



**National Drought
Management Authority**



Knowledge Management and Learning Strategy





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Abbreviations and Acronyms

ASALs	Arid and Semi-Arid Lands
CCA	Climate Change Adaptation
CCF	Climate Change Fund
CDCs	County Drought Coordinators
CoP	Communities of Practice
DCF	Drought Contingency Fund
DCS	Directorate of Corporate Services
DEWS	Drought Early Warning System
DHR	Department of Human Resources
DICT	Department of Information and Communication Technology
DPME	Directorate of Planning, Monitoring and Evaluation
DPP	Department of Policy and Planning
DRM	Drought Risk Management
DTS	Directorate of Technical Services
HSNP	Hunger Safety Net Programme
IDDRSI	Intergovernmental Authority on Development Drought Disaster Resilience and Sustainability Initiative
IGAD	Intergovernmental Authority on Development
IPC	Integrated Phase Classification
KM	Knowledge Management
KM & IS	Knowledge Management and Information Sharing
KNBS	Kenya National Bureau of Statistics
KPIs	Key Performance Indicators
KSH	Kenya Shillings
M & E	Monitoring and Evaluation
MoUs	Memoranda of Understanding
NDEF	National Drought Emergency Fund
NDMA	National Drought Management Authority
SRAs	Strategic Result Areas

Statement by Board Chairman



Inadequate rainfall coupled with increased temperature has led to increased frequency and intensity of droughts in Kenya. The negative impact of drought on livelihoods and Kenya's economy requires an institution that champions drought risk management and climate change adaptation. It is on this basis that an Act of Parliament (NDMA Act, 2016) established the National Drought Management Authority to establish mechanisms which ensure that drought does not result in emergencies and that the impacts of climate change are sufficiently mitigated.

Droughts, unlike other hazards, set in slowly. This implies that with appropriate mechanisms in place, it is possible to plan for timely response in the short-term and build resilience of vulnerable communities as a long-term solution. The NDMA has

put in place several mechanisms to aid in the delivery of its mandate. These include a drought early warning system, a contingency planning process that comprises investment in strategic drought preparedness projects, drought response, climate change funding mechanism to mobilize resources, social protection mechanism targeting the poorest, and a monitoring and evaluation system to track progress.

An important addition to these mechanisms and systems is a knowledge management system that requires a guiding strategy. Thus, institutionalizing this knowledge management strategy is timely. It takes into consideration the importance of internal and external knowledge assets and stipulates means of managing them. This will go a long way in asserting NDMA as the leader in matters of drought risk management and climate change adaptation as already is the case in the Horn of Africa region.

A key output of this strategy is integration of information within the Authority for reliable and ease of access and use by internal and external stakeholders. Access to reliable drought risk management and climate change adaptation information is expected to aid the scaling out of good practices. Overall, this should improve the efficiency of the Authority and by extension, that of stakeholders.

To this end, I welcome all partners, at both national and devolved levels in supporting implementation of this Knowledge Management and Learning Strategy.

A handwritten signature in blue ink that reads "Raphael Nzomo".

Raphael Nzomo, MBS

Chair of the Board of Directors

Foreword by the Chief Executive Officer



The National Drought Management Authority (NDMA) has a mandate to initiate and oversee all aspects of drought risk management and climate change adaptation in Kenya. A robust Knowledge Management System is a prerequisite for the effective delivery of NDMA's mandate. For NDMA, a Knowledge Management System comprises the processes, tools and behaviours that motivate people to generate and share reliable information and utilize it to improve efficiency in solving community problems. A successful Knowledge Management System requires a guiding strategy.

NDMA developed this strategy in consultation with partners, who are an integral part of stakeholders working to end drought emergencies in Kenya, thus widening its applicability.

This approach was appropriate given the objectives of this strategy to generate reliable information; share information with targeted users for decision making; store information safely and in easily retrievable forms; build capacity of the Authority; strengthen and leverage partnerships; and enhance internal results measurement and learning processes.

The work of developing this strategy would not have succeeded without the support of NDMA staff, Board of Directors and our partners. Special thanks go to the European Union for financing the process of developing this strategy through the Ending Drought Emergencies - Drought Risk Management and Coordination project. I am confident that strategies in this document will go a long way in enabling the NDMA to improve its performance and collaboration.

Therefore, I call upon our partners and stakeholders to support the implementation of this Knowledge Management and Learning Strategy as we gear towards ending drought emergencies in Kenya.

A handwritten signature in black ink, which appears to read 'James Oduor', followed by a stylized flourish.

James Oduor
Chief Executive Officer





Definition of Key Terms

- i) **Data** – is a set of discrete facts about events. In the context of NDMA, data is described as the structured records of events e.g. number of Kenyans affected by drought. Data is essential because it forms the raw material for the generation of information.
- ii) **Information** – refers to data that has been contextualised e.g., trends on the number of Kenyans affected by drought may show a decrease. Information helps in using past experiences to improve on the future e.g., by avoiding past mistakes or scaling out positive lessons. The only weakness of information is that, it is passive and may not lead to intended change if not transformed into knowledge.
- iii) **Knowledge** - is information put to action. Knowledge combines information with experience and skills to solve problems. For example, a trend of increasing incidences of drought as well as their intensity prompted the establishment of a National Drought
- Emergency Fund (NDEF) in Kenya to avoid diverting development funds to managing drought episodes.
- iv) **Knowledge management** – is the systematic organization, packaging, storage and sharing of knowledge for the purpose of creating value and meeting known needs. Knowledge management consists of initiatives, processes, strategies, and systems that sustain and enhance the storage, assessment, sharing, refinement, and creation of knowledge.
- v) **Knowledge management system (KMS)** – comprises technologies and people that enable knowledge collaboration within NDMA and with stakeholders. Technologies permit generation, packaging, analysis, safe storage and retrieval of information. People use technologies in sharing knowledge. It should be noted that technologies should only make work easier and can never replace the people who are the custodians of knowledge.

1.0 Introduction

1.1 Drought Risk Management and Climate Change Adaptation

Disasters including those related to climate change such as drought are a global concern because of their negative effect on lives and livelihoods. Consequently, several strategies have been developed to guide disaster risk reduction interventions. The Sendai Framework for Disaster Risk Reduction¹ addresses risk reduction at the global level by strengthening social and economic resilience to ease the negative effects of climate change and other natural hazards, and man-made disasters. At the regional level, the Intergovernmental Authority on Development (IGAD) is implementing the IGAD Drought Disaster Resilience and Sustainability Initiative (IDDRSI). IDDRSI² builds on the mandates and objectives of the Member States for integrated results-oriented interventions that are responsive to the needs of vulnerable communities in arid and semi-arid lands (ASALs).

ASALs in Kenya comprise 89% of the land mass with the Arid Counties covering 70% (Republic of Kenya, 2012³). The potential of the Kenyan ASALs has been underexploited due to various limitations, including discriminative policies such as the Sessional Paper No. 10 of 1965 on African Socialism and its Application to Planning in Kenya, worsening weather conditions, poor infrastructure, and weak human capacity. This has increased vulnerability of communities in the ASALs.

The Kenya Constitution recognizes the need to redress historical marginalisation of vulnerable communities. The Vision 2030 Strategy for Development of Northern Kenya and Other

Arid Lands aligns the Vision to the unique circumstances and priorities of the ASALs. It lists Drought Risk Management (DRM) and Climate Change Adaptation (CCA) as foundations for socio-economic transformation of the ASALs. Moreover, the overall goal of Sessional Paper No. 8 of 2012 on National Policy for the Sustainable Development of Northern Kenya and Other Arid Lands is to facilitate, fast track increased investment, and ensure that use of resources is fully reconciled with realities of people's lives.

1.2 The National Drought Management Authority

The National Drought Management Authority (NDMA) is a public agency established under the NDMA Act 2016. The Act mandates the Authority to exercise overall coordination over all matters relating to DRM and to establish mechanisms, either on its own or with stakeholders that will end drought emergencies in Kenya. The Vision of the Authority is to be a world class Authority in DRM and CCA for sustainable livelihoods. Its mission is to provide leadership and coordination of Kenya's efforts in the management of drought risks and adaptation to climate change.

The NDMA Act 2016 defines 14 functions of the Authority that are summarised into five broad categories: 1) building resilience against drought; 2) providing drought related information; 3) planning and executing response against drought; 4) coordinating drought management; and 5) managing knowledge related to drought.

This Knowledge Management and Learning Strategy is anchored in the fifth function.

¹ United Nations 2015. Sendai Framework for Disaster Risk Reduction 2015-2030.

² IGAD 2013. IGAD Drought Disaster Resilience and Sustainability Initiative (IDDRSI).

³ Republic of Kenya 2012. Vision 2030; Development strategy for Northern Kenya and Other Arid Lands.

1.3 Role of Knowledge Management and Learning in NDMA

Knowledge Management is a support function and therefore will succeed by linking with NDMA strategic objectives as shown below.

NDMA strategic objectives	Contribution of KM
SO1: To strengthen institutional and community resilience to drought risk and climate change.	Use knowledge on institutional and community needs and gaps to design and implement capacity building initiatives through training and mentorship as well as keeping a reliable organizational and community memory.
SO2: To provide drought and climate information to facilitate concerted actions by relevant stakeholders.	Coordinate generation and sharing of reliable knowledge to stakeholders in a user-friendly form and improving the processes through timely feedback.
SO3: To protect livelihoods of vulnerable households and community systems to cope and recover from drought shocks.	Use existing and new evidence strategically in improving community resilience by documenting and applying lessons learnt.
SO4: To ensure coordinated actions on drought risk management by government and other stakeholders.	Enhance coordination, knowledge sharing and learning through integration of knowledge for ease of access and organized learning fora.
SO5: To enhance resource mobilization and partnerships for drought risk management and climate change adaptation at county, national, regional and global levels.	Provide timely evidence on the impact of drought on livelihoods, impact of timely response to drought and existing investment gaps in order to attract resources from governments and development partners.
SO6: To strengthen planning, performance management and knowledge management (KM) approaches that generate evidence on DRM and CCA for decision making and practice.	Coordinate knowledge generation and sharing within NDMA, with stakeholders and improve based on feedback.
SO7: To strengthen NDMA institutional capacity to provide leadership in drought risk management at national and county levels.	Ensure NDMA 'knows its story' regarding drought risk management and climate change adaptation in order to be a trusted coordinator of drought initiatives.

To improve the resilience of communities living in the ASALs, policies and programmes need to be based on evidence. This strategy will enable continuous collection of reliable (accurate and timely) data and its analysis to generate evidence

e.g., what works in building community resilience and what does not. The information will then be shared with a wide range of stakeholders on need basis. It is expected that the stakeholders will use the shared evidence to design and

implement interventions that are more responsive to community resilience needs. To sustain reliable knowledge and be able to scale up positive lessons learnt while avoiding previous mistakes, knowledge management will be central with an aim to learn from own and others' experiences. Recommendations on what works will be scaled up. To ensure relevance and vibrancy of this strategy, feedback from target audience will be continuously sought. The feedback will be used in improving ongoing programmes as well as in the design of new ones.

1.4 Objectives of this Strategy

The broad objective of this Strategy is to guide NDMA to use DRM and CCA Knowledge as a foundation of community transformation. The specific objectives are to:

- 1) Improve on existing knowledge management processes for DRM and CCA.
- 2) Generate new knowledge for DRM and CCA
- 3) Strengthen the strategic position of NDMA by:
 - a) Storing information safely and in easily retrievable ways.
 - b) Building capacity of NDMA on matters of knowledge management.
 - c) Leveraging partnerships to enrich internal knowledge.

1.5 Justification

In line with its mandate to coordinate DRM and CCA initiatives, NDMA has established several mechanisms and systems including a social protection mechanism that ensures that vulnerable households are supported through unconditional cash transfers. The Authority provides drought early warning information from its drought early

warning system (DEWS) as well as DRM and CCA information. Funding of DRM and CCA interventions is supported by strong mechanisms including a drought contingency fund (DCF) business process and climate change fund (CCF) mechanism.

Despite the NDMA generating immense amounts of information and being a custodian of experienced personnel on DRM and CCA, it had not integrated its knowledge management mechanism fully in its operations. Consequently, information is scattered. This makes access time consuming, affecting timeliness of action negatively. Thus, there is a felt need in NDMA to develop an integrated knowledge management system. The first step in developing and implementing a reliable knowledge management system is by developing a knowledge management and learning strategy. Strategies discussed in this document will therefore be key pillars in guiding NDMA and its partners in the generation and sharing of knowledge.

This Knowledge Management Strategy is in line with NDMA's Strategic Plan (2018-2022), specifically Strategic Objective six; to strengthen planning, performance management and Knowledge Management approaches that generate evidence on DRM and CCA for decision making and practice. Strategic Objective six is also one of the Kenya Vision 2030 flagship projects and is captured in the Medium-Term Plan II and III as "Integrated Knowledge Management System". This strategy also complements the NDMA Communication Strategy. In this regard, this strategy should be read and used alongside the rest of the strategies mentioned *a priori*.



2.0 Situation Analysis

2.1 Existing Mechanisms and Systems

The NDMA should provide DRM and CCA information for resilience building of vulnerable communities in Kenya. This ambitious goal is supported by various mechanisms and systems. The Knowledge Management System will complement existing mechanisms/systems through the guidance of this strategy.

Information provision mechanisms include the drought early warning system, which allows the NDMA to provide monthly drought early warning information using a web-based system on the one hand. The web-based system integrates remote sensing, biophysical and socio-economic data, complemented by indigenous knowledge from local communities. Food Security Assessments, on the other hand, provide information on the state of food and nutrition security in the ASAL counties twice a year (after the short and long rain)

Social protection mechanism cushions vulnerable households through regular and unconditional cash transfers under the Hunger

Safety Net Programme (HSNP). Households are registered and targeted to determine the most vulnerable. Community validates the targeted households to correct inclusion and exclusion errors. The neediest households receive Ksh 5,400 every two months.

The National Drought Emergency Fund (NDEF), established under the Public Finance Management (PFM) Act, 2012 will ensure that resources are always available for quick action before drought effects deteriorate. NDMA has been testing this approach since 2014 with drought contingency funds provided by the European Union. The pilot enabled the Authority to disburse funds to drought-affected counties in partnership with the County Governments. Operationalization of the NDEF will build on the drought contingency fund (DCF) business process and an information system developed by the NDMA during the pilot phase. In addition, the climate change fund mechanism supports ASAL counties to enhance DRM and CCA interventions.

Monitoring and evaluation mechanism enables NDMA to track and measure performance of programmes and projects. The mechanism has priority indicators. To track results easily, various tools have been adopted including a Di-Monitoring system and an investment tracker.

This strategy will complement the above mechanisms/systems by guiding information generation, enhancing packaging, improving user targeting and dissemination of information for action.

2.2 Assessment of NDMA's Knowledge Management Maturity

Knowledge Management maturity consist of five levels:

- 1) **Reaction** - an organisation is not aware of the importance of Knowledge Management in enhancing efficiency.

- 2) **Initiation** - an organisation begins to recognise the need for Knowledge Management and pilots it.
- 3) **Expansion** - Knowledge Management is fully applied.
- 4) **Refinement** – an organization continually evaluates its Knowledge Management processes and outcomes with an aim to improve. Lessons learnt from previous experiences influence future actions.
- 5) **Maturity** – an organization mainstreams Knowledge Management fully in its plans. Knowledge Management becomes integral in results delivery.

Based on the characteristics of the above levels, NDMA is at level three which is the Expansion Level. Its staff appreciates the role of Knowledge Management. Moreover, the Authority is putting in place interventions that will lead to the full mainstreaming of Knowledge Management in its processes, including capacity building.

2.4 Strengths, Weaknesses, Opportunities and Threats analysis

Strengths

- Knowledge Management is one of NDMA's functions.
- NDMA has skilled staff in the fields of DRM and CCA.
- Strong mechanisms for collecting and availing data and information on DRM and CCA.
- Flexibility in adoption of modern technology.
- NDMA works directly with target communities.

Opportunities

- Supportive partners, most of whom have DRM and CCA information.
- Improved understanding of the role of Knowledge Management among stakeholders.
- Demand for DRM and CCA evidence to guide actions.
- County structures that offer immediate link with local communities.

Weaknesses

- Lack of a partnership guideline.
- Lack of an integrated Knowledge Management System.
- Lack of Knowledge Management champions.
- Gaps in necessary skillset for Knowledge Management.

Threats

- Misinterpretation of NDMA information.
- ASALs are prone to community conflicts and extremism, affecting knowledge generation and sharing activities.



2.5 Stakeholder Analysis

This sub-section presents various categories of stakeholders who would benefit from knowledge owned by NDMA or hold knowledge that NDMA requires. Information needs of the stakeholders and respective sources are also summarised.

Table 1: Selected main stakeholders, their information needs and sources

Target stakeholders	Information needs	Information source
1. National Government	<ul style="list-style-type: none"> ▪ Budget requirement for DRM/CCA ▪ Drought early warning information ▪ DRM and CCA investment information ▪ State of resilience of target communities ▪ Resilience building guidelines ▪ Food security situation 	<ul style="list-style-type: none"> ▪ National Drought Management Authority Development partners
	<ul style="list-style-type: none"> ▪ Drought contingency plans ▪ Drought response plans ▪ Drought scenario building mechanism ▪ DRM and CCA coordination structures ▪ Partnership guideline ▪ Mapping of partners (who is doing what, where and with which resources) ▪ Legal and policy framework for DRM and CCA ▪ Capacity needs 	
	<ul style="list-style-type: none"> ▪ Weather information 	Kenya Meteorological Department
	<ul style="list-style-type: none"> ▪ Lessons learnt and best practices 	<ul style="list-style-type: none"> ▪ Target communities ▪ County governments ▪ Various partners

Target stakeholders	Information needs	Information source
2. County Governments	<ul style="list-style-type: none"> ▪ Drought early warning information ▪ Food security assessments ▪ Response plans ▪ Drought scenario building mechanism ▪ DRM and CCA investment information ▪ DRM and CCA coordination structures ▪ Mapping of partners (who is doing what, where and with which resources) 	<ul style="list-style-type: none"> ▪ National Drought Management Authority ▪ Development partners
	<ul style="list-style-type: none"> ▪ Lessons learnt and best practices 	<ul style="list-style-type: none"> ▪ Target communities ▪ County governments
	<ul style="list-style-type: none"> ▪ Weather information 	Kenya Meteorological Department
3. Development partners	<ul style="list-style-type: none"> ▪ State of resilience of target communities ▪ Drought early warning information ▪ Food security assessments ▪ Contingency plans ▪ DRM and CCA investment information ▪ DRM and CCA coordination structures ▪ Funding gap 	<ul style="list-style-type: none"> ▪ National Drought Management Authority
	<ul style="list-style-type: none"> ▪ Lessons learnt and best practices 	<ul style="list-style-type: none"> ▪ Target communities ▪ County governments ▪ Various partners
4. NGOs/CBOs/FBOs/lobby groups	<ul style="list-style-type: none"> ▪ State of resilience of target communities ▪ Drought early warning information ▪ Food security assessments ▪ DRM and CCA investment information ▪ DRM and CCA coordination structures 	<ul style="list-style-type: none"> ▪ National Drought Management Authority
	<ul style="list-style-type: none"> ▪ Lessons learnt and best practices 	<ul style="list-style-type: none"> ▪ Target communities ▪ County governments ▪ Various partners

Target stakeholders	Information needs	Information source
5. Target communities	<ul style="list-style-type: none"> ▪ Drought early warning information ▪ Food security assessments 	<ul style="list-style-type: none"> ▪ National Drought Management Authority
	<ul style="list-style-type: none"> ▪ Weather information 	Kenya Meteorological Department
	<ul style="list-style-type: none"> ▪ Lessons learnt and best practices 	County governments
6. Private sector	<ul style="list-style-type: none"> ▪ State of resilience of target communities ▪ DRM and CCA investment information 	National Drought Management Authority
7. Media	<ul style="list-style-type: none"> ▪ Drought early warning information ▪ Food security assessments 	<ul style="list-style-type: none"> ▪ National Drought Management Authority
	<ul style="list-style-type: none"> ▪ Weather information 	Kenya Meteorological Department
8. Research agencies	<ul style="list-style-type: none"> ▪ Drought early warning information ▪ Food security assessments ▪ Drought scenario building mechanism ▪ DRM and CCA investment information 	<ul style="list-style-type: none"> ▪ National Drought Management Authority
	<ul style="list-style-type: none"> ▪ Weather information 	Kenya Meteorological Department
9. Universities	<ul style="list-style-type: none"> ▪ Guideline for building community resilience ▪ Drought scenario building mechanism ▪ DRM and CCA investment information ▪ Capacity needs of NDMA 	National Drought Management Authority
	<ul style="list-style-type: none"> ▪ Lessons learnt and best practices 	<ul style="list-style-type: none"> ▪ National Drought Management Authority ▪ Target communities ▪ County governments
10. Sectoral working groups	<ul style="list-style-type: none"> ▪ DRM and CCA coordination structures 	<ul style="list-style-type: none"> ▪ National Drought Management Authority

Target stakeholders	Information needs	Information source
	<ul style="list-style-type: none"> Lessons learnt and best practices 	<ul style="list-style-type: none"> National Drought Management Authority Target communities County governments
11. Multilateral institutions	<ul style="list-style-type: none"> Drought early warning information Food security assessments Contingency Plans DRM and CCA investment information DRM and CCA coordination structures 	<ul style="list-style-type: none"> National Drought Management Authority
	<ul style="list-style-type: none"> Lessons learnt and best practices 	<ul style="list-style-type: none"> Target communities County governments
	<ul style="list-style-type: none"> Weather information 	Kenya Meteorological Department
12. Regulatory bodies	<ul style="list-style-type: none"> DRM and CCA investment information 	<ul style="list-style-type: none"> National Drought Management Authority
	<ul style="list-style-type: none"> Legal framework 	<ul style="list-style-type: none"> National Government
Council of Governors	<ul style="list-style-type: none"> Drought early warning information Food security assessments Response plans DRM and CCA investment information DRM and CCA coordination structures Mapping of partners (who is doing what, where and with which resources) 	<ul style="list-style-type: none"> National Drought Management Authority

3.0 Strategic Result Areas

This strategy document has six Strategic Result Areas (SRAs) that are grouped into core and enablers. The core SRAs are internal knowledge generation, knowledge sharing, and knowledge storage and retrieval. Enabling SRAs are capacity building, partnerships, and monitoring, evaluation and learning.

Table 2: Summary of strategic areas, strategies and outputs

Strategic Result Area	Strategies	Outputs
SRA 1: Internal knowledge generation	1.1 Identify DRM/CCA knowledge needs and sources.	1.1.1 Assessment of DRM/CCA knowledge needs and sources conducted.
	1.2 Develop/review data/information management guidelines.	1.2.1 Guideline for data/information management developed/reviewed.
	1.3 Strengthen internal knowledge generation.	1.3.1 Data/information capture tools developed/updated.
		1.3.2 Existing information synthesised. 1.3.3 DRM research proposals funded.
SRA 2: Knowledge sharing	2.1 Improve knowledge packaging.	2.1.1 Targeted electronic and print knowledge products produced.
	21.2 Strengthen knowledge sharing.	2.2.1 DRM and CCA communities of practice strengthened.
		2.2.2 Targeted explicit knowledge shared.
		2.2.3 Mentoring programme enhanced. 2.2.4 DRM and CCA models and peer learning centres developed.
SRA 3: Knowledge safety, storage and retrieval	3.1 Establish online knowledge storage and retrieval system.	3.1.1 KM & IS platform operationalised.
	3.2 Establish a knowledge centre.	3.2.1 County resource centres operationalised.
		3.2.2 NDMA registry restructured and revamped.
	3.3 Enhance access to knowledge products.	3.2.1 Inventory of information assets mapped.
	3.4 Strengthen business process continuity.	3.3.2 Data and information classified.
		3.3.3 Access rights and protocols developed.
		3.4.1 Backup and restore systems enhanced.
SRA 4: Capacity building for knowledge management	4.1 Strengthen NDMA KM function.	4.1.1 KM unit at HQ established.
	4.2 Develop internal skills for knowledge management.	4.1.2 NDMA board and senior staff sensitised on KM.
		4.1.3 Knowledge champions appointed.
		4.1.4 KM hardware and software infrastructure strengthened.
		4.2.1 KM training needs identified.
		4.2.2 KM training manual developed.
		4.2.3 KM skills enhanced.

Strategic Result Area	Strategies	Outputs
SRA 5: Partnerships	5.1 Support KM collaboration & partnerships 5.2 Develop a partnership guide	5.1.1 KM incorporated in programme/ project MoUs and agreements. 5.2.1 Partnership guide launched.
SRA 6: Monitoring, evaluation and learning	6.1 Monitor KM progress. 6.2 Evaluate implementation of the KM strategy. 6.3 Develop and strengthen learning and feedback mechanisms.	6.1.1 Progress reports submitted. 6.2.1 Midterm review for the implementation of the KM strategy conducted. 6.2.2 End term evaluation implementation of the KM strategy conducted. 6.3.1 DRM/CCA feedback forums strengthened. 6.3.2 Feedback mechanisms strengthened.

3.1 SRA 1: Internal Knowledge Generation

This SRA comprises four components: knowledge and needs identification, data collection, analysis and information synthesis. Knowledge and needs identification will involve profiling stakeholders on the basis of the knowledge they require to perform their intended tasks. The identified knowledge needs will guide data to be collected to generate new knowledge. Existing information will also be synthesized to establish new perspectives.

3.2 SRA 2: Knowledge Sharing

Knowledge sharing has two components namely packaging and sharing. Packaging will result in explicit knowledge products including reports, research papers, policy briefs, videos, photographs, guides, fact sheets, fliers and bulletins. The type of knowledge being shared and targeted users will determine the choice of any of the knowledge products or combination of products.

Packaged products will be shared using various channels and technologies. To share explicit knowledge, relevant technologies will include email, NDMA knowledge management and

information sharing (KM & IS) platform, printing and disseminating hard copies, social and mass media. To share tacit knowledge, learning forums will be used including workshops and conferences, social media, and mentorship programmes.

3.3 SRA 3: Knowledge Safety, Storage and Retrieval

Storage will focus on safekeeping of explicit knowledge products. Different storage formats will be used, guided by the type of knowledge being stored and information will be classified accordingly. Appropriate technology will be employed for storage and retrieval while ensuring information security. Use of integrated virtual and physical information repositories will enable knowledge seekers and users to access information easily and timely.

3.4 SRA 4: Capacity Building for Knowledge Management

Capacity for KM will involve human resources and appropriate tools. Human resources are the most important capacity in KM and their capacity will be continuously assessed. Building human capacity will involve sensitising NDMA

staff at all levels on KM. Moreover, knowledge champions will be identified and trained. Human resource capacity will also be built by hiring qualified staff or short-term consultants on need basis. This will ensure that NDMA has the necessary and sufficient skillset for implementation of a robust KM function.

Appropriate tools such as computers, working space and internet are necessary enablers for human resources to work efficiently. The tools will enhance efficiency in knowledge generation, packaging and sharing, storage and retrieval, and monitoring, evaluation and learning.

3.5 SRA 5: Partnerships

NDMA will develop and operationalize a partnership guide to strengthen existing partnerships and guide new ones. The main objective of building strong partnerships is to leverage their knowledge, among other resources.

3.6 SRA 6: Monitoring, Evaluation and Learning

The strategies in this document are integrated into NDMA programmes and will, therefore,

be monitored together on a continuous basis. However, indicators that measure the success of this strategy will be reported separately to enable tracking of its implementation. NDMA will conduct a midterm review and end term evaluation after five years of implementation of this strategy. The midterm review will enable NDMA to use lessons learnt for the two years of implementation and adjust the approach if need be. The end term evaluation will assess the extent to which planned results will have been achieved.

Outcomes of the review and evaluation processes will be used in developing the second generation of this strategic document. It is worth noting that learning will be a continuous activity through a feedback loop between knowledge sources and users and enabled by a functional knowledge management system (Figure 1). Feedback will be used to seek and provide clarification on already shared knowledge in order to improve the quality of new knowledge being generated and identify emerging knowledge needs and gaps that require filling.

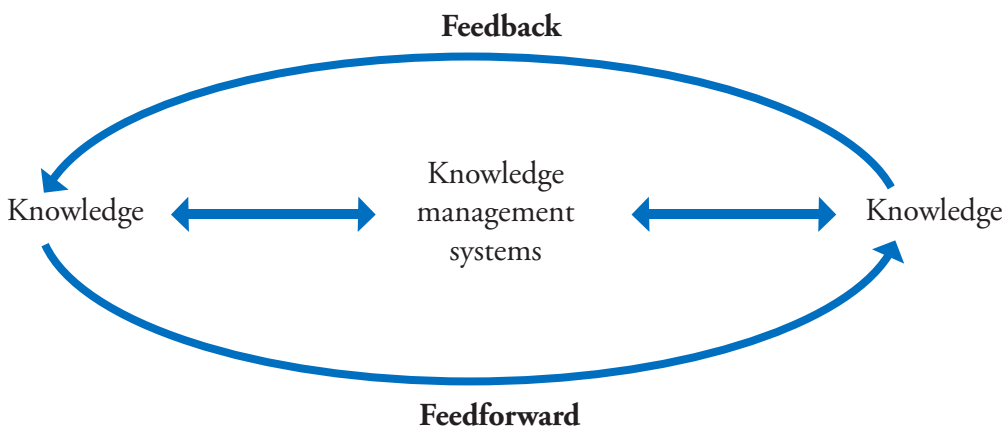


Figure 1: Knowledge management learning loop

4.0 Risk Management Framework

Risks identified in this document are categorised into four:

- 1) **Acquisition risks** relate to obtaining knowledge from internal and external sources. Custodians of knowledge may not release information when needed. Moreover, sources may share inaccurate information.
- 2) **Utilisation risks** originate from the fact that users of information may distort it, mostly due to limited understanding of the message. It is also possible for users to access NDMA data and information without consent. This makes it difficult to control the use of such illegally acquired data and information.
- 3) **Outsourcing risks** can emanate from using external skills (consultants) to perform core functions of NDMA. External skills are often short-term and may therefore, not have the time to understand fully the functions and processes of NDMA, leading to poor response to existing and emerging KM needs of the Authority.
- 4) **Continuity risks** relate to the inability of NDMA to sustain its knowledge assets, especially staff who are the custodians of tacit knowledge.

Table 3: Risk identification and mitigation matrix

Risk factor	Probability	Impact	Risk Mitigating Measures
Acquisition risks			
1. Barriers to knowledge acquisition - knowledge gatekeeping by knowledge custodians? Custodians of knowledge may not release information when needed.	Medium	High	<ul style="list-style-type: none"> ▪ Create awareness and buy-in among stakeholders ▪ Promote and sustain a knowledge sharing culture ▪ Integrate knowledge management in the ToRs of staff and in the scope of work of committees.
2. Unauthenticated information from external stakeholders	Medium	High	<ul style="list-style-type: none"> ▪ Develop knowledge authentication mechanisms <ol style="list-style-type: none"> i) Use published information ii) Strengthen internal review and validation processes
Utilisation risks			
3. Distortion of information by external stakeholders	High	High	<ul style="list-style-type: none"> ▪ Timely sharing of information. ▪ Present information in forms that are easy to comprehend

Risk factor	Probability	Impact	Risk Mitigating Measures
4. Unauthorised access and use of NDMA data and information	High	High	Develop a knowledge access and use protocol
Outsourcing risks			
5. Limited understanding of NDMA's knowledge needs – NDMA functions and processes by outsourced parties	High	High	<ul style="list-style-type: none"> Strengthen internal capacity in NDMA core functions <ul style="list-style-type: none"> i) Fill core positions ii) Train staff on core skills
Continuity risks			
6. Loss of tacit knowledge – if staff who are custodians of tacit knowledge leave NDMA	Low	High	<ul style="list-style-type: none"> Develop knowledge continuity plans. <ul style="list-style-type: none"> i) Succession plan ii) Team building plan
7. Lack of ownership of KM - personification of knowledge management	High	High	<ul style="list-style-type: none"> Create awareness and buy-in among internal and external stakeholders. Use knowledge champions as one of the implementation approaches Mainstream KM in NDMA operational plans
8. Disruption of systems	Medium	High	<ul style="list-style-type: none"> Strengthen capacity of system managers Develop business continuity plans and disaster recovery mechanism <ul style="list-style-type: none"> i) Succession plan ii) Off-line back up system



5.0 Implementation and Reporting

5.1 Implementation

Human resource, a supportive organizational environment, technology, and funds will enable the successful implementation of this strategy.

1.2.1 Human resource

NDMA functional directors, deputy directors and County Drought Coordinators (CDCs) will be the core implementers of this strategy. In addition to NDMA staff, partners and stakeholders will also be important either as owners of knowledge that NDMA needs or as users of NDMA knowledge. As a result, NDMA will strengthen its partnerships to benefit from the pool of resources controlled by partners.

1.2.2 Supportive organisational environment

Knowledge is 'sticky' and thus requires an environment that lubricates its flow. NDMA will continuously improve the working environment of staff. One of the ways of improving the KM environment is by sustaining a knowledge sharing culture. Knowledge share fairs and exchange programmes will therefore, be implemented and teamwork strengthened through team building activities. NDMA will

also strengthen communities of practice (CoP) to facilitate sharing of specialised knowledge. These initiatives will ensure sustainability of KM through increased synergy among teams.

1.2.3 Technology

Technology will improve the efficiency of managing knowledge. Relevant technologies will include computers, internet infrastructure, information systems and databases, and cameras.

1.2.4 Funding

NDMA anchors this strategy in its strategic plan and annual work plan for funding. As such, its implementation budget is drawn from NDMA's annual work plan. Funding gaps will be turned into proposals and presented to development partners for funding.

5.2 Reporting

Progress of the implementation of this strategic document will follow NDMA's reporting cycle. Progress will be reported quarterly against the planned deliverables and an annual report produced at the end of each financial year.

Appendices

Appendix One: Results Framework

Strategy	Outputs	KPIs	Baseline 2019- 2020	Target 2020- 2021	Target 2021- 2022	Target 2022- 2023	Target 2023- 2024	Target 2024- 2025	Respon- sible
Strategic Result Area 1: Internal Knowledge Generation									
1.1 Identify DRM/CCA knowl- edge needs and sources	1.1.1 Assessment of DRM/CCA knowledge needs and sources con- ducted	1. Inventory	0	1	0	1	0	0	DPP
1.2 Develop/review data/informa- tion manage- ment guideline	1.2.1 Guideline for data/information management de- veloped/ reviewed	2. Guideline	0	1	0	1	0	0	DDI
1.3 Strengthen internal knowl- edge generation	1.3.1 Data/information capture tools de- veloped/ updated	3. Tools set	1	0	1	0	0	1	DPME
	1.3.2 Existing informa- tion synthesized	4. No. of policy briefs	0	1	2	2	3	3	DPP
	1.3.3 DRM research proposals funded	5. No. of proposals funded	6	1	1	1	1	1	DTS

Strategy	Outputs	KPIs	Baseline 2019- 2020	Target 2020- 2021	Target 2021- 2022	Target 2022- 2023	Target 2023- 2024	Target 2024- 2025	Respon- sible
Strategic Result Area 2: Knowledge Sharing									
2.1 Improve knowl- edge packaging	2.1.1 Targeted elec- tronic and print knowledge prod- ucts produced	6. Fact sheets	0	1	1	1	1	1	DCC
		7. Annual reports	1	1	1	1	1	1	DPME
		8. Progress reports	1	4	4	4	4	4	DPME
		9. Mass media releases	2	2	4	4	4	4	DCS
	2.1.2 DRM and CCA communities of practice strength- ened	10. Documentaries	0	0	1	1	1	1	DCS
2.2 Strengthen knowledge sharing	2.2.1 Targeted explicit knowledge shared	11. No. of active participants in DRM/CCA blog	0	0	10	20	30	40	DICT
		12. No. of knowledge sharing forums	3	3	4	4	4	4	DPME
		13. No. of visits on NDMA platform	-	0	1000	1500	2000	2500	DICT
	2.2.2 Communities of practice strength- ened	14. No. of discus- sions topics	0	4	4	4	4	4	DTS
	2.2.3 Mentoring pro- gramme enhanced	15. Mentorship structure	0	1	0	1	0	0	DHR
		16. No. of persons mentored	0	0	5	5	5	5	DHR

Strategy	Outputs	KPIs	Baseline 2019- 2020	Target 2020- 2021	Target 2021- 2022	Target 2022- 2023	Target 2023- 2024	Target 2024- 2025	Respon- sible
	2.2.4 DRM and CCA models and learning centres developed	17. No. of DRM/CCA models/practices	0	0	1	2	2	3	DTS
		18. No. of DRM/CCA learning centres	0	1	1	2	2	3	DTS
		19. No. of exchange visits	0	0	1	1	2	2	DTS
		20. No. of replications	0	0	1	1	2	2	DTS
		Strategic Result Area 3: Knowledge Storage and Retrieval							
3.1	Establish online knowledge storage and retrieval system	3.1.1 KM & IS platform operationalized	0	1	0	0	0	0	DPME
		22. No. of staff sensitised	0	50	100	150	0	0	DHR
3.2	Establish a knowledge centre	23. Resource centre	0	0	1	0	0	0	DCS
		24. Knowledge champions	0	1	0	0	0	0	DCS
		25. Registry	1	1	0	0	0	0	DHR
3.3	Enhance access to knowledge products	26. Records officer revamped	0	0	1	0	0	0	DHR
		3.3.1 Data and information classified	0	0	1	0	0	0	DICT
		3.3.2 Access rights and protocols developed	0	0	1	0	1	0	DICT

Strategy	Outputs	KPIs	Baseline 2019- 2020	Target 2020- 2021	Target 2021- 2022	Target 2022- 2023	Target 2023- 2024	Target 2024- 2025	Respon- sible
3.4 Strengthen business process continuity	3.4.1 Backup and restore system enhanced	29. Off-line back up	0	1	0	0	0	0	DICT
Strategic Result Area 4: Capacity Building for Knowledge Management									
4.1 Strengthen Knowledge Management function	4.1.1 KM unit at HQ established	30. KM personnel	0	1	0	0	0	0	DPME
	4.1.2 NDMA board and senior staff sensitized on KM	31. No. of people sensitised	0	11	0	0	0	0	DPME
	4.1.3 Knowledge champions appointed	32. No. of HQ champions	0	10	0	0	0	0	DPME
		33. No. of county champions	0	23	0	0	0	0	DTS
	4.1.4 KM hardware and software infrastructure strengthened	34. Software	2	2	3	0	0	3	DICT
4.2 Develop internal skills for knowledge management skills		35. No. of professional cameras	1	1	23	1	0	0	DCS
	4.2.1 KM training needs identified	36. Needs report	0	1	0	1	0	0	DPP
	4.2.2 KM training manual developed	37. Manual	0	0	1	1	0	0	DPME
	4.2.3 KM skills enhanced	38. No. of staff trained on KM	52	0	50	100	50	50	DHR
		39. No. of staff retrained on KM	0	0	0	33	0	33	DHR

Strategy	Outputs	KPIs	Baseline 2019- 2020	Target 2020- 2021	Target 2021- 2022	Target 2022- 2023	Target 2023- 2024	Target 2024- 2025	Respon- sible
Strategic Result Area 5: Partnerships									
5.1	Develop a partnerships guide	5.1.1 Partnership's guide adopted and operational- ized	1	0	1	0	0	0	DCS
		5.1.2 Review the part- nerships guide		0	0	0	0	1	DCS
5.2	Support KM Collaborations & Partner- ships	5.2.1 KM incorporated in programme/ projects MoUs and agreements	5	5	6	7	8	9	DCS
Strategic Result Area 6: Monitoring, Evaluation and Learning									
6.1	Monitor KM progress	6.1.1 Progress reports submitted	0	4	4	4	4	4	DPP
6.2	Evaluate imple- mentation of the KM strategy	6.2.1 Midterm review conducted	0	1	1	1	1	1	DPP
		6.2.2 End term evalua- tion conducted	0	0	0	1	0	0	DPME
6.3	Develop and strengthen learning and feedback mech- anisms	6.3.1 DRM/CCA feedback forums strengthened	1	1	1	1	1	1	DTS
		6.3.2 Feedback mechanisms strengthened	0	0	1	0	1	0	DCS

Appendix Two: Notes to the implementation matrix

KPI	NOTES
3: Tools set	The set should have baseline, M & E; drought early warning, and Food Security Assessment tools among others on need basis.
8: Progress report	Work plan progress report.
12: # of knowledge sharing forums	A forum to share Kenya Food Security report, Annual report, work plan report, any other major report.
14: # of discussions topics	At least one topic per quarter.
16: # of persons mentored	Pilot with five departments at the HQ, one per department.
31: # of people sensitised	Nine members of the board, three directors, ten managers.
34: Software	Software for data collection, analysis and graphic design.
35: Professional Camera	Three for HQ and 23 for counties.
38: # of staff trained on KM	23 county data analysts, 2 satellite officers, 25 county information officers, 2 officers from the HQ. Eventually, target is all the 299 NDMA staff over 5 years.
39: # of staff retrained on KM	23 county champions, 10 champions (one per department).
40: # of MoUs and agreements with KM component	At baseline the agreements that had KM component were Drought Risk Management and Coordination, SDRM, Adaptation Consortium, Hunger Safety Net Programme, SFS.



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