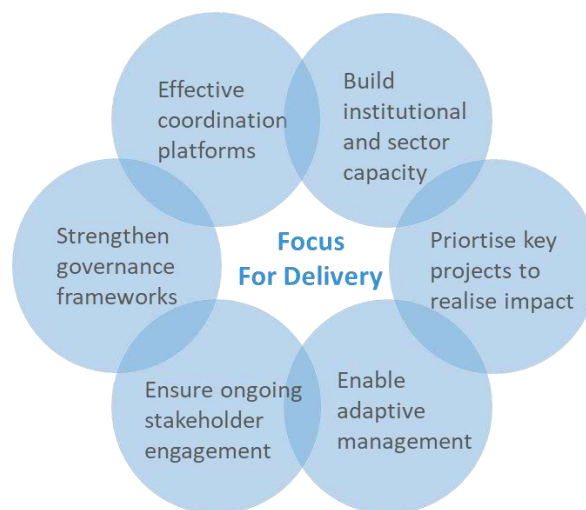


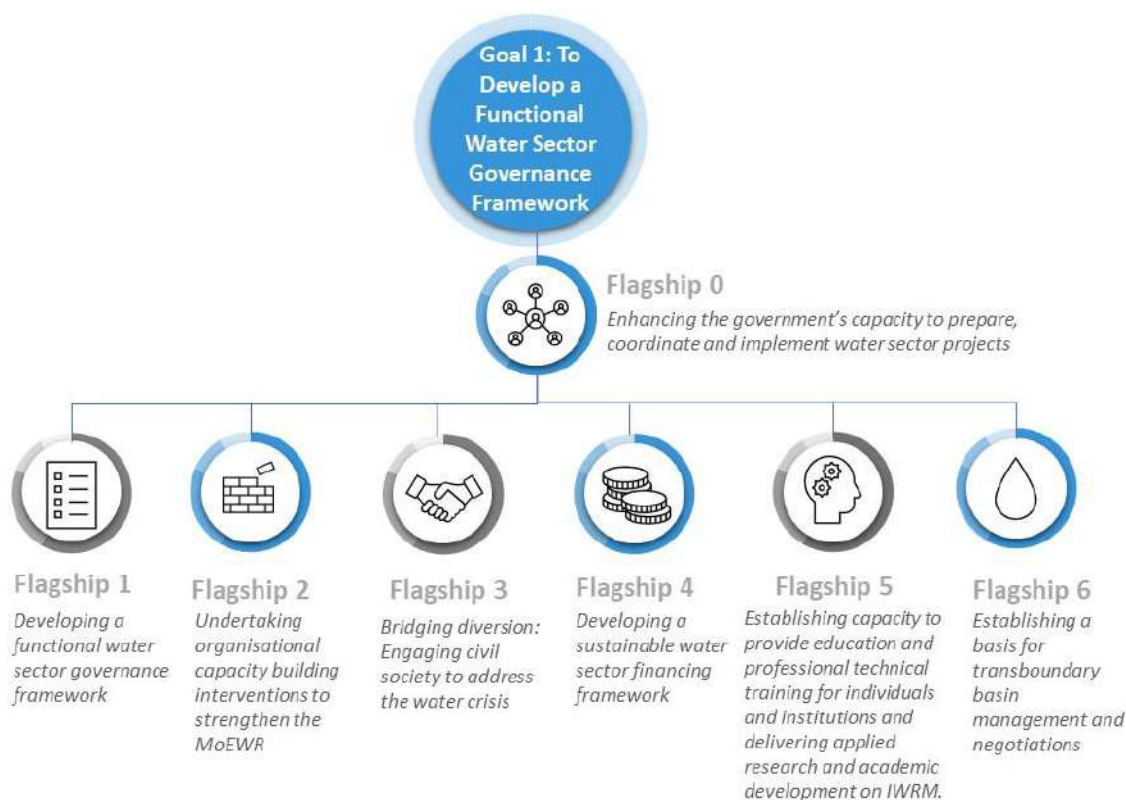
Figure 4-1: Key factors to underpin focused NWRS implementation

Using these key delivery factors, 13 flagship project charters have been outlined to kick-start the implementation of the strategy. These flagship projects broadly align with the pillars of the NWRS and are structured to support the phases of implementation as outlined below.

It is important to emphasise a number of key aspects about these Flagship projects:

- **Flagship Project 0:** This Flagship project is central to the implementation of the NWRS as this project provides for the establishment and facilitation of a Coordination Committee that will support and oversee projects that support the roll-out of the NWRS as well as provide the bridging coordination between the water sector and other developmental sectors. Thus, Flagship Project 0 supports all remaining Flagship Projects.
- **Flagship Project Charters:** The projects are presented below as project charters that will later require more detailed translation into project Terms of Reference. These Terms of Reference will then provide a more rigorous breakdown of scope, deliverables, timelines and so forth. The current charters introduce these projects and therefore aim to provide a broad indication of the project scope, objectives, supporting activities, beneficiaries, lead ministries, and timelines.
- **Lead Ministries:** While the MoEWR as water sector leader will be leading many of the Flagship projects, there are a number where other Ministries will be required to take up this responsibility noting the linkages to the specific sector.

4.2 Flagship Project Charters



NWRS FLAGSHIP PROJECT NO 0	
Title:	<i>Enhancing the government's capacity to prepare, coordinate and implement water sector projects.</i>
Overview:	The government's current capacity to provide the necessary strategic leadership and coordination that enables effective water sector development is limited. This flagship programme is proposed to provide early additional professional capacity at the Ministry of Energy and Water Resources (MoEWR), to provide support for an inter-ministerial federal/state level coordination facility, and to develop and support a platform for information collection, analysis and dissemination. This programme is seen as a "zero-phase programme" as a prerequisite for the subsequent three NWRS roadmap phases to be managed and implemented according to expectations in terms of delivery and timelines. The coordination facility will provide a powerful mechanism to promote sector development across Somalia, engaging key federal ministries and all member states.
Objectives:	<ul style="list-style-type: none"> • Enhance the staff and institutional capacity of the MoEWR to initiate, prepare and implement water projects. This includes capacity to negotiate with international donors and organizations, other federal ministries, and state members government. • Establish an inter-ministerial federal/state level coordination facility to support the initiation, preparation, and implementation of water projects. The facility will support all water projects in Somalia on behalf of federal and state level governments. The facility will be supported by a secretariat that consists of 2-3 full-time persons. • Launch a water sector information platform, where updated information about planned and ongoing projects across Somalia is found and that directly supports coordination, growth, and well-being.

	<ul style="list-style-type: none"> • Provide a full-time secretariat that will backstop the MoEWR in preparing for meetings, in capturing and providing information, in following-up on decisions and in tracking progress. The secretariat will work within MoEWR; working closely with staff and facilitating coordination with other sectors and ministries.
<p>Strategic NWRS activities include:</p> <ul style="list-style-type: none"> • A6: Establish an interim management facility to oversee and monitor implementation of the NWRS • A7: Establish an Intergovernmental working group to ensure effective coordination in the implementation of the NWRS • A22: Establish inter-ministerial cooperation structures • A23: Establish inter-governmental cooperation structures • A32: Develop a water sector planning framework • A72: Ensure gender representation in sector processes, institutions, and committees 	
<p>Beneficiaries: The water sector at large, as well as key sector Ministries, as this is part of the governance structure for enhanced capacity to plan and implement water and development projects. The programme will provide both federal and state government with the capacity to lead sector development and will provide the donor and international community with support in ensuring that planned and ongoing projects are well coordinated and implemented according to policy, plans and government priorities.</p>	
<p>Lead Ministry: MoEWR</p>	
<p>Government counterparts: MoPIED, MoHADM, MoAI, MoL; DoE, FMS</p>	
<p>Geographic coverage: National</p>	
<p>Timeframe: 2021-2026; 5 years</p>	
<p>Principle activities performed:</p> <ul style="list-style-type: none"> • Develop Terms of Reference for coordination facility and secretariat, develop an inter-ministerial and federal/state member government cooperative agreement. • Support the facility set-up and establishment including assessing staff needs, develop job descriptions, determining staff costs, identifying individuals and appoint staff. Establish project office and determine office running costs and provisioning requirements. • Provide support functions to enable roll-out of the NWRS and enhance cooperation. • Develop website and procedures for collecting and disseminating project information. Have one secretariat member experienced in website management and how to add information. 	
<p>Results: Government capacity – federal as well as state level – is profoundly enhanced in terms of providing water sector leadership. Project implementation and inter-sectoral integration will be enhanced. Project efficiency and effectiveness will be enhanced, with reporting and adaptive management being strengthened.</p>	

NWRS FLAGSHIP PROJECT NO 1	
Title:	<i>Developing a functional water sector governance framework</i>
Overview:	Through a range of ongoing processes Somalia has been working to strengthen the existing governance frameworks. Within the water sector, the NWRS has provided strategic guidance as to the array of interventions that are needed to strengthen the water sector and support the implementation of NDP-9, however, stabilizing the broader governance frameworks will be important to provide consolidated national intent and enable normative approaches towards improved water sector management and development. This governance framework will provide consistent and coherent direction to the water sector at national, Federal State and local levels. Key dimensions that require redress include the need to finalize the national

	water act, to develop an overarching policy to guide water resource management and development, and to develop an institutional framework that addresses uncertainties regarding mandates, roles and responsibilities.
Objectives:	<ul style="list-style-type: none"> • Provide support to develop a national water sector policy that provides the basis for legislation, regulation and the institutional frameworks that will implement these governance instruments. • Support the MoEWR to refine and finalise the national water act including developing core legal principles, developing the revised legislation, and supporting the MoEWR in the various participative processes to finalise the act. • Support the MoEWR and Federal Member States to develop a clear institutional framework that will enable the effective management and development of water ranging from water resource management, water resource development and the provision of water services. This will include the development of an implementation plan and the provision of support to transform existing institutions.
Strategic activities included:	<ul style="list-style-type: none"> • A1: Develop a national water policy to direct sustainable water sector management and development • A2: Develop guidelines and protocols to support policy implementation • A3: Undertake required legislative amendments • A4: Enactment of the Water Bill • A8: Develop water sector governance principles • A9: Develop institutional policies and strategies that set out the water sector institutional framework • A10: Develop an institutional establishment and development plan that is phased, progressive and innovative • A11: Ensure and oversee the establishment of water sector institutions • A12: Guide the delegation of water sector mandates to appropriate institutions at sub-national level
Beneficiaries:	Broader water sector including government institutions, civil society and private sector actors
Lead Ministry:	MoEWR
Government counterparts:	MoPIED; MoHADM, MoAI, MoL, DoE, FMS
Geographic coverage:	National
Timeframe:	2021-2026
Principle activities performed:	<ul style="list-style-type: none"> • Design a process to develop the policy and law, including the construction of task teams to provide inputs into the development of each aspect of the policy and law. This needs to include a broader stakeholder engagement process to ensure participation at key process junctures. • Develop a suite of agreed upon governance principles that guide the development of national instruments including policy, legislation and institutions. • Progressively develop new policy, law and institutional frameworks and provide support to the MoEWR to take these through to finalisation. • Develop implementation plan to roll-out new institutional framework and provide support to the MoEWR in the implementation of the institutional transformation plan.
Results:	Clarity in the governance arrangements that will lead water sector management and development, with improved institutional arrangements that will implement the national water policy and water act.

NWRS FLAGSHIP PROJECT NO 2	
Title:	<i>Undertaking organisational capacity building interventions to strengthen the MoEWR at FGS and FMS levels</i>
Overview:	The MoEWR is leading water sector management and development at a national level, in close partnership with the FMS. The capacity of the MoEWR is limited and stretched and this will impact the ability to ensure implementation of the NWRS. Whilst support will be sought to underpin the coordination of actions across the government, there is still a significant amount of technical interventions that require the MoEWR to drive. Developing the MoEWR's capabilities, capacity and competencies across key line functions will be essential to ensure that water sector development is progressively and effectively delivered. This will need to consider the prioritisation of interventions so that the capacitation takes place in an appropriate, phased, and progressive manner. The focus of this programme will primarily be on the MoEWR, while the capacity at FMS level is also of concern noting the importance of the working partnership at Federal and State level. This will require this programme to integrate interventions to support capacity building at both levels in the longer term.
Objectives:	<ul style="list-style-type: none"> • Understand the progressive capability, capacity and competency requirements of the MoEWR and water ministries at FMS level. • Provide a plan to progressively develop the capability, capacity and competency of the MoEWR to technically support the implementation of the NWRS. • Support the MoEWR to ensure sustainable resourcing to ensure ongoing progress with capacitation to underpin institutional development. • Undertake primary interventions to develop the required capabilities, capacity and competencies including staffing, training as well as other interventions to support the needed development. • Develop a longer term plan of interventions to transfer capacity building consistently to FMS.
Strategic activities included:	
<ul style="list-style-type: none"> • A27: Undertake water sector capacity needs assessment • A28: Develop water sector capacity building framework and plan • A29: Implement priority aspects of the capacity building framework and plan 	
Beneficiaries: Federal government as well as broader water sector	
Lead Ministry: MoEWR	
Government counterparts: MoPIED	
Geographic coverage: National	
Timeframe: 2021-2031; 5+5 years	
Principle activities performed:	
<ul style="list-style-type: none"> • Undertake a skills audit and conduct a needs assessment for additional staffing, training and capacity building. • Development of a capacity building strategy and implementation plan over short- and long-term durations, including a monitoring and evaluation framework to track progress. • Develop and implement a resource mobilisation drive to ensure the capacity building strategy and plan are adequately financed. • Develop and pursue partnerships for skills development and capacity building with best practice institutions. 	

- Design approaches to institutionalise training and capacity building (maintaining institutional memory).
- Support the roll-out of the implementation plan.
- Establish and maintain water sector knowledge sharing platforms.

Results: The MoEWR has strengthened its capabilities, capacity and competency to implement the NWRS in a phased and progressive manner. Water sector skills and capacity has broadly increased, new partnerships for knowledge sharing and lessons learnt have developed, training and capacity building has been institutionalised, and knowledge sharing platforms and information packages have been developed.

NWRS FLAGSHIP PROJECT NO 3

Title:	<i>Bridging diversion: Engaging civil society to address the water crisis</i>
Overview:	Somalia's water crisis is linked to diversion and conflict between opposing groups. It is an important step to utilise the water crisis itself and to generate a shared common interest that enables sound, long-term sustainable water resources management to support development. This is particularly so at local levels, having significant impacts on livelihoods. As such, a solution must be found by bridging different interests and finding shared, win-win solutions that support sustainable development and livelihoods. Diversions are linked to such aspects as the clan-based system, gender inequality, conflicting land-use demands, political interests, federal/state arrangements, and religious positions. Whilst there are efforts at the government level to introduce improved governance arrangements, it is also important to work at the more localised levels to unite people to find cooperative and sustainable solutions to the range of water challenges that communities face.
Objectives:	<ul style="list-style-type: none"> • Develop and establish a Somalia Civil Society Water Caucus that provides linkages between national and local level water sector challenges and crises and provides a conduit to support interventions at community levels; • Develop a an agreed-upon "minimum-agenda" for a shared water future in Somalia; • Define activities, roles and responsibilities, how to monitor progress, and provide conflict resolution mechanisms; • Support the implementation of NWRS and linked Roadmap.
Strategic activities included:	
<ul style="list-style-type: none"> • A24: Develop an engagement strategy and plan that enables more active participation of stakeholders at transboundary, national, federal state and catchment levels; • A25: Support and drive functional platforms for the engagement of stakeholders nationally, within catchments and at local levels • A29: Implement priority aspects of the capacity building framework and plan • A30: Identify specific water sector interventions to diffuse and prevent conflict situations • A72: Ensure gender representation in sector processes, institutions, and committees • A74: Capacity building plan to support the empowerment of women • A75: Develop guidelines for the mainstreaming of gender and equity into water services delivery 	
Beneficiaries: National with a focus upon local level change. This is targeted as a basic building block in easing and resolving various water crises. It will support equity, poverty reduction, and deliver growth and the generation of jobs and opportunities.	
Lead Ministry: MoEWR	
Government counterparts: MoIFAR, FMS	
Geographic coverage: National	

Timeframe: 2021-2031; 5+5 years
<p>Principle activities performed:</p> <ul style="list-style-type: none"> • Undertake a civil society situation assessment including identifying different groups and their agendas/ positions. Arrange meetings and collect information. • Develop Terms of Reference for Somalia Civil Society Water Caucus as a platform for exchange, lesson learning and focused implementation of the NWRS and Roadmap. Agree on activities/targets, monitoring and conflict resolution. Support the establishment and initial meetings of the Caucus. • Develop a strategic roadmap with roles and responsibilities attached. Link it with NWRS and government policy and priorities. • Develop a programme approach that allows for post-conflict communication and meetings. • Provide platforms for trust building through experiential exchanges regarding the water crisis, water management, and boundary conditions. Arrange study tours, meetings across the country, promote awareness.
<p>Results: Improved understanding of how to address local water challenges that support local development and economic activities. Conflict and disruptions are reduced through a common understanding of the need for shared development and wellbeing.</p>

NWRS FLAGSHIP PROJECT NO 4	
Title:	<i>Developing a sustainable water sector financing framework</i>
Overview:	The Somalian water sector is dependent upon development support and humanitarian aid from a range of international development partners. As such this financial support is provided in many different and uncoordinated ways. Whilst some of this support uses the Somali country systems, much aid does not and as such it is difficult for the government to strategically guide how these financial resources are utilized to support national and state level priorities. At the same time there is a need to strengthen the governance arrangements within the Somali government to ensure transparency and more effective coordination across ministries. The implementation of the NWRS requires improved financial sustainability and autonomy for the water sector. Importantly, the ability of Somalia to recover from its history of conflict, from recurrent natural disasters and the recent impact of the Covid-19 pandemic the concepts that underpin “build back better” requires the country to deliver resilient, sustainable and efficient recovery systems. This requires funding and financing mechanism that will underpin the ability of the government to ensure that priorities are financed, and that the government demonstrates its ability ensure this process of reconstruction and recovery is effective and efficient.
Objectives:	<ul style="list-style-type: none"> • Develop a suite of financing principles that provide normative guidance as to how water sector financing will be realised through a water sector financing framework and policy. • Provide a water sector funding and financing strategy. • Provide the basis for structured and sustainable resource mobilisation. • Support capacity building to ensure effective resource management and the development of country systems.
Strategic activities included:	
<ul style="list-style-type: none"> • A13: Develop water sector financing policy principles • A14: Engage the water sector in developing a water sector financing policy • A17: Develop a funding and resource mobilisation strategy 	

Beneficiaries: Federal government, FMS, broader water sector
Lead Ministry: MoEWR
Government counterparts: MoPIED, MoF, FMS
Geographic coverage: National
Timeframe: 2021-2031
<p>Principle activities performed:</p> <ul style="list-style-type: none"> • Undertake a detailed assessment of the current water sector financing and funding arrangements, existing funding and financing gaps, and needs to achieve the federal government’s ambition for the water sector. • Develop water sector financing policy principles and engage the water sector in developing a water sector financing policy. • Develop a water sector funding and financing strategy to support the implementation of key developmental projects. • Support the Federal government to undertake resource mobilisation. • Support the government to strengthen country systems and improve governance systems.
<p>Results: Improved understanding of the water sectors financial constraints and the development of strategic interventions to address gaps and provide longer-term, more sustainable funding and financing to support water sector development.</p>

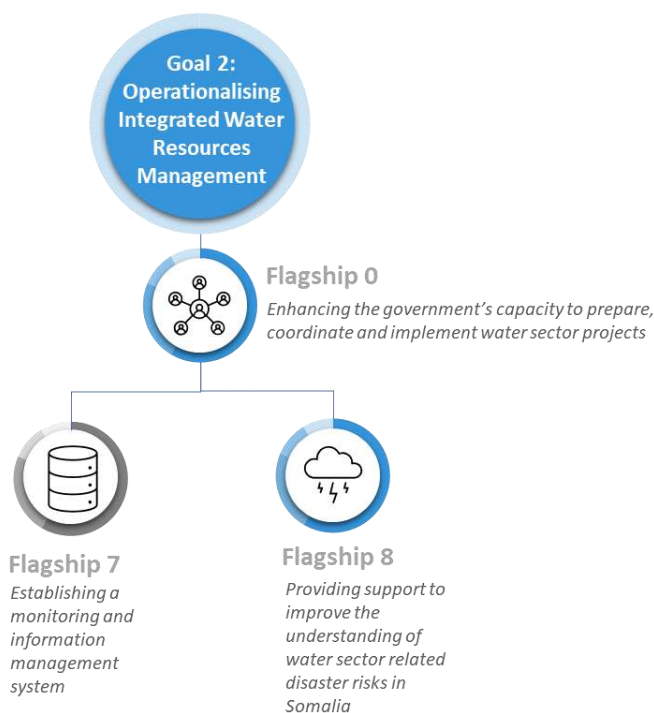
NWRS FLAGSHIP PROJECT NO 5	
Title:	<i>Establishing capacity in Somalia to provide education and professional technical training for individuals and institutions and delivering applied research and academic development on IWRM</i>
Overview:	Given the dire need for trained professionals in IWRM/environmental management and linked technical issues in Somalia there is a need to undertake a suite of interventions to support the development of this new cohort of technical professionals. This programme has three goals. Firstly, the programme will undertake actions to build capacity within Somalia focused on the needs of institutions and the broader water sector. This implies to deliver long-term academic IWRM BSc/MSc education and short-term professional and technical water-linked training. This also requires targeted short-term support to enable government ministries at federal and state levels to address capacity for identified roles and responsibilities. Secondly, the programme will aim to deliver three batches of academic students, with these students being linked / earmarked for internships at identified institutions, thereby supporting longer term institutional development. Thirdly, this programme will enable and support the preparation and implementation of applied research in priority selected topics.
Objectives:	<ul style="list-style-type: none"> • Establish a programme to deliver academic and professional training in IWRM and related technical issues for individuals and institutions and undertake applied research in priority selected topics in Somalia. • Provide professional training and targeted seminars for government staff. • Develop collaborative approaches with regional / global networks engaged in IWRM capacity development and relevant research. • Undertake capacity development within institutions and the support the training of

	<p>students towards strengthening institutional capacity.</p> <ul style="list-style-type: none"> Initiate applied research and generate new knowledge and understanding for water, environment, and development sectors in Somalia.
<p>Strategic activities included:</p> <ul style="list-style-type: none"> A27: Undertake water sector capacity needs assessment A28: Develop water sector capacity building framework and plan A29: Implement priority aspects of the capacity building framework and plan A40: Conduct scientific research and studies on climate change impacts on water sector nationally, locally and for prioritised areas A83: Support innovative and alternative approaches towards irrigation and agriculture development that support improved water use efficiency and enable sector growth 	
<p>Beneficiaries: Universities, vocational institutions, water sector professional bodies</p>	
<p>Lead Ministries: MoE and MoEWR</p>	
<p>Government counterparts: MoAI, MoHADM, DoE, FMS</p>	
<p>Geographic coverage: National</p>	
<p>Timeframe: 2021-2031; 5+5 years</p>	
<p>Principle activities performed:</p> <ul style="list-style-type: none"> Undertake a situation assessment and needs assessment to establish training and skills development requirements. Establish a programmatic approach for supporting the delivery of academic and professional training in IWRM and technical water issues. This includes development and accreditation of curricula, courses and supporting materials, the design of interventions to train trainers, to support institutional capacitation, and to provide online, web-based trainings. Arrange and deliver capacity development for three batches of academic students. Provide professional training based on demand and proactive assessments and deliver seminars for targeted government and institutional staff. Develop applied research in priority selected topics. This will deliver context appropriate solutions, capacitated staff, and international collaboration. Develop cooperation with regional and global networks and universities. Assess future training and capacity development interventions to support ongoing improvements and upscaling of the programme. 	
<p>Results: Somalia has developed its own capacity to capacitate individuals and institutions in critical water and environmental issues. There is an established programme that can provide for new subject focus areas, enabling ongoing development to support the needs of the country whether individuals or institutions. Institutional capacity has been strengthened.</p>	

NWRS FLAGSHIP PROJECT NO 6

Title:	<i>Establishing a basis for transboundary basin management and negotiations</i>
Overview:	Transboundary water resources in Somalia include surface water as well as groundwater and these resources are of utmost importance to Somalia and its drive to develop. Agriculture systems in the Jubba and Shabelle river basins, both originating in upstream Ethiopia, and produce most of the food grown in Somalia. Likewise, Somalia shares transboundary aquifers with Ethiopia and Kenya. There is a need to ensure that the shared waters generate benefits, support sustainable development, and well-being in all three countries. Developing

	cooperative approaches to support this will be important to all riparian states. There is a need therefore to initiate a range of interventions to support the development of these cooperative relations, noting that these take time to develop through trust-building exchanges.
Objectives:	<ul style="list-style-type: none"> • Develop an agreed upon programmatic approach to strengthening trust between the three riparian states. • Develop a Somali perspective and policy principles on transboundary water management, with a focus on regional development and the sharing of benefits. • Undertake a series of interventions to develop adequate capacity in basin management, transboundary water management, and negotiation skills with Federal Ministries. • Provide support to the Federal Government to facilitate interventions with neighbouring states for trust-building activities, to undertake background studies that build common understanding, and provide a foundation for future cross-border discussions.
Strategic activities included:	
<ul style="list-style-type: none"> • A 20: Develop principles and policy for transboundary cooperation and basin management • A 21: Promote trust building activities towards transboundary basin management across the region • A 27: Undertake water sector capacity needs assessment • A 29: Implement priority aspects of the capacity building framework and plan 	
Beneficiaries: Federal government from the development of approaches to inform national policy and principles. Communities depending on water in the Jubba and Shabelle rivers and shared aquifers in south-east Ethiopia, eastern Kenya. National benefits from improved water security in Jubba and Shabelle that supports agriculture development.	
Lead Ministry: MoEWR	
Government counterparts: MoFA, FMS.	
Geographic coverage: National	
Timeframe: 2021-2026	
Principle activities performed:	
<ul style="list-style-type: none"> • Develop a programme of support that progressively enables engagement with partner states. • Develop policy principles that support effective transboundary engagement in shared basin and aquifers. • Assess current human and institutional capacity in basin and transboundary water management, and what future negotiations with neighbouring countries require. • Develop a suite of interventions to build capacity within the Federal Government and Member States to build capacity and competencies to support transboundary processes and negotiations. • Approach neighbouring countries and jointly develop and undertake trust-building activities like study tours, basin studies, training, and identify potential shared benefits in regional development. • Undertake discussions with neighbouring countries on how to initiate and conduct discussions about transboundary waters and regional development. • Engage with regional structures to support improved regional development and to drive the development of instruments that underpin transboundary agreements for basins and aquifers. 	
Results: Somalia has an agreed upon approach to strengthen transboundary basin and aquifer management. Improved trust between neighbouring states provides the basis for the development of international agreements for the management and development of transboundary water resources.	



NWRS FLAGSHIP PROJECT NO 7	
Title:	<i>Establishing a monitoring and information management system</i>
Overview:	The ability to make water sector decisions is strongly influenced by access to data and information required to inform these decisions. The status of monitoring networks and the management of data that is generated requires significant strengthening. The programme will establish a Water Information Management System for Somalia (WIMSS). This will require a comprehensive, integrated system that includes data collection, data analysis and the development of information knowledge products, that enables effective data and information management and that supports dissemination of data, information and knowledge products to stakeholders including government, water sector institutions, water user, civil society, and private sector. This programme will also need to address the institutional aspects related to the monitoring of climatic and hydrological aspects as well as managing and maintaining the SWIMS.
Objectives:	<ul style="list-style-type: none"> • Develop hydrological and environmental monitoring networks. • Improve institutional frameworks for data and information management. • Develop intergovernmental information management and decision support systems. • Provide demand driven and tailor-made water information services. • Establish and develop a modern, functioning hydro-meteorological offices, with the necessary resourcing and systems.
Strategic activities included:	
<ul style="list-style-type: none"> • A 61: Develop a plan for the strengthening of hydrological and environmental monitoring • A 62: Recruit staff and build institutional capacity to support effective hydrological and climate monitoring and data and information management • A 63: Establish a national hydro-meteorological service • A 65: Undertake a situation assessment, needs analysis and develop options for an IMS 	

<ul style="list-style-type: none"> • A 66: Develop with key partners a strategy for IMS development and implementation
<p>Beneficiaries: National water sector as well as other related Ministries including those responsible for disaster risk management, for agriculture and irrigation and for livestock. Additionally, the donor community in supporting the transition from emergency aid to long-term programmatic development and the private sector in developing and providing cost-effective quality services.</p>
<p>Lead Ministry: MoEWR</p>
<p>Government counterparts: MoHADM, MoAI, MoL, DoE, FMS</p>
<p>Geographic coverage: National</p>
<p>Timeframe: 2021-2031; 5+5 years</p>
<p>Principle activities performed:</p> <ul style="list-style-type: none"> • Undertake three studies. Assess (i) existing hydrological and environmental monitoring and identify gaps and opportunities for improvement, including deliveries by other ongoing or planned projects and initiatives; (ii) water-linked data and information needs among key sector actors; and (iii) optional management systems that exists in turning data into information, disseminating such information, and turn information into actual, everyday planning and decision making. • Develop the SWIMS in conjunction with the ongoing institutional development processes as well as working with key sector Ministries. • Develop a detailed organisational structure for the national hydro-metrological service centre which will include mandate and purpose, roles and responsibilities, clear and assigned activities and processes, and governance work processes. Part of this will also require understanding the capacity needs of the centre and how this can be built / strengthened in a phased and progressive manner. • Conduct a capacity development and recruiting programme to identify, recruit and/or train staff members. This activity will be ongoing once the service centre has been established as the institution grows into its mandate. • Develop a programme document to identify longer-term technical assistance, and funding support requirements to support long-term implementation and developmental improvements (for five years). • Develop close institutional cooperation with SWALIM, noting that there is an overlap in roles between the centre and SWALIM. It is foreseen that SWALIM can provide much support to the establishment of the centre.
<p>Results: A comprehensive system for demand-driven water-linked data and information is developed and institutionalised in Somalia, thereby providing a platform for support to a variety of sectors with tailor-made, timely, and applicable information.</p>

NWRS FLAGSHIP PROJECT NO 8	
Title:	<i>Providing support to improve the understanding of water sector related disaster risks in Somalia</i>
Overview:	Disasters such as floods and droughts continue to wreak havoc in Somalia with compounded effects being felt in urban and rural settings. The impacts of these disasters are significant as community level with lives and livelihoods being threatened. Noting the drive to ensure ongoing growth and development aligned to NDP-9, the need to improve disaster risk reduction and enable effective and swift recovery is imperative. This programme will enable quantification of current and future disasters in select urban areas and communities accompanied with the design and implementation of appropriate interventions in response to current and anticipated disasters.

Objectives:	<ul style="list-style-type: none"> • Improve the scientific research and studies to develop the understanding of climate impacts on extreme events in Somalia. • Strengthen the capacity building and training to improve the water sector’s climate change and disaster risk reduction competencies. • Develop medium to long-term risk reduction strategies to guide ongoing plans to improve climate resilience and minimise disaster risk.
Strategic activities included:	
<ul style="list-style-type: none"> • A40: Conduct scientific research and studies on climate change impacts on water sector nationally, locally and for prioritised areas • A41: Develop capacity building and training plans to strengthen water sector climate change and DRR competencies • A43: Undertake flood and drought risk assessment studies to identify priority risks nationally • A44: Develop long-term water sector disaster risk management strategy 	
Beneficiaries: Federal government and FMS in enabling improved planning and risk reduction, as well as urban areas, and communities that will benefit from better planning reduced risk.	
Lead Ministry: MoHADM	
Government counterparts: MoEWR, DoECC, FMS	
Geographic coverage: National	
Timeframe: 2021-2026	
Principle activities performed:	
<ul style="list-style-type: none"> • Undertake study to strengthen the understanding of future climate change impacts on Somalia. • Identify immediate water sector disaster risk management interventions from national climate strategies and policies e.g., NAPA, NDC, INC, climate policy etc, and ensure alignment. • Undertake vulnerability and impact assessment of floods and droughts on urban areas and local communities to identify priorities and develop a short to medium term implementation plan; • Ensure alignment of DRM interventions with regional disaster risk reduction strategies and coordination with the flood and drought programme. • Support current disaster risk reduction and management coordination mechanisms and platforms for stakeholder engagement. • Contributing to scientific research and studies on climate change impacts on water sector nationally, locally and for prioritised areas. • Develop a capacity building and skills enhancement programme for government officials to improve the abilities to manage climate risk. 	
Results: Increased resilience to floods and droughts through improved quantification of impacts on floods and droughts in select locations. Strengthened capacity in government institutions and within prioritised communities. Better coordination of stakeholders and disaster response to minimise risk and support faster recovery.	



NWRS FLAGSHIP PROJECT No 9	
Title:	<i>Undertaking prioritised interventions to improve urban water and sanitation services</i>
Overview:	While the WASH Cluster has supported a range of interventions to improve the provision of water and sanitation services (WSS), the challenges across Somalia to provide basic and sustainable service are many. The WASH sector governance requires the cooperation and engagement of several ministries, institutions and stakeholders to address WSS challenges. The support of international partners is important. The provision of services is still largely in the hands of private sector actors and sometimes communities. There is a need to urgently strengthen the role of government in ensuring that basic services are supplied according to agreed-upon standards. This programme will enable a paradigm shift in sector service delivery to ensure government oversight is progressively realised. This will be undertaken through developing national approaches, standards and procedures and through the practical implementation of these within three priority urban areas. This will provide the basis for transferring these approaches to other important areas in a phased and progressive manner.
Objectives:	<ul style="list-style-type: none"> • Develop a sustainable institutional framework and appropriate business models for the provision of WSS services; • Develop WSS delivery standards, procedures and guiding regulations to support improved service delivery and ensure consistent quality of service; • Identify three priority urban and community centres for support towards improved service delivery, for transformation of service business models and for improved regulation of standards; and • Develop a suite of guidelines and knowledge products based on lessons learned to support other urban centres. • Build institutional capacity regarding approaches to strengthen WSS.
Strategic activities included:	

<ul style="list-style-type: none"> • A90: Develop institutional frameworks and improved business models to support improved water sanitation and services (WSS) delivery and regulation • A92: Develop WSS delivery standards, procedures and guiding regulations • A93: Improve service delivery levels through enhanced private sector participation in urban water supply and sanitation services • A94: Undertaken training interventions to support communities to engage with sustainable WSS services • A95: Develop consolidated suite of WSS guidelines to support effective service delivery
<p>Beneficiaries: FMS and districts from improved governance approaches to service delivery, private water companies that strengthen business models for more sustainable service provision, and citizens in three priority urban centres from receiving improved standards of service.</p>
<p>Lead Ministry: MoEWR</p>
<p>Government counterparts: MoPIED, FMS</p>
<p>Geographic coverage: National</p>
<p>Timeframe: 2021-2031; 5+5 years</p>
<p>Principle activities performed:</p> <ul style="list-style-type: none"> • Develop improved institutional framework for the provision of WSS, aligned to the upcoming WASH policy. • Develop standards and supporting guidelines and regulations for the provision of WSS. • Design and implement business models to provide more sustainable services that meet service delivery standards. • Identify three priority areas for support to improved WSS delivery and map out privately owned WSS companies with the intent of regularising activities. • Provide institutional and operational support to WSS companies in the identified priority areas. • Develop capacity of government institutions to oversee the delivery of WSS. • Capitalise and build on the Somalia WASH Cluster for WSS coordination and to exchange lessons learned.
<p>Results: Enhanced WSS sector services in urban areas, improved water supply and sanitation network and infrastructure, increased information exchange and coordination, improved capacity and skills for WSS services</p>

NWRS FLAGSHIP PROJECT NO 10	
Title:	<i>Undertaking interventions to improve water security for the agriculture sector</i>
Overview:	Food insecurity has been an issue of concern for many years within Somalia and is an area of focus for NDP-9. Crop production through irrigated and rain-fed agriculture remains important to the ability to address concerns of food security. Additionally, the development of irrigated agriculture is seen as being a key part of strengthening the national economy. Larger scale commercial agriculture is based within the Juba and Shabelle river basins, but the water security of these areas has been decreased by recurrent floods and the deterioration of infrastructure including canals and barrages. Improving infrastructure in the Juba and Shabelle River basin is a priority to reduce the water related risks and to support irrigation expansion. Importantly, rain-fed agriculture provides a significant contribution to national food security and undertaking actions to strengthen the resilience of local rain-fed agriculture will have national impact on livelihoods. Led by the MoAI, efforts to ensure improved water

	use efficiency, reduced water losses, and introduction of climate smart, innovative and alternative approaches for agricultural development will further improve the water security of agriculture nationally.
Objectives:	<ul style="list-style-type: none"> • Improve the water security of the agriculture sector in the Juba and Shabelle River basin to support economic stability, livelihoods and food security; • Undertake infrastructure improvements that address floods and improve irrigation supply to support agricultural expansion; • Develop dryland agriculture practices to enable expansion of agriculture that benefits communities and improves food security; • Develop improved on-farm technologies and water use management to support further agricultural expansions; and • Provide guidance for further agricultural developments across Somalia.
Strategic activities included:	
<ul style="list-style-type: none"> • A79: Develop improved land management and conservation policies and guidelines • A80: Develop improved system management approaches to improve water security for irrigated agriculture • A82: Develop strategy and plans to introduce climate smart approaches, improve water use efficiency and minimise water losses within the irrigation and agricultural sectors • A83: Support innovative and alternative approaches towards agriculture development that support improved water use efficiency and enable sector growth • A84: Introduction and application of modern irrigation technologies to avoid water losses • A85: Improve rainfed agriculture system through conjunctive water use and develop rainfed water harvesting • A86: Develop agriculture water management and improve the drainage system 	
Beneficiaries: Small and large-scale farmers, private sector	
Lead Ministries: MOEWR and MoAI	
Government counterparts: MoPIED, DoE, FMS	
Geographic coverage: Juba and Shabelle river basin, flood risk areas, dry-land areas	
Timeframe: 2021-2031; 5+5 years	
Principle activities performed:	
<ul style="list-style-type: none"> • Undertake an infrastructure needs assessment to support irrigated and rain-fed agriculture in the Juba and Shabelle River basin. • Conduct a needs assessment for improvements needed to increase water use efficiency and reduce water losses at on-farm level. This will build on on-going programmes for greater efficiency. • Identify innovative, climate-smart and alternative approaches for agricultural development. Collaboration with research institutions will be key as well as with agricultural incubation hubs locally. • Develop and roll-out an implementation plan for the phased improvement of water security for agriculture in the Juba and Shabelle River basin. • Design a holistic training programme for farmers to cover all aspects of agricultural development including but not limited to value addition, business planning, access to markets, technology etc. • Working with MoEWR, MoAI and FMS undertake interventions to build local capacity in institutions as well as that of local farmers. • Identify financing institutions that can provide financing for agricultural development at micro, medium and large scale production. • Implement a rigorous monitoring and evaluation plan to track progress and scale of investment against 	

results.

Results: Increased agricultural productivity (quantity, quality, coverage), reduced water loss and increased water use efficiency at farm level, adaptable and scalable climate-smart and innovative agricultural models.

NWRS FLAGSHIP PROJECT NO 11

Title:	<i>Implementing a programme of support to address on-going flooding in Beledweyne, Jowhar Hirshabelle and Qardo City, Puntland</i>
Overview:	Beledweyne is an important socio-economic hub being the largest city within the Hirshabelle State. Whilst there is a long history of flooding, in recent years the recurrence of floods and the magnitude of these floods has increased. In 2019 about 68% of the city was flooded having significant impacts on lives and livelihoods. Recent flash flooding in 2020 impacted upon Qardo City, Puntland resulted in loss of life. There has been support from Ministries of the Federal Government together with that of international partners. Recent work supported by the United Nations Peacebuilding Fund is informative and provides a useful basis for further interventions. This programme will build upon this and other work undertaken to date towards developing a suite of interventions that will reduce the risk to flooding and minimize the socio-economic impact of these floods.
Objectives:	<ul style="list-style-type: none"> • Develop a comprehensive flood management strategy and implementation plan for Juba and Shabelle basin. • Support the roll-out of the implementation plan to improve risk reduction. • Develop improved practices to minimize flood risk. • Ensure coordination of actions with the Task Force on floods and droughts. • Undertake capacity building interventions within government institutions to strengthen flood warning and response mechanisms as well as emergency response working with key development partners such as the UN OCHA. • Undertake capacity building interventions with civil society groups to support in flood response as well as enhancing community awareness. • Provide support to regional engagements with Ethiopia to address transboundary aspects.
Strategic activities included:	
<ul style="list-style-type: none"> • A43: Undertake flood and drought risk assessment studies to identify priority risks nationally • A44: Develop long-term water sector disaster risk management strategy • A45: Develop flood mitigation strategy together with flood mitigation infrastructure development plans • A48: Monitor and oversee implementation of emergency response plans for floods and droughts • A49: Establish Permanent Flood Task Force/ Committee to coordinate governmental action 	
Beneficiaries: Communities with Beledweyne, Hirshabelle. Communities within Qardo City, Puntland. International counterparts	
Lead Ministry: MoEWR and MoHADM	
Government counterparts: Hirshabelle State, Puntland.	
Geographic coverage: Flood and drought prone areas across Somalia	
Timeframe: 2021-2031; 5+5 years	
Principle activities performed:	
<ul style="list-style-type: none"> • Undertake assessment of previous flood risk studies and their findings. 	

- Develop stakeholder engagement plan and establish a cooperation and coordination task team.
- Develop a long-term flood risk management strategy and implementation plan working in coordination with floods and droughts Task Force.
- Outline specific and priority response strategies and plans and provide support to implement these with key local, national and international partners.
- Undertake prioritised actions to develop needed infrastructure aligned to the developed plans.
- Design and roll out capacity development for government officers, coordinating partners, civil society groups, and communities focussing on technical and operational flood risk reduction in Beledwyne and Qardo City.
- Establish data and information sharing protocols for water sector data e.g. hydrological data that is important for flood and drought monitoring and management.
- Coordinate monitoring and reporting on progress and improvements in flood response.
- Document lessons learned and develop guidance materials.

Results: Reduced flood risk and improved resilience to floods by communities within two urban centres. Developed strategies and plans, as well as lessons learned to guide other regions of Somalia. Improved capacity of government and community representatives, improved cooperation, and joint planning by government ministries.

NWRS FLAGSHIP PROJECT NO 12

Title:	<i>Undertaking key interventions to improve water security for livestock</i>
Overview:	Livestock plays a pivotal role of the Somalian economy and livelihoods of Somalian communities. Water shortages are critically important and with many parts of the country being arid, the maintenance of water supply infrastructure and water points are critical to maintaining herd health. Access to water for livestock herds continues to be a source of conflict, particularly between sedentary farmers and agro-pastoralists who move their herds from location to location. The programme will increase the infrastructure network for water storage and supply for livestock through rehabilitation and development of infrastructure as well as roll out interventions to increase water efficiency and reduce water losses for the livestock sector. The programme will also develop and implement interventions to address the conflicts that arise over access to water.
Objectives:	<ul style="list-style-type: none"> • Develop a water security strategy and implementation plan for livestock sector. • Undertake actions to rehabilitate and improve water security for livestock herds in two prioritised areas. • Develop and implement capacity building interventions in prioritised areas to ensure sustainable operations and maintenance of local water points. • Build capacity within local administrations to support communities, to ensure good practice and report on water security issues, and to address conflicts that arise. • Develop capacity of civil society groups to support awareness and improved practice as well as address conflict over access to water. • Develop guidance materials and knowledge products to support other regions of Somalia.
Strategic activities included:	<ul style="list-style-type: none"> • A30: Identify specific water sector interventions to diffuse and prevent conflict situations • A87: Develop improved system management approaches to improve water security for livestock • A88: Assess infrastructure rehabilitation and development requirements for water storage and supply

<p>for livestock management as inputs into national masterplan and investment framework</p> <ul style="list-style-type: none"> • A89: Develop strategy and plans to introduce climate smart approaches, improve water use efficiency, and minimise water losses within the livestock sector
<p>Beneficiaries: Communities; civil society groups, Agro-pastoralists, nomads across Somalia</p>
<p>Lead Ministries: MoEWR and MoL</p>
<p>Government counterparts: DoECC, FMS</p>
<p>Geographic coverage: Two priority regions within Somalia, National impact</p>
<p>Timeframe: 2021-2026</p>
<p>Principle activities performed:</p> <ul style="list-style-type: none"> • Establish a multi-sectoral platform for collective planning between sectors (water, agriculture, community development etc.) to understand the developmental needs and design respective interventions to address the identified needs. • Develop tools and implementation guidance to support the reduction of conflict over access to water. • Undertake an assessment of hotspots for overgrazing, poor land management and deforestation of rangelands for priority intervention areas. • Undertake an assessment to identify two priority areas for infrastructure improvements e.g. livestock water points, that needs rehabilitation and development for water storage and supply for livestock. • Rehabilitate and expand infrastructure to ensure sufficient water supplies for stock watering in two priority areas; <ul style="list-style-type: none"> ○ Incorporate conjunctive use of surface and groundwater to increase livestock production and reduce water insecurity risk. ○ Design and implement water conservation activities through improved catchment and rangeland management interventions. • Conduct a capacity building and knowledge exchange programme to support and disseminate information on improved practice and to reduce current and future conflict in the priority areas. • Provide a platform for civil society and private sector to support government to drive new approaches and build the capacity needed. • Develop guidance materials based on lessons learned.
<p>Results: Resilience of communities, agro-pastoralists and nomads is increased, rehabilitated, and improved infrastructure for livestock, strengthened capacity at community and local levels, guidance materials developed to support other areas of Somalia.</p>

4.3 Principles that underpin the Flagship Projects

The Flagship projects will provide important support in the process of developing improved approaches to governance and strengthening the national drive towards growth and development, and as such the drive towards action needs to be underpinned by core principles and values. These are in many instances specific and normative in nature and as such guide the objectives and actions that are required to implement the Flagship projects. These key principles include:

- **Leadership:** The NWRS is a national strategy that impacts on multiple sectors and as such key projects will be led by Ministries that are responsible for these sectors, such as MoEWR, MoAI, MoHADM and MOL.

- **Gender and equity:** Ensuring that all citizens, regardless of gender, age or disability should have access to water for their basic human needs and for broader developmental purposes. Gender and equity considerations will be central to all projects and the way in which these projects are undertaken.
- **Good governance:** The establishment and development of Somali-led governance systems that support effective management and accountability will be important in supporting the strengthening of the Somali government over time.
- **Public interest:** The management of resources will be undertaken using principles and approaches to ensure the broader public interest.
- **Transparency:** Developing open and communicative approaches regarding process and progress in project implementation will ensure that all key parties have access to data and information that can inform decision making.
- **Efficiency and effectiveness:** Projects should be undertaken to ensure effective delivery using resources efficiently.
- **Stakeholder engagement:** The engagement of stakeholders is important to the effective implementation of projects and recognises that this engagement involves various levels of participation ranging from informing through to consulting and collaborating.
- **Monitoring and reporting:** The management of projects will ensure that implementation will be monitored, supported by regular reporting. This will support adaptive management approaches and will ensure that project objectives are achieved.
- **Phased implementation:** Many of the Flagship projects identify potentially second and follow up phases of work that serve to further entrench delivery. This enables the project to assess delivery to date and to entrench improved approaches during follow-up phases.

5. FAST TRACKING IMPLEMENTATION

Initiating and driving complex strategies can be daunting and require a step-by-step approach and need to be understood through the project management lens of project initiation, project planning and project execution. While many of the core activities are to be led by the MoEWR, the intergovernmental nature of this undertaking will require that Ministries cooperate with each other in transparent and regular manner from the start. Equally, engaging the support of key international cooperating partners as early as possible will be essential to get key pathfinder Flagship projects moving as quickly as possible.

Key steps to fast-track implementation include:

- **MoEWR Senior Management Alignment:** In preparing for the presentation of the strategy to Cabinet, there is opportunity to create clear alignment within the senior management of the MoEWR. This is an important first step to fully understand not only the NWRS but also the requirements of the Ministry as sector leader to drive the implementation of the NWRS. It needs to be noted that the NWRS implementation becomes the core guiding instrument for MoEWR business into the future. In this regard, it will be important to outline the operational management arrangements within the MoEWR for leading the NWRS implementation, noting that the Minister and the DG will act as the “project sponsors”. It will be important to delegate this responsibility to take the operational lead and outline the reporting requirements to support this and keep the Minister and DG abreast of progress.
- **Presentation to Cabinet:** A key step for all NWRS instruments is to obtain Cabinet approval, noting the implications of this for Government and the commitment of staff to realise its implementation. The Cabinet will provide approval of the cooperative, intergovernmental approach that is required and this is a key step in ensuring that all Ministries are aware that whilst the MoEWR is the water sector leader, that several Ministries will have key leading roles where water interfaces with their sectors. Approval by Cabinet will then enable the formal launch of the NWRS.
- **Launch of the NWRS:** The official launch of the strategy provides the opportunity to not only ensure that a broader suite of stakeholders is aware that the NWRS is to be officially implemented, but importantly starts to create cohesion around the need to support implementation. This cohesion can be understood through a range of lenses and it is important to potentially unpack these to guide the launch process. Suggested options include:
 - *National launch:* This provides the opportunity pull together a wide array of stakeholders and create a broader awareness of the initiation of the strategy and its implementation.
 - *Federal State launch:* The impacts of Covid-19 may potentially prohibit this, but the launch of the strategy in each FMS provides access to the launch and creates awareness with a more localised suite of stakeholders. This will have profound impact of the implementation of the strategy within each FMS. Through this launch

process it will be important to outline the coordination platforms to be established within each FMS.

- *International Partner launch:* While many of the ICP's would have been engaged at the national launch, it will be important to have a more detailed implementation discussion with these partners. The ICPs provide critically important technical and financial resources that will aid in driving the Flagship Projects, as well as other supporting interventions and as such it will be an important step to start creating synergy in effort. As the strategy is placing much emphasis on the FGS to take the lead on coordination and leadership this launch will be the first of a number of more focused discussions to create aligned support from the ICPs.
- **Initiate Flagship Project 0:** A key step will be to rapidly initiate this Flagship Project focused upon the coordination of interventions and projects to implement the NWRS. This intergovernmental committee will be an operational committee that will ensure oversight of NWRS activities as well as the interfacing initiatives that have impact. As such the committee members will ensure coordination across a significant range of governmental projects. This is in recognition of the centrality of water to many aspects of socio-economic development and the delivery of NDP-9. As such, the principles outlined for the Flagship Projects are critically important to adhere to. Lastly, the introduction of a Secretariat to support this coordination committee will be important in enabling the Ministries to focus on the technical dimensions of ensuring effective implementation, with the Secretariat assisting in ensuring the coordination process is effectively coordinated. The establishment of this committee will require:
 - *Terms of Reference:* A clear Terms of Reference for the committee will need to be developed and presented at the first meeting. This will need to outline aspects such as core functions and responsibilities, membership, quorum, meeting frequency, reporting requirements and so forth.
 - *Commitment of Staff:* The efficacy of this committee will be dependent upon consistent membership and participation by all Ministries. This consistency will be essential in establishing alignment between the various sector Ministries and as such members should be co-opted onto this committee for a minimum of two years.
 - *Commitment of leadership:* The support of senior ministerial leadership for this committee is important in providing the mandate to ensure implementation. Whilst it is expected that some decisions for time-to-time will require the approval of the DGs, wherever possible this committee should be mandated to ensure ongoing delivery and progress.
- **Initiating the Flagship Projects:** Once the coordination committee is in place, the committee's first order of business will be to drive the remaining Flagship Projects. These could be phased in various ways, but the support that ICPs provide for these projects may also impact on their roll-out. At this stage, these projects are presented as high-level project charters and do require translating into more detail Terms of Reference. This may be

influenced by the way in which support is accrued i.e a specific ICP may support a Flagship Project in part. This will therefore require a mobilisation drive to assess the support that can be garnered for each Project. This will then guide the Coordination Committee in developing an execution plan against which progress can be monitored. Potential phasing of the projects is outlined in Figure 5-1.

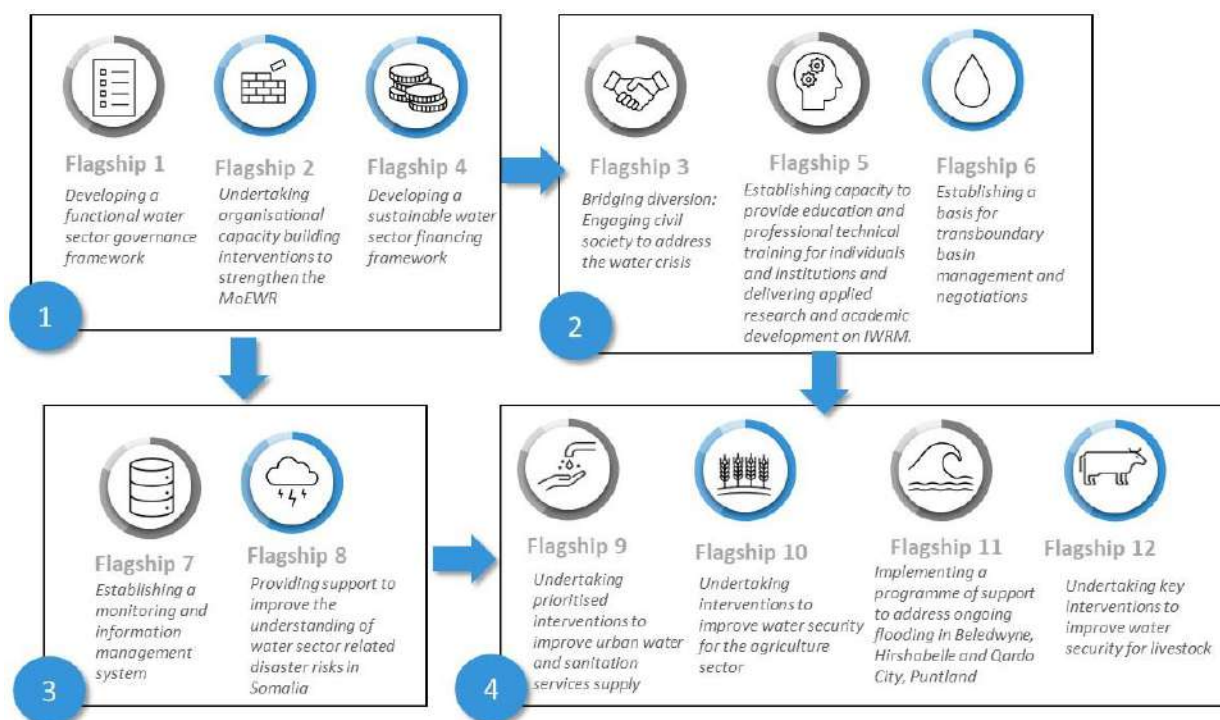


Figure 5-1: Potential phasing for the initiation of Flagship Projects

- Monitoring & Evaluating:** As the projects start to be initiated it will be imperative to put in place a monitoring and evaluation framework supported by a dashboard that enables the Coordination Committee (under Flagship Project 0) to track progress and guide adaptively. This will enable ongoing reporting to Cabinet on progress as well as to ICPs who are supporting specific interventions. Equally, important will be the development of a web-based platform to communicate progress and give access to information and knowledge products that share lessons learned.

6. REFERENCES

- AFDB. (2016). *Improving Access to Water and Saitation in Rural Somalia: Environmental and Social Management Plan*. AFDB.
- AfDB. (2020). *African Economic Outlook*.
- African Development Bank. (2016). *Environmetal and Social management Plan - Improving Access to Water and Sanitation in Rural Somalia*.
- Alexander, L. (2020, June 16). *7 Facts About Sanitation in Somalia*. Retrieved from The Borgen Project: <https://borgenproject.org/tag/10-facts-about-sanitation-in-somalia/>
- Basnyat, D. (2007). *Water Resources of Somalia; Technical Report No W-11*. Nairobi: FAO-SWALIM.
- Chemonics International. (2017). *Policy Brief: Water Demand Management in the Limpopo River Basin*. USAID.
- Development Initiatives. (2019). *Towards an improved understanding of vulnerability and resilience in Somalia*.
- Embassy of Sweden. (2019). *Scoping Study for Improvement of Water and Sanitation in Somalia*. Nairobi: Embassy of Sweden, Somalia Section.
- FAO Aquastat. (2016). *AQUASTAT Main Database*. Retrieved November 28, 2020, from Food and Agriculture Organization of the United Nations: <http://www.fao.org/nr/water/aquastat/data/query/results.html>
- FAO SWALIM. (2020). *Climate*. Retrieved September 21, 2020, from <http://www.faoswalim.org/water/climate-somalia>
- FAO, SWALIM. (2014, September). *Water Resources*. Retrieved from Groundwater: <https://www.faoswalim.org/water/water-resources/ground-water>
- FAO, SWALIM. (2020). *The Juba and Shabelle Rivers and Their Importance to Somalia*. Retrieved June 3, 2020, from <http://www.faoswalim.org/article/juba-and-shabelle-rivers-and-their-importance-somalia>
- Federal Directorate of Environment and Climate Change. (2020). *Somalia National Climate Change Policy*. Federal Republic of Somalia.
- Federal Government of Somalia. (2017). *National Development Plan 2017 - 2019*.
- Federal Government of Somalia. (2017). *Somalia National Development Plan, 2017-2019*. Mogadishu.
- Federal Government of Somalia. (2019). *National Environment Policy*. Directorate of Environment.
- Federal Government of Somalia. (2019). *Somalia National Development Plan 2020-2024: NDP-9 The Path to a Just, Stable and Prosperous Somalia*. Mogadishu, : Federal Government of Somalia.

- Federal Government of Somalia. (2020a). *Somalia 2019 Floods Impact and Needs Assessment*. World Bank.
- Federal Republic of Somalia. (2013). *National Adaptation Programme of Action on Climate Change (NAPA)*. Mogadishu: Ministry of National Resources.
- Federal Republic of Somalia. (2017a). *The National Youth Policy of the Federal Republic of Somalia*.
- FGS. (2015). *Somalia's Intended Nationally Determined Contributions (INDC)*. Federal Government of Somalia (FGS).
- Geology.com. (2007). *Map of Somalia*. Retrieved from Geology.com.
- Global Water Partnership Technical Committee. (2004). *Catalyzing Change: A handbook for developing integrated water resources management (IWRM) and water efficiency strategies*. GWP.
- Global Water Partnership Technical Committee. (2004). *Tools for keeping IWRM strategic planning on Track*. GWP.
- Hallegate, S., Rentschler, J., & Walsh, B. (2018). *Building Back Better: Achieving resilience through stronger, faster, and more inclusive post-disaster reconstruction*. Washington DC: Global Facility for Disaster Reduction and Recovery, The World Bank.
- Hussein, H., Conker, A., & Grandi, M. (2020). Small is beautiful but not trendy: Understanding the allure of big hydraulic works in the Euphrates-Tigris and Nile waterscapes. *Mediterr. Politics*, 1-24.
- IMF. (2020). *Enhanced heavily-indebted poor countries (HIPC) initiative - preliminary document*. IMF.
- Jama, A. A., & Mourad, K. A. (2019, February 11). Water Services Sustainability: Institutional Arrangements and Shared Responsibilities. *Sustainability*, p. 15.
- Mabhaudhi, T., Chibarabada, T., & Modi, A. (2016). Water-Food-Nutrition-Health Nexus: Linking Water to Improving Food, Nutrition and Health in Sub-Saharan Africa. *International Journal of Environmental Research and Public Health*, 13(107).
- Ministry of Agriculture and Irrigation. (2019). *National Irrigation Policy*. Federal Government of Somalia.
- Ministry of Livestock Forestry and Range. (2019). *Somalia Livestock Sector Development Strategy*. Federal Government of Somalia.
- Ministry of Planning, Investment, and Economic Development. (2020). *Aid Flows in Somalia*.
- Ministry of Planning, Investment, and Economic Development. (2020). *Somalia National Development Plan 2020 to 2024*.

- Mourad, K. A. (2020). A Water Compact for Sustainable Water Management. *Sustainability*, 12(7339), 1-18.
- OCHA. (n.d.). *Somalia WASH Cluster*. Retrieved from <https://www.humanitarianresponse.info/fr/operations/somalia/somalia-wash-cluster#:~:text=The%20Somalia%20WASH%20Cluster%20brings,effective%20and%20sustainable%20humanitarian%20action.>
- Reliefweb. (2020). *Somali WASH Cluster Dashboard*. Retrieved from https://reliefweb.int/sites/reliefweb.%20int/files/resources/somali_wash_cluster_dashboard_for_june_2020.pdf
- Somalia WASH Cluster. (2019). *Somalia Water, Sanitation, and Hygiene Assessment Report*. UNICEF, REACH.
- SWALIM. (n.d.). *Seasonal Average Rainfall during Gu and Deye Seasons*. Mogadishu: SWALIM.
- The New Humanitarian. (2010). *Fight over water, pasture sends hundreds fleeing*. Retrieved March 2, 2021, from The New Humanitarian: <https://www.thenewhumanitarian.org/report/91034/somalia-fight-over-water-pasture-sends-hundreds-fleeing>
- The World Bank. (2014, August 12). *Al-Shabaab's 'water terrorism' is yielding results and tragedy in Somalia's civil war*. Retrieved March 2, 2021, from Conflict: <https://www.pri.org/stories/2014-08-08/how-al-shabaab-using-water-tool-terrorism>
- UN Environment. (2018). *Progress on integrated water resources management. Global baseline for SDG 6, Indicator 6.5.1: degree of IWRM implementation*. UNEP.
- UNDP. (2019). *Human Development Report 2019*. New York.
- UNDP. (2021, January 21). *UNDP Climate Change Adaptation*. Retrieved from Somalia Climate Ambition NDC: <https://www.adaptation-undp.org/somalia-climate-ambition-NDC>
- UNHCR. (2020). *Conflict and heavy floods force tens of thousands of people to flee their homes in Somalia, amidst COVID-19 threat*. Retrieved November 25, 2020, from <https://www.unhcr.org/news/briefing/2020/5/5eb50d2d4/conflict-heavy-floods-force-tens-thousands-people-flee-homes-somalia-amidst.html>
- UNICEF. (2020). *Reimagining our Future: Building Back Better from COVID-19*. New York: UNICEF.
- United Nations. (2014). *Report of the Intergovernmental Committee of Experts on Sustainable Development Financing*. New York: United Nations.
- United Nations Assistance Mission in Somalia. (2017). *A New Partnership for Somalia for Peace, Stability, and Prosperity - A Framework for Mutual Accountability and Accountable Progress. London Conference, Somalia*.

United Nations Department of Economic and Social Affairs. (2019). *World Population Prospects*.
<https://population.un.org/wpp/Graphs/DemographicProfiles/Line/706>: United Nations.

WHO UNICEF. (2017). *Household Data Somalia*. Retrieved September 21, 2020, from
<https://washdata.org/data/household#!/table?geo0=country&geo1=SOM>

World Bank. (2020). *Impact of COVID-19: Policies to Manage the Crisis and Strengthen Economic Recovery*. World Bank Group, Federal Republic of Somalia.

World Bank. (2020, August 25). *Renewable Internal Freshwater Resources per Capita (cubic meters) 1962-2014*. Retrieved from data.worldbank.org:
<https://data.worldbank.org/indicator/er.h2o.intr.pc>

World Bank Group. (2011). *Delivering Water Supply and Sanitation in Fragile States: The transition from emergency to development*.

World Economic Forum. (2019). *Global Risks Report 2019: 14th Edition*. Geneva: World Economic Forum.

WWF, AfDB. (2012). *Africa Ecological Footprint Report: Green Infrastructure for Africa's Ecological Security*. WWF – World Wide Fund for Nature, AfDB - African Development Bank.



**MINISTRY OF ENERGY
AND WATER RESOURCES**

