



WORLD
METEOROLOGICAL
ORGANIZATION

WMO Integrated Strategic Planning Handbook



WMO-No. 1180

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ISBN 978-92-63-11180-7

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WMO Integrated Strategic Planning Handbook

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FOREWORD

The World Meteorological Organization (WMO) adopted strategic planning in 2008 to guide the implementation of its Programme activities and projects and achieve the results agreed upon for the benefit of its Members. The focus over the years has been to enhance the capacity of National Meteorological and Hydrological Services (NMHSs), who play a key role in the implementation of WMO Programmes, to provide high-quality and efficient weather, climate, hydrological and related environmental services for the benefit of the citizens they serve. However, there are still significant gaps in the capacities of NMHSs to deliver services. These gaps can only be reduced if more investments are made to improve such services. Furthermore, targeted investments can only be made through a clearly defined strategic direction. It is in view of this need that WMO has decided to develop integrated strategic planning guidelines to assist NMHSs in strengthening their capacity in strategic planning so as to initiate or improve their national strategic plans.

This *WMO Integrated Strategic Planning Handbook* provides a step-by-step approach to conduct strategic planning using a strategic planning template. It is expected to help NMHSs to focus their activities and attract more investments by governments, partners and funding agencies in order to improve operational efficiency and effectiveness in delivering high-quality meteorological and hydrological services. The Handbook is presented in three sections which define the purpose of strategic planning and the phases and various models used, among other elements of a strategic planning process.

I am confident that this Handbook will be helpful to NMHSs interested in initiating or improving their strategic planning processes, and I am committed to provide appropriate support to NMHSs to enable them to develop or improve their national strategic plans.



(Petteri Taalas)
Secretary-General

1. INTRODUCTION

The *WMO Integrated Strategic Planning Handbook* provides a step-by-step approach to conduct strategic planning.

Governments, institutions and citizens worldwide are increasingly demanding more useful and reliable weather, climate, water and related environmental information products and services. The World Meteorological Organization and the National Meteorological and Hydrological Services of its Members play a critical role in the provision of these products and services. Indeed, the services provided by NMHSs are of significant benefit for decision-makers addressing global, regional and national challenges in a number of different spheres and sectors.

According to the WMO Strategic Plan 2016–2019, the high demand for quality and timely weather, climate, water and related environmental information products and services is also fuelling growth in a number of private-sector entities which also provide value-added products and services. As such, WMO and NMHSs are exploring methods to improve efficiencies in the sector through regional collaboration and cooperation, and the forging of strategic and cost-effective partnerships among themselves, with other institutions and private-sector service providers. This is expected to improve the capacity of NMHSs to deliver support in meeting the expectations of governments to save lives, reduce damages, contribute to economic growth and support environmental stewardship.

1.1 Purpose of the Handbook

The purpose of this Handbook is to assist NMHSs to strengthen their capacity in strategic planning, which would be helpful in attracting investments to improve operational efficiency and effectiveness in delivering high-quality meteorological and hydrological services to citizens all over the world. This document is specifically intended for NMHSs interested in initiating or improving their strategic planning processes. This resource can be used as a capacity strengthening tool to help senior management and staff better understand the why and how to do strategic planning, and then guide the planning team through the process.

This Handbook is to be used in conjunction with the WMO Strategic Planning Template that represents a basic strategic plan model which can be easily completed by an NMHS.

1.2 Structure of the document

This document consists of three sections, summarized as follows:

- Section 1 provides the introduction and context for the document.
- Section 2 provides general information on what strategic planning is, why it is done and who normally does it. This section also provides an overview of the various strategic planning models and the steps involved.
- Section 3 details a step-by-step process of conducting a strategic planning exercise, highlighting tips to make the process more efficient and effective.
- A set of annexes provides resources for strategic planning, including templates, checklists and samples containing critical information to aid the process.

2. WHAT IS STRATEGIC PLANNING?

This section presents an overview of strategic planning and the rationale behind the conduct of this process by large and small organizations and across various sectors. Additionally, it provides a summary of the main models of strategic planning.

2.1 Strategic planning defined

Strategic planning is an important aspect of governance and strategic management. The research shows that over the past five decades, more organizations have been engaging in strategic planning as they seek to, inter alia: ensure that stakeholders, in particular staff, are working towards common goals; establish agreement around intended outcomes/results; assess and adjust the organization's direction in response to a changing environment; set priorities; strengthen operations and focus on value for money.

There are numerous definitions of strategic planning. Strategic planning is integral to an organization in terms of fulfilling its mission and to ensure that, through effective preparation, its programmes and support activities are best positioned to achieve its long-term goals and objectives. Strategic planning will assist the management and staff in setting the organization's long-term directions and policies and in making decisions on near-term priorities and resource allocations. It will assist those who develop and implement programmes by providing guidance for multi-year programme plans and budgets.

The Balanced Scorecard Institute describes strategic planning as: "a disciplined effort that produces fundamental decisions and actions that shape and guide what an organization is, who it serves, what it does, and why it does it, with a focus on the future". The Institute further notes that "[e]ffective strategic planning articulates not only where an organization is going and the actions needed to make progress, but also how it will know if it is successful" (Balanced Scorecard Institute, 2016).

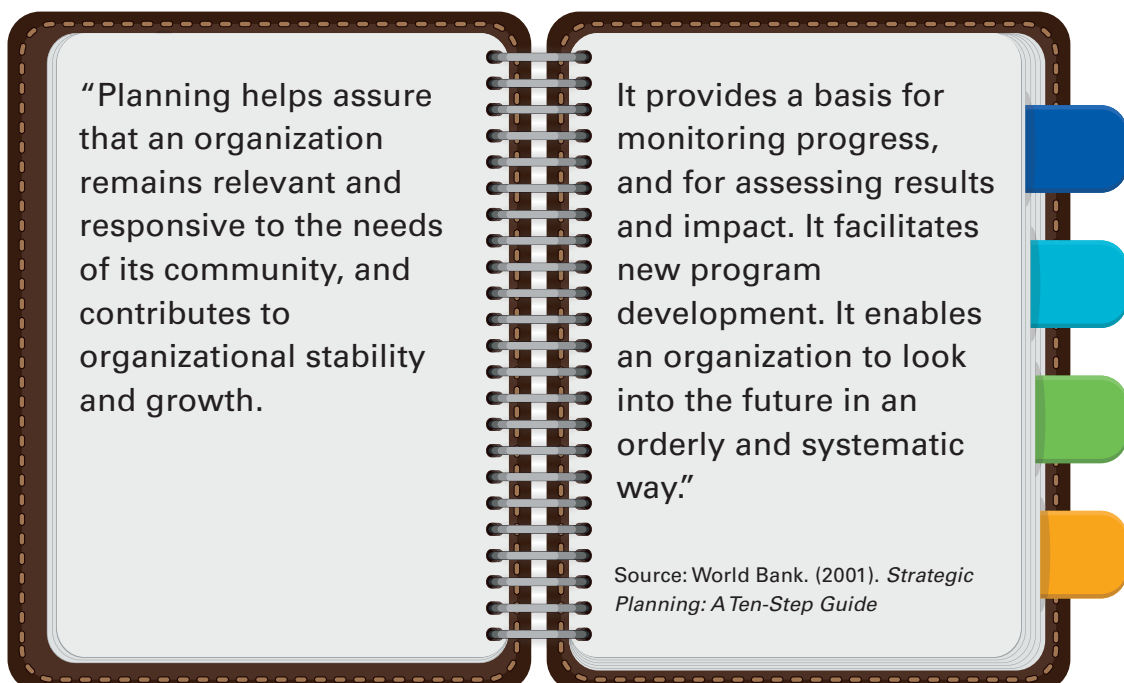


Figure 1. Definition of strategic planning

The World Bank (2001) *Strategic Planning: A Ten-step Guide* remains relevant and provides that strategic planning is a “process by which leaders of an organization determine *what* it intends to be in the future and *how* it will get there”. It outlines a process that includes the development of a vision for the organization’s future and the determination of the necessary priorities, procedures and operations (strategies) to achieve the vision. Included also are “measurable goals which are realistic and attainable, but also challenging; emphasis is on long-term goals and strategies, rather than short-term (such as annual) objectives”.

Strategic planning is a collaborative process that brings together diverse stakeholders to reimagine a bolder future for their organization. “It’s a way for organizations to figure out where they want to go, identify the hurdles that stand in the way of getting there, and then engage in the co-creation of strategies to determine how best to overcome, circumvent, or mitigate those hurdles” (Third Plateau, 2015).

At the end of the day, strategic planning responds to the following four questions:

- Where are we now?
- Where do we want to be?
- How do we get there?
- How do we gauge progress?

These four questions are critical because they are the basis for preparing the content of the strategic plan.

The main output of the strategic planning process is the strategic plan. A strategic plan is a document used to communicate within the organization and to its stakeholders the organization’s goals, the actions needed to achieve those goals and all of the other critical elements developed during the planning exercise. The process that an organization undertakes to develop a strategic plan is paramount to the actual plan that is developed. The key aspect of strategic planning is the communication involved between and among key stakeholders within the organization to develop and implement a strategic plan.

2.2 Rationale for strategic planning

Why do strategic planning? The benefits of strategic planning are many and include:

- (a) Agreement on a common purpose (among internal and external stakeholders in the strategic planning process);
- (b) Building consensus around organizational goals, objectives and priorities;
- (c) Increased effectiveness through implementation of the organization’s mandate and mission;
- (d) Increased efficiency through better results achieved with the use of less resources;
- (e) Providing the basis for resource allocations and ensuring value for money;
- (f) Better understanding of and ability to predict and adjust to changing circumstances;
- (g) Improved decision-making;
- (h) Improved organizational abilities;
- (i) Improved communication through coordination and cooperation;
- (j) Development of a higher level of awareness and a better understanding of the operational environment;
- (k) Enhanced transparency and accountability through the establishment of monitoring, evaluation and reporting frameworks that assess the organization’s performance (results).

A good strategic plan should:

- Address critical performance issues.
- Be visionary – convey a desired future end state.
- Be flexible – allow and accommodate change.
- Guide decision-making at all levels – operational, tactical and individual.

2.3 Overview of strategic planning models

There are various models of strategic planning and numerous iterations of these models. The strategic planning process that is used is contingent upon the type and size of the organization and the people involved. The model or variation of the model that is selected is largely based on the discretion of the stakeholders involved in the strategic planning process.

2.3.1 *Basic Strategic Planning*

The Basic Strategic Planning model is often used by organizations that are small, busy and have limited experience in strategic planning. It can be used at the initial stages of adopting strategic planning to enable an organization to gain experience in the strategic planning processes. This approach requires top management to provide leadership.

This model uses the following steps:

- (a) Define or update your mission, vision and values;
- (b) Assess the external and internal factors and identify the strengths, weaknesses, opportunities and threats (SWOT) of your organization;
- (c) Articulate the organization's goals;
- (d) Identify specific approaches, tactics or strategies to be implemented to achieve the goals or expected results;
- (e) Document the mission, vision, goals or expected results, and strategies into a strategic plan;
- (f) Develop an operating plan or action plan to translate the strategies into the specific actions that will be implemented to achieve the goals or expected results;
- (g) Develop a monitoring, evaluation and reporting system.

2.3.2 *Issue-based (or Goal-based) Planning*

The Issue-based (or Goal-based) Planning model is considered to be more comprehensive and more effective than the Basic Strategic Planning model. Organizations that have some amount of experience in strategic planning are likely to use this model.

The following steps represent the relevant activities associated with this model:

- (a) Define or update your mission, vision and values;
- (b) Assess the external and internal factors and identify the SWOT of your organization;
- (c) Conduct a strategic analysis to identify and prioritize major issues to be addressed;
- (d) Define your goals or expected results to be achieved in addressing those issues so as to realize the vision within your mission;
- (e) Select appropriate strategies to address the issues so as to achieve your goals or expected results;
- (f) Document the mission, vision, issues, goals or expected results, and strategies into a strategic plan;
- (g) Develop operating or action plans to translate strategies into specific actions, indicating specific timelines and assigning responsibilities;
- (h) Develop a budget;
- (i) Develop a monitoring, evaluation and reporting system.

2.3.3 *Alignment model*

The thinking behind this model is to align the resources with the mission to ensure effective operations. It is relevant for fine-tuning the strategies if they are not working. It can also be appropriate for an organization experiencing extensive internal inefficiencies.

The steps in this model include the following:

- (a) Define or update your mission, vision and values;
- (b) Assess the external and internal factors and identify the SWOT of your organization;
- (c) Identify what is working well and what needs adjustment;
- (d) Identify how these adjustments should be made;
- (e) Include the adjustments as strategies in the strategic plan;
- (f) Develop operating plans or action plans translating strategies into specific actions; indicate specific timelines and assign responsibilities;
- (g) Develop a budget;
- (h) Develop a monitoring, evaluation and reporting system.

2.3.4 ***Scenario Planning model***

The scenario approach provides a process for thinking clearly about the complex factors that influence decision-making. It provides the management with a common language to talk about the future by answering several “what if” questions. Based on the discussions and answers to those questions, stories or scenarios of the future that need to be addressed are developed. This model can be combined with other models to support strategic thinking and identify strategic issues and goals.

The steps involved in carrying out this model are:

- (a) Define or update your mission, vision and values;
- (b) Select several external forces and imagine related changes which might influence the organization, such as a change in regulations or demographic changes. Scanning the newspaper for key headlines often suggests potential changes that might affect the organization;
- (c) Select the most likely external changes to affect the organization;
- (d) Discuss three different future scenarios for the organization (including best case, worst case, and ok/reasonable case) associated with each change. It is advisable to review the worst-case scenario to trigger strong motivation to change within the organization;
- (e) Suggest what the organization might do or potential strategies to respond to the three categories of scenarios;
- (f) Consider strategies that should be implemented to respond to possible external changes;
- (g) Identify the most reasonable strategies the organization should implement to respond to the changes;
- (h) Develop operating plans or action plans translating strategies into specific actions; indicate specific timelines and assign responsibilities;
- (i) Develop a budget;
- (j) Monitor, evaluate and report performance progress.

2.3.5 ***Organic (Self-organizing) Planning***

This is a non-linear strategic planning model that uses values as the centre for dialoguing and is comparable to a process of developing an organism. The organization reflects on its operating systems and processes to identify what needs to be aligned with the strategic direction.

The steps include:

- (a) Define or update your mission, vision and values;
- (b) Conduct regular discussions to identify the systems or processes needed to realize the vision and what needs to be done about those processes;
- (c) Keep in mind that this approach is a continuous process, without an end, and that each group has to learn to conduct its own values clarification, dialogue/reflection and process updates;

- (d) Be patient and focus more on learning than on the method. Each group should reflect on how the strategic plan will be communicated to the stakeholders, develop operating plans or action plans that translate strategies into specific actions, indicate specific timelines and assign responsibilities;
- (e) Develop a budget;
- (f) Develop a monitoring, evaluation and reporting system.

2.3.6 ***Real-time Strategic Planning***

Real-time Strategic Planning is similar to the organic model of planning. This model is particularly suited for those who believe that the rapidly changing and dynamic nature of organizations make long-term and detailed planning irrelevant. These experts might assert that planning for an organization should be done continuously, or in real time. The real-time planning model is best suited to organizations with very rapidly changing external environments.

The steps involved in this model are:

- (a) Define or update your mission, vision and values;
- (b) Assign planners to research the external environment and, as a result, suggest a list of opportunities and threats facing the organization;
- (c) Present the list to the Board and other members of the organization for strategic thinking and discussions;
- (d) Soon after (perhaps during the next month) assign planners to evaluate the internal workings of the organization and, as a result, suggest a list of strengths and weaknesses in the organization;
- (e) Present this list to the Board and other members of the organization for strategic thinking and discussions, perhaps using a SWOT analysis to analyse all four elements;
- (f) Repeat steps (b) to (e) regularly, for example, every six months or year, and document the results in a strategic plan.

2.3.7 ***Theory of Change model***

An important component of the results-based approach that WMO embraces is the Theory of Change (TOC). In practical terms, results-based management (RBM) means developing a TOC for a specific intervention or an organization for a given time frame. TOC is a causal model. It defines all building blocks required to bring about a given long-term goal. It explains *how* and *why* the desired change is expected to come about. This set of connected building blocks shows a pathway of change or a change framework, which clearly explains the causal link between different levels of results. Assumptions about how these changes might happen are critical to the TOC model.

A TOC is an excellent basis for a strategic plan because it works methodically through the path, from the need you are trying to address to the change you want to achieve. A logic model is a tool that helps to express an organization's TOC.

This is a robust and flexible model that, once developed, can be used to plan, evaluate and communicate the change or results journey for the organization's work.

Articulating the TOC as strategy includes the following steps:

- (a) Define or update your mission, vision and values;
- (b) Analyse the context/identify the problem/needs assessment/SWOT;
- (c) Identify goals;
- (d) Develop the logic model/results chain;
- (e) Plan for monitoring and evaluation;
- (f) Develop operational/action plan;
- (g) Develop results-based budget.

2.3.8 **Balanced Scorecard model**

The Balanced Scorecard (BSC) was introduced to the business world more than 20 years ago and is still in use today in varied forms. The BSC was designed to measure the performance of an organization in four perspectives, namely financial, customer, internal business process, and learning and growth.

- The **customer perspective** – this refers to customer concerns about time, quality, performance, service and cost.
- The **internal business process perspective** – this refers to those business processes that have the greatest impact on customer satisfaction.
- The **innovation and learning perspective** – this refers to innovation, as well as improvements to existing products and processes.
- The **financial perspective** – this refers to the extent to which the company strategy contributes to profitability, growth and shareholder value.

For each perspective, the objectives, measures, targets and initiatives are defined as relates to the vision, mission and strategy to enable performance monitoring.

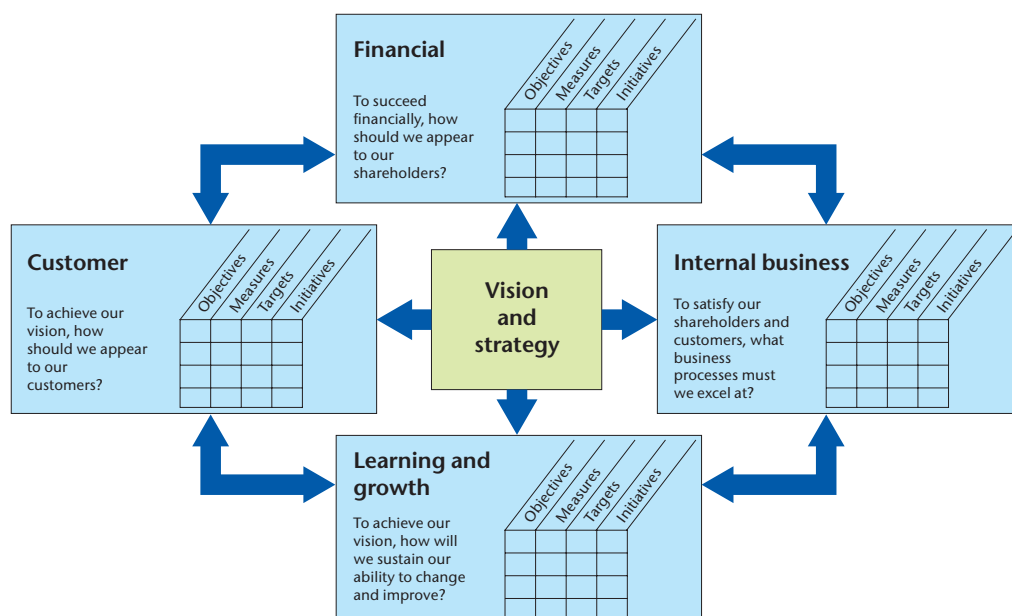
This model is used extensively in business and industry, government, and non-profit organizations worldwide to align business activities with the vision and strategy of the organization; to improve internal and external communications; and to monitor organization performance against strategic goals.

It has evolved into a second-generation strategic management system due to its widespread use.

The BSC model as strategy includes the following steps:

- Define or update your mission, vision and values;
- Conduct a SWOT analysis;
- Build a strategy map;
- Define the strategic themes;
- Identify strategic objectives and performance indicators.

See Annex 1 for an example of a scorecard tailored to an NMHS.



Adapted from: Kaplan and Norton. (1996). *The Balanced Scorecard*. Harvard Business School Press: 9.

Figure 2. Template of Balanced Scorecard

2.4 Strategic planning phases

Strategic planning is a cycle. The cycle represents a continuous process in which each stage provides the foundation for the next. Typically, the strategic planning cycle comprises at least three phases. Those who refer to three phases identify them as *diagnosis*, *design* and *implementation*. Operational planning, and monitoring and evaluation (M&E) are often considered as part of the implementation phase.

Given the importance that this Handbook places on M&E and the fact that M&E answers one of the fundamental questions of strategic planning – “How do we gauge progress?” – it is treated as a phase in its own right.

This Handbook therefore sets out six strategic planning phases as follows:

- (a) **Preparatory phase:** establishing the strategic planning process;
- (b) **Assessment and analysis phase:** looking inside and outside the organization;
- (c) **Design/define phase:** developing your strategic plan;
- (d) **Implementation phase:** making the strategic plan a reality;
- (e) **Performance measurement phase;**
- (f) **Review and modify phase.**

Preparatory phase: Adequate and appropriate preparation is important if the strategic planning process is to be efficient and the end product effective. This phase involves the pre-planning course of action to be undertaken ahead of the actual strategic planning process. The justification for embarking on the strategic planning process is also considered during this phase.

The **assessment and analysis phase** involves examining the current and past state of an organization from various perspectives to understand the current definition of its business, the trends, and factors that may influence its future. In this phase, factors that influence performance are identified and documented. It provides the information required to design a strategic plan.

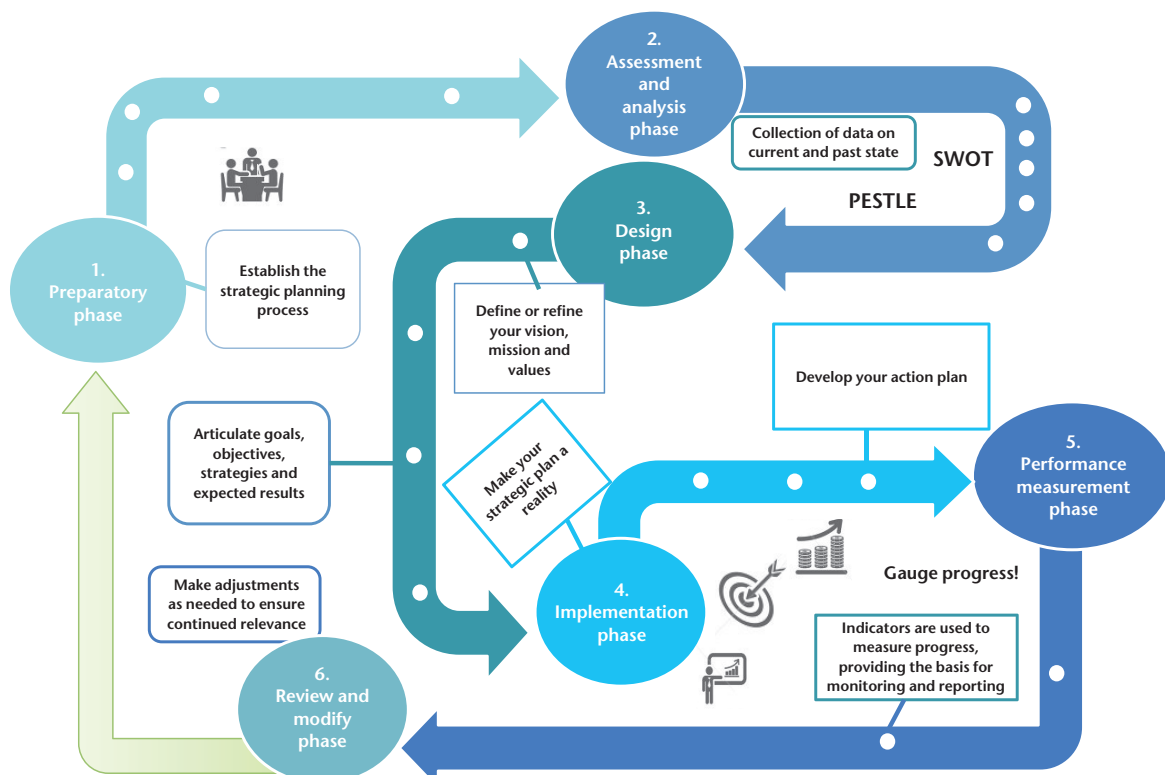


Figure 3. Strategic planning phases

During this phase, several tools can be used to garner the required information. Some of these include SWOT, 3C's, Porter's five forces, 7S's and PESTLE.

The ***design/define phase***, otherwise called the strategy formulation phase, includes defining or updating the organization's vision, mission and values statements, identifying organizational goals, and identifying strategies and expected results.

The ***implementation phase*** is focused on executing the strategic plan. It includes the development of an action plan or operational plan.

Performance measurement phase: The strategic plan will be of no use if you do not measure and report on it. Performance measures play a vital role within a strategic plan in determining how well the organization is progressing towards achievement of each objective or expected result.

Review and modify phase: The world today is dynamic and ever changing; this phase is to ensure that the plan is adjusted as necessary so that it remains relevant.

3. GUIDE TO INTEGRATED STRATEGIC PLANNING

“If you fail to plan, then you plan to fail.” – Harvey Mackay

No one says strategic planning is easy! In fact, the strategic planning process can be quite overwhelming or even intimidating. Every organization is different and there is no set process or template. It is therefore overconfident and unrealistic to say, this is “how to” do strategic planning in every situation. Nonetheless, if you break it down into phases, strategic planning becomes easier to tackle. This guideline document emphasizes the TOC or RBM as strategy.

The following sections provide guidance on how to conduct an integrated strategic planning process in line with the phases described earlier.

3.1 Preparatory phase

Once you have embarked on a strategic planning process, you will have already answered the question “why do we need a strategic planning process?”

Now that there is consensus that a strategic planning process is required or necessary, the next step is to prepare.

Here are some of the important preparatory steps to take:

- (a) Affirm the rationale and purpose of the process – Do we need a strategic planning process?
- (b) Ensure that there is widespread commitment to and ownership of the process – How much understanding of and commitment to the process is there?
- (c) Identify participants and assign roles and responsibilities – Who will be involved?
- (d) Design the process, including information-gathering and consultation methods, and the models and tools used for analysis, the timeline and budget – How do we want to manage the strategic planning process? Do we need an external facilitator? How long will it take?

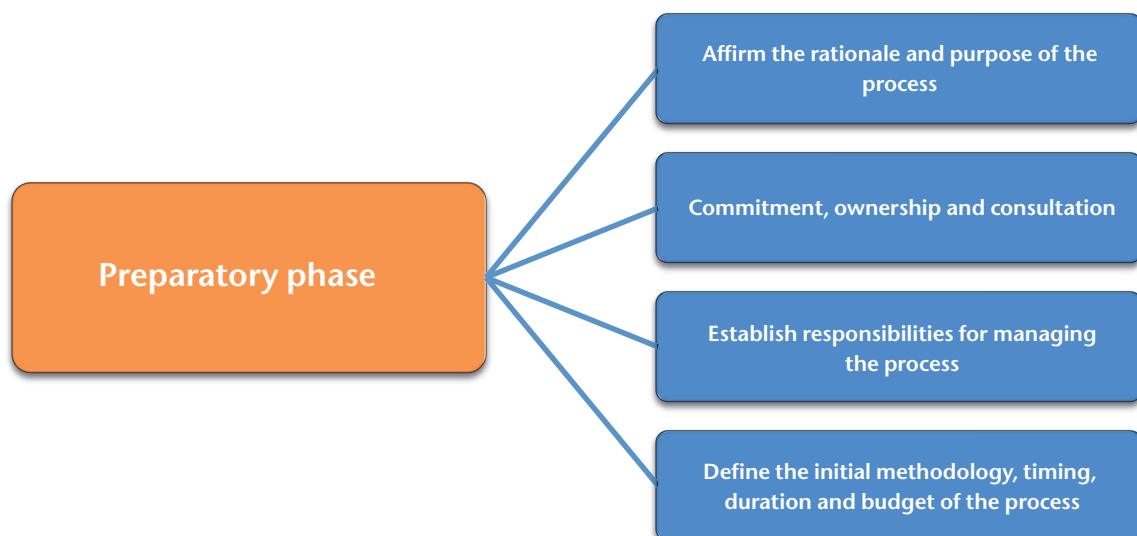


Figure 4. Steps in the preparatory phase

Critical success factors

In order to meaningfully engage in a strategic planning process and realize the benefits, you will need:

- An identified champion of the process and leadership support
- Ability to direct time, energy, and brain capacity to the process
- Open mindedness and willingness to change with a focus on outcomes/impact
- Eagerness to be transparent and collaborative
- A team mentality that strategic planning is an investment, and a commitment to persevere through the inevitable challenges with determination
- Appreciation that the process is just as valuable as the end product
- Regular communication on the development of the process

3.2 Assessment and analysis phase

3.2.1 Conduct an environmental scan

In order to develop a meaningful strategic plan for the future, an accurate assessment of the NMHS's internal and external working environments must be made by the strategic planning team. The necessary information can come from statistics, progress reports, evaluations and other documents. Consultation processes with internal and external stakeholders should also inform the analysis. While analysis should happen throughout every step of the planning process, the emphasis on analysis during this step is particularly strong. The planning team may organize public surveys, questionnaires, interviews, focus groups and plenary discussions to achieve this. A confidential interview process with stakeholders is another option that can be used to identify the real issues and involve those interviewed in the planning process.

At minimum, the environmental scan should: foster the participation of all stakeholders (the planning team and other NMHS staff as well as programme beneficiaries); allow room for creativity, to plan the changes needed to improve the situation; and gather both qualitative and quantitative data, as well as objective and subjective information.

The environmental scan is done by gathering facts and analysing trends that give an objective picture of where the organization stands in the "world" of this business and the external and internal pressures and factors likely to affect its future and its achievement of the general goals and objectives.

Specialists, staff and key subordinate managers are normally asked to collect and analyse much of this information.

Key questions for external assessment and analysis:

- What are the resources, capacities and weaknesses of external actors in helping to address vulnerability or alter these trends?
- What are the main threats to the NMHS and its work?
- What are the main opportunities that could benefit the NMHS and its work?
- Stakeholders – Who are our stakeholders?
- Which other organizations are working to provide the same services/products as we do?
- Which other organizations have an interest in and/or influence on our work?
- What are our stakeholders' priorities, interests and problems?
- How is our relationship with each stakeholder?
- External trends – What are the social, political, economic and environmental trends that may affect our work in the future? Which can we influence? Which can we not influence?

3.2.1.1 Tools

The environmental scan (or situational analysis) requires tools to summarize, compare, prioritize and organize data. Many different tools can be used; however, it must be borne in mind that a tool is only useful if used at the right time and in the right way. The same tool can also be used at different times.

This Handbook highlights three tools to analyse the situation: SWOT analysis, PESTLE analysis and stakeholder analysis.

3.2.1.1.1 SWOT analysis

The single most familiar tool for developing strategy is the SWOT analysis (the letters represent strengths, weaknesses, opportunities and threats). Part of understanding “who we are and where we are” is an assessment of the organization’s internal strengths and weaknesses and its external opportunities and threats. The SWOT analysis provides this assessment. Strengths and weaknesses can be defined as inward-looking, while opportunities and threats as often outward-looking.

See the filled SWOT template in Annex 2.

| | Helpful | Harmful |
|--|--|---|
| Internal (Attributes of the organization that are within your control) | <p>Strengths (List here anything you can think of that makes your organization amazing! What can you rely on to deliver your services?)</p> <ul style="list-style-type: none"> Strengths are the things that you do well Strengths can be tangible, for example: loyal customers, very high-quality products, excellent financial condition Strengths can be intangible, for example: good leadership, strategic insights, customer intelligence, solid reputation | <p>Weaknesses (What is not quite the way it should be yet? What is missing?)</p> <ul style="list-style-type: none"> Weaknesses are those things that prevent you from doing what you really need to do Examples of weaknesses include poor leadership, unskilled workforce, insufficient resources, poor product quality and outdated technologies |
| External (Attributes of the environment/society that are outside of your control) | <p>Opportunities (List here any potential opportunities to really push your organization forward that you have not yet taken advantage of.)</p> <ul style="list-style-type: none"> Opportunities are potential areas for growth and higher performance Examples of opportunities include favourable economic conditions, clients’ dissatisfaction with competitor’s products and services, availability of multiple funding sources for research and development | <p>Threats (List here anything that might get in your way of achieving your goals – such as funding you are not sure of yet, relationships that might break down, etc.)</p> <ul style="list-style-type: none"> Threats refer to challenges confronting the organization that are external in nature Examples of threats include global economic crises, bad press coverage, shifts in consumer behaviour, influx of substitute products, new regulations |

Figure 5. SWOT analysis template

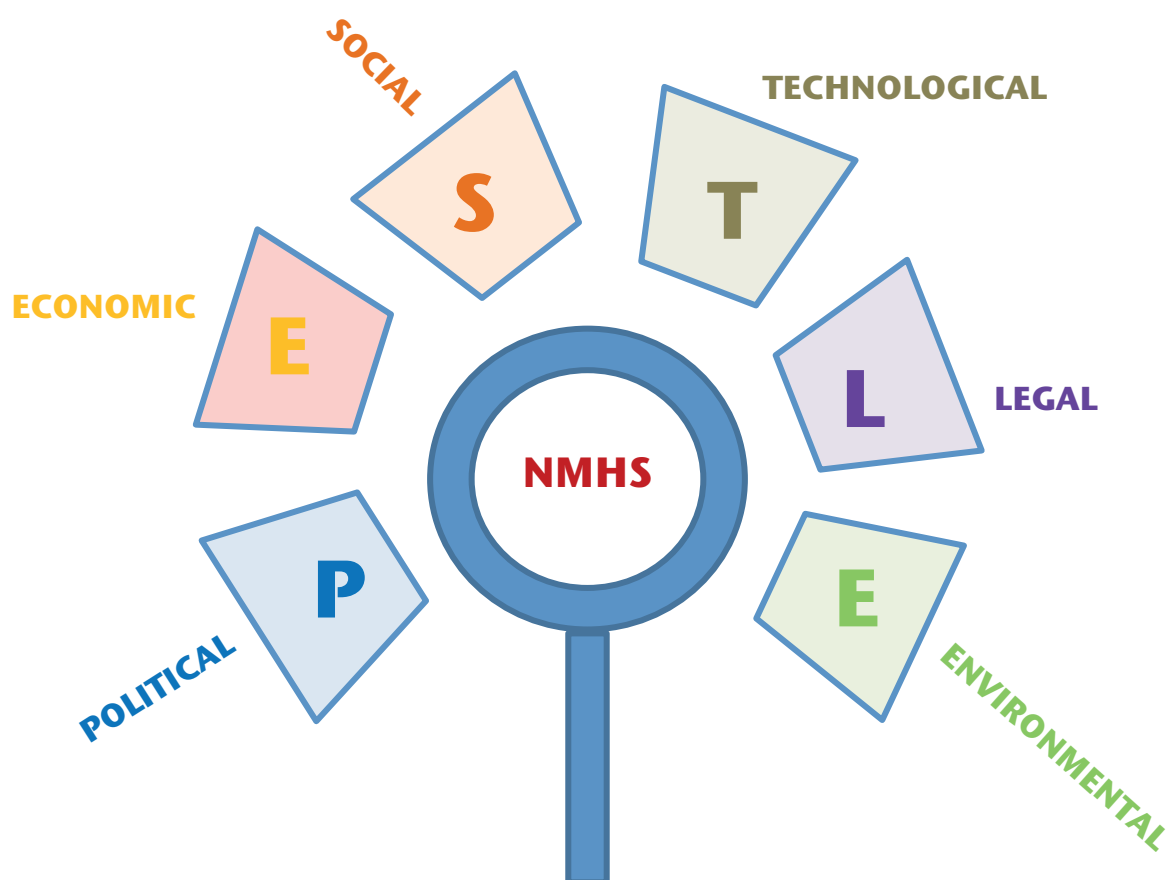


Figure 6. PESTLE revealed!

3.2.1.1.2 *PESTLE analysis*

This is used to provide an understanding of the organization's external environment. PESTLE stands for political, economic, sociocultural, technological, legal and environmental (ecological) factors. This analysis is usually conducted during a stakeholder workshop utilizing outputs from research on the six factors highlighted. The PESTLE analysis is regarded as complementary to a SWOT analysis in that it expands on the analysis of external context by looking in detail at specific types of issues that frequently have an impact on the implementation of projects/initiatives. It is usually recommended to use both during the strategic planning process.

Please use the following template as a guide when collecting information for the PESTLE analysis. See filled PESTLE template in Annex 2.

Table 1. Elements for consideration during a PESTLE analysis

| PESTLE ANALYSIS | |
|---|---|
| Political factors <ul style="list-style-type: none"> • Government stability and likely changes • Bureaucracy • Corruption level • Tax policy (rates and incentives) • Import restrictions (quality and quantity) • Competition regulation • Government involvement in trade unions and agreements • Environmental law • Education law • Antitrust law • Discrimination law • Copyright, patents/intellectual property law • Consumer protection and e-commerce • Employment law • Health and safety law • Data protection law • Laws regulating environment pollution | Economic factors <ul style="list-style-type: none"> • Growth rates • Inflation rate • Interest rates • Exchange rates • Unemployment trends • Labour costs • Stage of business cycle • Credit availability • Trade flows and patterns • Level of consumers' disposable income • Monetary policies • Fiscal policies • Price fluctuations • Stock market trends • Weather • Climate change • Natural disasters |
| Sociocultural factors <ul style="list-style-type: none"> • Health consciousness • Education level • Poverty level • Attitudes towards security and safety • Attitudes towards product quality and customer service • Attitudes towards green or ecological products • Attitudes towards and support for renewable energy • Population growth rate • Housing quality • Squatting • Sustainable development goals | Technological factors <ul style="list-style-type: none"> • Basic infrastructure level • Rate of technological change • Spending on research and development • Technology incentives • Legislation regarding technology • Technology level in organization • Communication infrastructure • Access to newest technology • Internet infrastructure and penetration |
| Legal factors <ul style="list-style-type: none"> • Antitrust law • Discrimination law • Copyright, patents/intellectual property law • Consumer protection and e-commerce • Employment law • Health and safety law • Data protection | Environmental (ecological) factors <ul style="list-style-type: none"> • Weather • Climate change • Disaster management • Laws regulating environment pollution • Air and water pollution • Recycling • Waste management • Attitudes towards green or ecological products • Endangered species • Attitudes towards and support for renewable energy |

3.2.1.1.3 Stakeholders assessment

This step includes a discussion about who the NMHS serves and in what ways. It also includes an assessment of the needs of the stakeholders that the organization must address. This section looks at the competition or collaborators, that is, who else is addressing these needs or problems? It also looks at who the NMHS should be serving and its comparative advantage.

Table 2. Stakeholder analysis matrix

| Stakeholder | Interests | Expectations | Potential |
|------------------------------|--|--|---|
| <i>List the stakeholders</i> | <i>Highlight their (the stakeholders') interests in the NMHS</i> | <i>Detail what they expect from their relationship with the NMHS</i> | <i>Enumerate the contributions that they could make to the NMHS</i> |
| | | | |
| | | | |
| | | | |

See completed stakeholder analysis matrix in Annex 3.

3.3 Design and define phase

During this phase, you decide on the structure or components of the strategic plan and select model(s) to use.

- This is the “where do you want to be?” aspect of the strategic planning process.
- Also called the strategy formulation phase, it includes defining or updating the organization’s vision, mission and values statements, identifying organizational goals or objectives, and identifying strategies and expected results.

3.3.1 Define or update the organization’s vision, mission and values statements

This is where you dream big! The foundation of a strategic plan is its mission, vision and values statements. These statements succinctly reflect a shared understanding of why your organization exists and its aspirations for the future. Quite often, it is convenient to just dust off and reuse those already in existence. Admittedly, these can be a starting point, but it is important to critically review whether they are ambiguous or outdated. Do they resonate with you and what the organization now represents? Because of their defining nature, and the fact that they will help guide the rest of your work, it is important to invest time to clarify and articulate them on paper (Mittenthal, 2002).

Which goes first – vision or mission? When it comes to creating mission and vision, there is no prescribed order of development. Some strategic planners suggest beginning with the vision, the futuristic view or the ideal state of change/improvement. Mission and vision are often used interchangeably. According to the literature, however, this is not a correct practice. Mission is about what the organization does, that is, its purpose, while vision is what the organization aspires to be.

QUICK DEFINITIONS

Mission: The organization’s purpose; what the organization does and why.

Vision: Futuristic view regarding the ideal state or conditions that the organization aspires to change or create.

Values: Principles, beliefs and underlying assumptions that guide the organization.

For the purpose of this guidance document, defining the organization’s vision is recommended as a first step in the mission, vision and values process. Since the mission will communicate how the agency will go about achieving the vision, it is important that the two statements be linked to show how the agency’s actions can potentially impact the envisioned state.

Once the mission, vision, and values statements have been developed and adopted by the organization and its management cadre, statements are communicated to all staff and other key stakeholders to ensure a shared understanding by all.

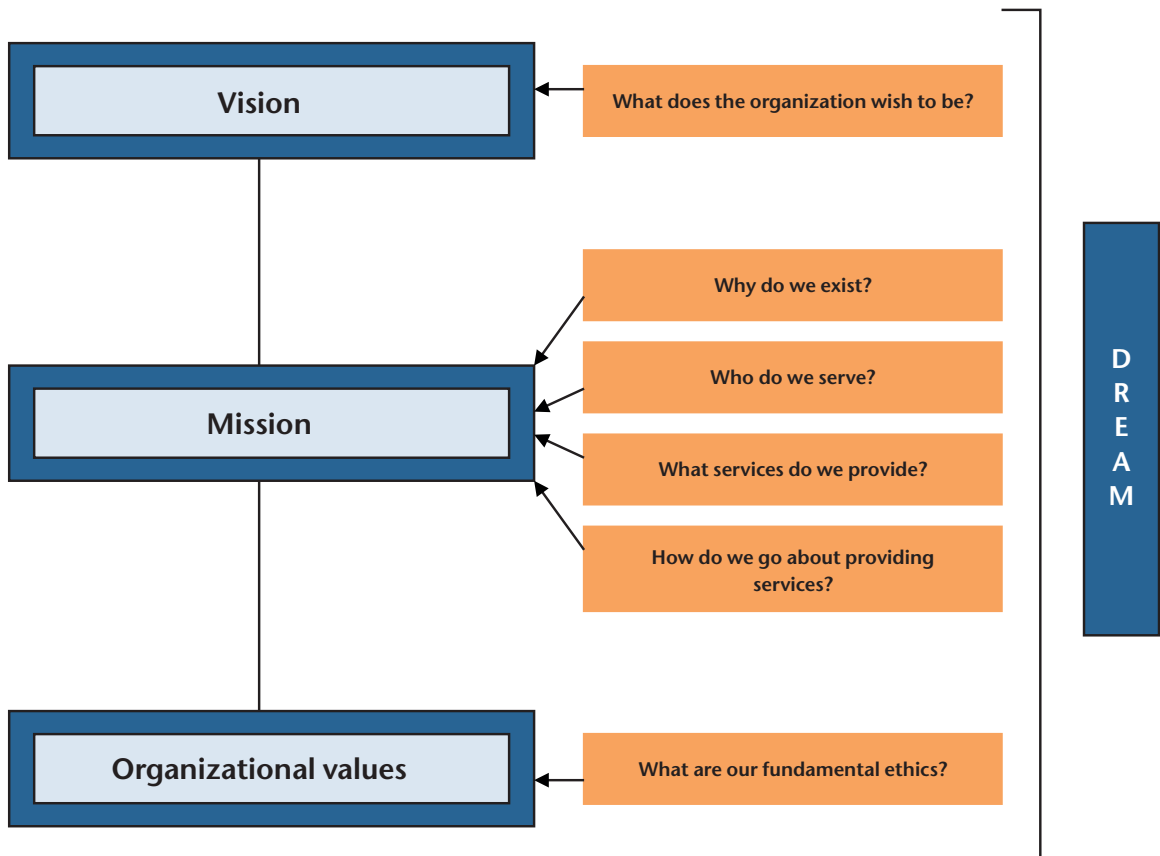


Figure 7. Key questions for developing NMHS vision, mission and values

3.3.1.1 Vision

Vision represents a future to which your organization aspires that is responsive to needs and concerns. An organization's vision describes how it will appear when it reaches its full potential.

What are the characteristics of a good vision statement?

- A good vision statement is **aspirational** – It describes what the organization wants to be/how it wants to be seen when it has reached its goals.
- A good vision statement is **inspirational** – It should provide clear motivation and guidance to the organization's staff or members.
- A good vision statement is future-based but written in the present tense.
- A good vision statement is clear and concise.
- A good vision statement is memorable.
- A good vision statement answers the question "where does the organization wish to go?"

It is not easy to develop a vision statement, even though it usually consists of only a few sentences or a short paragraph.

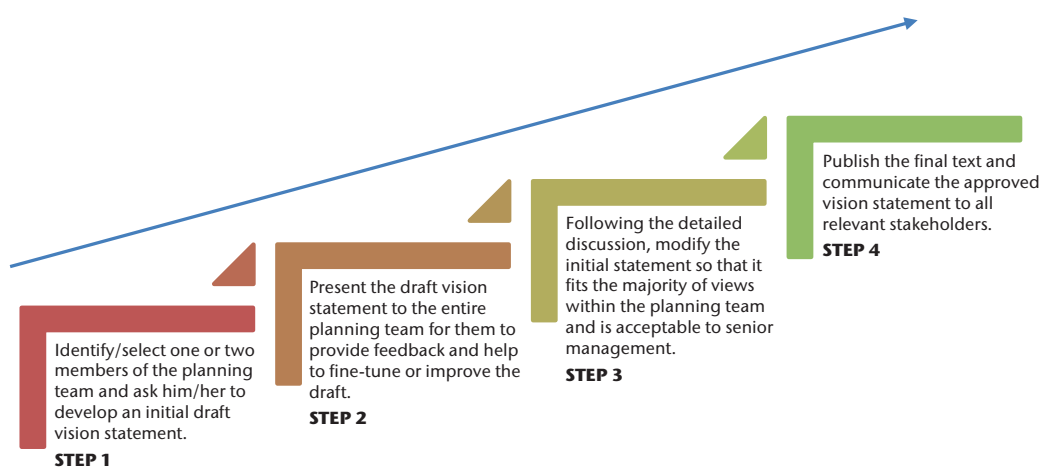


Figure 8. Steps to formulate your vision statement

In formulating their vision statement, the team members should answer the following basic questions:

- What does the organization do/why does the organization exist?
- Where does the organization want to be in 5–10 years? What does the organization aspire to become?

One writer suggests that in writing a vision statement, team members should use a basic formula to help them think of the organization's aspirations within a specific time frame (Ward, 2016).

Use the following formula to help shape your vision statement:

Five years from now, (my organization name) will _____ by _____.

Using a formula like this will force you to choose what you consider to be the most important accomplishment of your business and give you a time frame to accomplish it.

Here is a sample vision statement using this formula:

In ten years' time, the National Weather Service will be the leader in the North American region by consistently providing improved meteorological and hydrological services that contribute to national sustainable development.

If the organization already has a vision statement, the planning team should convene a session to carefully review it and, as a group, determine whether the statement can respond positively to the following questions.

Table 3. Vision statement questions

| VISION STATEMENT (Carefully review your vision statement and answer the following questions) | Yes | No |
|--|-----|----|
| Does the vision statement provide a clear picture of the organization's future? | | |
| Is the vision statement challenging and inspiring? | | |
| Is the vision statement believable? | | |

Examples of good vision statements:

NOAA's Vision of the Future: Resilient ecosystems, communities and economies – Healthy ecosystems, communities and economies that are resilient in the face of change (13 words)

Microsoft (formulated by Bill Gates): There will be a personal computer on every desk running Microsoft software (12 words)

Oxfam: A just world without poverty (5 words)

Human Rights Campaign: Equality for everyone (3 words)

Habitat for Humanity: A world where everyone has a decent place to live (10 words)

Clinton Foundation: To implement sustainable programmes that improve access worldwide to investment, opportunity and lifesaving services now and for future generations (19 words)

National Oceanic and Atmospheric Administration (NOAA) National Weather Service: A weather-ready nation: society is prepared for and responds to weather-dependent events (14 words)

(Source: <http://www.brighthub.com/office/entrepreneurs/articles/98285.aspx>)

WMO vision statement

To provide world leadership and expertise in international cooperation in the delivery and use of high-quality, authoritative weather, climate, hydrological and related environmental services by its Members, for the improvement of the well-being of societies of all nations.

What do you think about this vision statement?

3.3.1.2 *Mission*

It is critical that you have a solid, current and agreed mission statement in place before you initiate the subsequent planning steps. A mission statement clearly communicates to your customers (citizens to whom services are provided) and other stakeholders (those with a vested interest) what your organization does, which services and programmes it provides, why you provide them, and for whom and how they benefit or are impacted. It is a comprehensive statement that articulates a clear purpose.

Characteristics of a mission statement:

- A good mission statement is clear and to the point.
- A good mission statement is a concise and practical description of what the organization does.
- A good mission statement is memorable.
- A good mission statement answers the following questions: What does this organization do? How does this organization do its work? Why does this organization do the work it does?

Guidance (for organizations that already have a mission statement): Convene the strategic planning team and, as a group, determine whether your mission statement can respond positively to the following questions.

Table 4. Mission statement questions

| MISSION STATEMENT (Carefully review your mission statement and answer the following questions) | Yes | No |
|--|-----|----|
| Does it clearly state what business you are in? | | |
| Does it answer the questions: "who are we, what do we do, for whom (or to whom) do we do it, and why is it important?" | | |
| Is the ultimate rationale for existence clear? | | |
| Is the mission broad enough to accommodate the current times? | | |
| Can the mission survive changes in administration? | | |
| Is it easily understandable to anyone who reads it? | | |
| Can you justify the resources you spend on executing the mission? | | |

How to formulate your organization's mission statement:

- Describe exactly **what** your organization does;
- Describe **how** your organization does its work;
- Identify the values that are important to your organization as it does its work;
- Describe **why** your organization does what it does in the way it does;
- Combine your responses into a single statement of purpose.

See the mission statement worksheet in Annex 4 to help NMHSs define each element of a mission statement.

Examples of good mission statements:

TED: Spreading ideas (2 words)

Livestrong: To inspire and empower people affected by cancer (8 words)

American Red Cross: Prevents and alleviates human suffering in the face of emergencies by mobilizing the power of volunteers and the generosity of donors (21 words)

The Nature Conservancy: To conserve the lands and waters on which all life depends (11 words)

NOAA National Weather Service: Provide weather, water, and climate data, forecasts and warnings for the protection of life and property and enhancement of the national economy (22 words)

Examples of poor mission statements:

Organization A is an economic and community development organization for artists and by artists. Our work is about building stronger communities, neighbourhoods and economies, and we believe that artists are an important leverage point in that work. The organization's mission is to cultivate vibrant communities by connecting artists with the skills, information and services they need to make a living and a life. (67 words)

*Critique: This mission statement describes the **what**, **how** and its values, but is too long.*

Organization B is committed to developing a wide range of innovative products and multimedia services that challenge the way consumers access and enjoy digital entertainment. By ensuring synergy between businesses within the organization, the company is constantly striving to create exciting new worlds of entertainment that can be experienced on a variety of different products. (53 words)

*Critique: This mission statement describes the **what**, **how** and its values, but is too long.*

What do you think about the WMO mission statement?

The mission of WMO is to:

- Facilitate worldwide cooperation in the establishment of networks of stations for the making of meteorological observations as well as hydrological and other geophysical observations related to meteorology, and to promote the establishment and maintenance of centres charged with the provision of meteorological and related services.
- Promote the establishment and maintenance of systems for the rapid exchange of meteorological and related information.
- Promote standardization of meteorological and related observations and to ensure the uniform publication of observations and statistics.
- Further the application of meteorology to aviation, shipping, water problems, agriculture and other human activities.
- Promote activities in operational hydrology and to further close cooperation between Meteorological and Hydrological Services.
- Encourage research and training in meteorology and, as appropriate, in related fields, and to assist in coordinating the international aspects of such research and training.

Table 5. Examples of mission statements from selected National Meteorological Services

Jamaica

“The Mission of the Meteorological Service is to take full advantage of man’s present knowledge of weather and climate; to take steps to improve significantly that knowledge and to foresee and prevent potential man-made changes in climate that might be adverse to the well-being of humanity.”

(Source: <http://www.metservice.gov.jm/aboutus.asp>)

Canada

“The mission of the Meteorological Service of Canada is to anticipate and respond to the evolving needs and expectations of Canadians and their institutions for meteorological, hydrological and related information and prediction services thereby helping Canadians adapt to their environment in ways which safeguard their health and safety, optimize economic activity and enhance environmental quality.”

(Source: http://www.chebucto.ns.ca/Science/AIMET/nms_visions/)

Fiji

“To observe and understand regional weather, Fiji’s climate and hydrological patterns, and provide meteorological and hydrological services in support of the well being of communities, economic growth, environmental sustainability and international obligations.”

(Source: http://www.met.gov.fj/about_us.php)

Philippines

“Protecting lives and properties through timely, accurate and reliable weather-related information and services.”

(Source: <http://pagasa.dost.gov.ph/index.php/learning-tools/12-about-pagasa/66-mission-and-vision-and-values>)

3.3.1.3 Values statements

Values statements are rooted in the core values of members of the organization. They manifest the core values of their leaders in particular.

- Values are the things that are important to your organization and that your clients or stakeholders identify as your important characteristics. What do people value about your organization?
- Values are those things which the organization believes to be important in its work and its interaction with others. These values are important as they help inform both your mission and vision statements. Examples of values are integrity, honesty, efficiency, teamwork, equality and excellence.
- All organizations have values and the work of all organizations is informed by their values, whether or not these values are documented.
- Values statements document the principles to which an organization subscribes and which guide its operations.
- Values statements are important as they communicate these principles to team members (internally) and to stakeholders (externally).

Example of a values statement

Google's core philosophy

Google calls its values and values statements its philosophy, and it revisits the components every few years to make sure the values still hold true.

- Focus on the user and all else will follow.
- It is best to do one thing really, really well.
- Fast is better than slow.
- Great just isn't good enough.

3.3.2 **Identify organizational goals**

"A goal without a plan is just a wish" – Antoine de Saint-Exupery

Organizations are established to solve problems. Goal statements describe the results that your organization is working to accomplish over a long-term period so as to make its contribution to solving an identified problem or challenge. The goal statement(s) should convey the area(s) in which the organization is intending to affect **change**. These changes over the long-term are typically those that address behaviours, patterns of events, and the state of conditions.

The attainment of organizational goals validates the organization's **purpose** or mission. The goals should be tied to the mission of the organization; they do not change often. However, the organization should remain flexible if there are emerging trends which (i) have changed or (ii) have the potential to change how work should be done in the field (or sector). For example, an emerging trend such as *making considerations for climate change in development planning* could cause an organization that delivers training to farmers to reconsider its mission and consequently its goals so as to incorporate climate change in its core functions.

The day-to-day work of the staff of the organization represents an investment in the attainment of these goals, so it is important to carefully select them. The goals set the organizational wheels in motion.

- The statement should identify "who" will benefit from the change you are working towards;
- The statement should include "what" you intend to be different – the results.



Figure 9. Interaction between mission and goal

WMO goal

To provide the citizens that we serve with fit-for-purpose, high-quality weather, climate and hydrological services. (Source: *WMO Strategic Plan 2016–2019* (WMO-No. 1161))

| GUIDING QUESTIONS: GOALS | Yes | No |
|--|-----|----|
| Do the goals support the mission? | | |
| Do the goals represent a measurable result? | | |
| Do the goals provide direction for action and results? | | |
| Are the goals challenging but realistic? | | |
| Are the goals important to management, policymakers and customers? | | |
| Would someone unfamiliar with the organization understand what the goals mean? | | |

3.3.3 **Articulate the objectives**

The set of strategic objectives reflect the organization's priorities as it tries to strike balances between achieving goals (long-term) and responding to existing realities.

The objectives indicate what it is that you specifically want to see change (within the scope of your organization). This change will be brought about because of a series of strategic actions that the organization will decide to pursue. In other words, your organization's work (over one or more strategic planning periods) will have caused a particular outcome (or change) to occur. These changes can be seen as evidence that your organization is doing something to make a difference (see section 3.3.2 on organizational goals).

| GUIDING QUESTIONS: OBJECTIVES | Yes | No |
|--|-----|----|
| Do the objectives reflect specific desired accomplishments? | | |
| Can progress be measured? | | |
| Are there enough resources to meet the objectives? | | |
| Do the objectives work towards a result? | | |
| Are there specific time frames associated with the objectives? | | |
| Will meeting objectives lead to goal attainment? | | |
| Is there at least one objective for each goal? | | |

- Aim to start the objective statement with: "To...".
- You are trying "To [achieve a *specific* outcome]...". The objective statements are specific. They are distinct from one another (i.e. an outcome statement is not simply a rephrasing or modification of another).

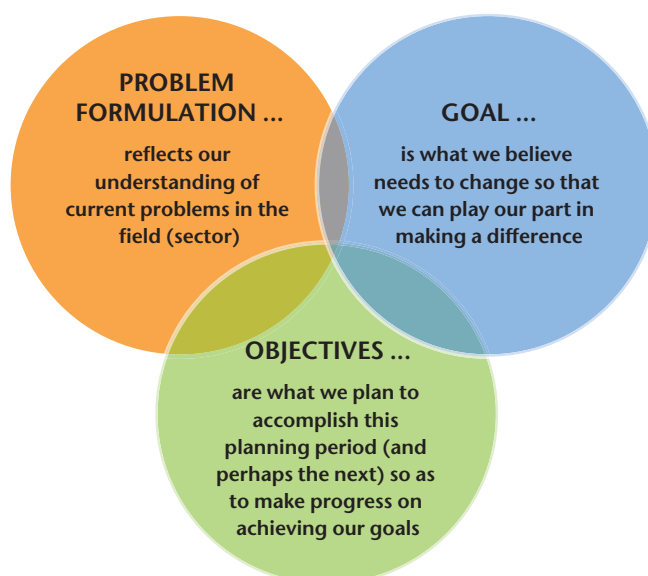


Figure 10. Interaction between goal and objective

- You are trying “To [*achieve a measurable outcome*]...”. The objective statements should reflect change that can be assessed to determine whether or not the (intended) change has occurred.
- You are trying “To [*achieve an achievable outcome*]...”. The objective statements should convey a change that can be achieved (within the specific time frame and with the allocated resources).

Examples of objective statements

- To facilitate worldwide cooperation in the establishment of networks of stations for the making of meteorological, hydrological and other geophysical observations related to meteorology.
- To promote the establishment and maintenance of centres charged with the provision of meteorological and related services.
- To promote the establishment and maintenance of systems for the rapid exchange of meteorological and related information.
- To promote standardization of observations (meteorological and related) to ensure the uniform publication of observations and statistics.

3.3.4 *Identify specific strategies and outputs*

Within the strategic planning process, your strategies represent your best pick of possible actions to take so that the objectives or the expected results can be met. More broadly, the strategy is the **approach** that the organization presents as its **solution** to address the challenges in the field (sector). Put another way, strategy is the method used to accomplish goals and objectives.

Strategies generate outputs, which are tangible products and/or services. These products and services are made available so that they can be applied to solving problems. Put another way, strategies link **input** and **output** and lead to **outcome** (the results of accomplishing an objective).



Figure 11. Interaction between objective and strategy

| GUIDING QUESTIONS: STRATEGY | Yes | No |
|---|-----|----|
| Do the strategies help achieve the objectives or expected outcomes? | | |
| Are there enough resources to implement the strategies? | | |
| Do the strategies relate to the ultimate vision? | | |

Examples of WMO strategies

Objective: To implement climate services under the GFCS, particularly for countries that lack them.

Strategies:

- (a) Establish Regional Climate Centres;
- (b) Identify user requirements for climate products;
- (c) Develop the Climate Services Information System;
- (d) Advance the sub-seasonal to seasonal prediction skill.

(Source: *WMO Strategic Plan 2016–2019* (WMO-No. 1161))

Strategy building involves research, analysis and prioritization. Strategy options or alternatives may be identified and compared through:

- **Brainstorming how to achieve results:** Engage in free-flowing discussions to generate innovative ideas, identify opportunities for coordination and cooperation, and encourage entrepreneurial approaches.
- **Researching what works.**
- **Evaluating what is already in place:** Use the information generated during the internal/external assessment to build strategies.

- (a) Aim to start the strategy statement with a verb (action word). For example: *Deliver training curricula...; Conduct needs assessment...; Establish regional centre...*;
- (b) Consider whether or not the outputs generated from the strategies are relevant to the objectives. In other words, will the existence of these outputs make change possible? Examples of outputs include training sessions, needs assessments or regional centres;
- (c) Consider that one strategy may serve to advance more than one strategic objective.

3.3.5 **Develop a pathway of change**

Results-based management is a management strategy by which all actors, contributing directly or indirectly to achieving a set of specific objectives, **ensure that their processes, products and services contribute to the achievement of desired results** (outputs, outcomes and higher-level goals or impact). The actors in turn use information and evidence on actual results to inform decision-making on the design, resourcing and delivery of programmes and activities as well as for accountability and reporting.

In practical terms, RBM means striving for a common TOC or a pathway of change. Goals and objectives are clarified through the formulation of precise and measurable statements of the results to be achieved.

Specifically, RBM:

- Emphasizes realistic development results.
- Clearly identifies beneficiaries and stakeholders.
- Uses information to make management decisions.
- Identifies and manages risks.
- Reports on results using indicators.

3.3.5.1 **Definition of results**

One of the key concepts in RBM is results. Results are defined as describable or measurable **changes** that are derived from a cause-and-effect relationship. Results represent the building blocks as they outline what the organization hopes to achieve.

These anticipated changes are articulated in a results statement and are usually signified by words such as: **improved** (service delivery), **increased** (access to water and climate data),

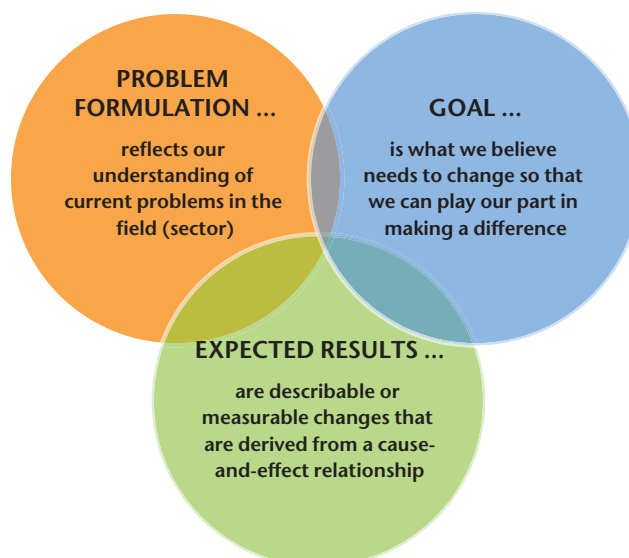


Figure 12. Interaction between goal and expected result

strengthened (capacity of NMHS), **reduced** (vulnerability), and **enhanced** (understanding of the changing climate system).

While it is expected that careful planning and management for results will lead to positive change, this is not always the case. It should be noted that change can sometimes lead to unintended or negative consequences and therefore results should be continuously monitored and managed to ensure that projects, programmes and interventions can yield positive change for the target audiences/beneficiaries.

When thinking about results, key questions to be asked include the following:

- Why are we undertaking this project/programme/intervention?
- What do we want to achieve?
- Who do we want to reach?

3.3.5.2 Levels of results

Change is an evolving process. There are different levels of results that seek to capture changes that occur at different points in time.

It is important to note that many development agencies and stakeholders are using different definitions and terminologies, even though the concepts are, in many cases, analogous. The idea, however, is to understand the logic that lies beneath differing terminology.

Table 6. Differing terminology for results used in selected agencies

| | Impact | | Outcomes | | Outputs | Interventions | |
|------------------------------------|-----------------------|--------------|-----------------------|--------------------|--------------------------|---------------|------------------|
| OECD ^a | Goal/impact | | Outcome | | Outputs | Activities | Inputs |
| | | | Medium-term effects | Short-term effects | | | |
| Global Affairs Canada ^b | Ultimate outcome | | Intermediate outcomes | Immediate outcomes | Outputs | Activities | Inputs |
| DFID ^c | Impact | | Outcome | | Outputs | Activities | Inputs |
| EuropeAid ^d | Overall objective | | Purpose | Outcome | Outputs | Activities | Inputs/ means |
| USAID ^e | Development objective | Project goal | Purpose | Sub-purpose | Outputs | Inputs | |
| World Bank ^f | Impact | | Objective/outcome | | Outputs | Activities | Inputs |
| WMO | Impact | | Expected Results | Key outcomes | Outputs/ deliverables | Activities | Inputs |

Sources:

- Organization for Economic Co-operation and Development/Development Assistance Committee (OECD/DAC). (2002). *Glossary of Key Terms in Evaluation and Results-Based Management/Proposed Harmonized Terminology*.
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- Morra, L.G. and R.C. Rist. (2009). *The Road to Results. Designing and Conducting Effective Development Evaluations*. International Bank for Reconstruction and Development/World Bank, Washington DC.

3.3.5.3 *Impact level of results*

The large-scale changes that the organization works towards are impacts. An impact statement is the long-term desired result for identifiable population groups, produced by a development intervention. It defines the overall “big picture” need or problem being addressed and the justification or the “why” of the project, programme or intervention. It is the larger change or goal that the organization expects or hopes will occur, that is to say, the ultimate sustainable change. There is little control over this level of result as many factors and stakeholders have influence over it, and it is likely that the specified project/programme/intervention will not directly bring about these changes but rather contribute to this overall long-term goal. In this context, monitoring of results at the impact level normally extends beyond the life of the project or programme itself.

The impact usually implies a sustainable change in a condition or state. These are long-term effects on identifiable population groups, communities, systems or organizations. These effects can be economic, sociocultural, institutional, environmental, technological or other, and often have some relationship to internationally agreed-upon and national development goals.

EXAMPLES OF IMPACT STATEMENTS

- Increased protection of life and property from extreme weather, climate and water events
- Reduced disaster risks
- Reduced potential impacts of hazards caused by weather, climate, water and related environmental elements

3.3.5.4 *Outcome level of results*

Outcomes are defined as the intended or achieved medium-term effects of an intervention’s outputs. Outcomes result from the use that beneficiaries and clients make of the products and services delivered. They are the consequence of the uptake of the outputs. Outcomes often represent changes in the institutional and behavioural capacities needed for development conditions to occur between the completion of outputs and the achievement of the impact. These are often changes in capacity and performance of the primary duty-bearers and may include changes in ***behaviours and attitudes, social action, policy formulation, decision-making, norms and knowledge, standards, etc.*** It is important to manage towards outcomes because they represent the concrete changes that the development intervention is trying to bring about.

EXAMPLES OF OUTCOME STATEMENTS

- Improved access to seamless weather, climate, water and related environmental products and services (e.g. warnings, forecasts and supporting information)
- Improved long-range forecasts and long-term projections
- Increased effectiveness and efficiency of WMO constituent bodies (regional associations and technical commissions)

3.3.5.5 *Output level of results*

Outputs are new products, goods and services or changes in skills and capabilities of individuals or institutions that result from the completion of activities within the control of the organization. Outputs are the most immediate results or deliverables of the activities undertaken within a

development intervention. Because these results are generated directly by the work being done, there is a higher degree of control over them. They are achieved with the resources provided and within the time period specified. Outputs contribute to outcomes in that, for example, an evaluation, a report, a new system or changes in skills and capabilities (outputs) may cause or affect higher-level changes such as policy formulation, decision-making and changes in general behaviours and attitudes (outcomes). Generally, outputs are fairly tangible given that they are direct products or effects of specific activities that have been implemented.

EXAMPLES OF OUTPUT STATEMENTS

- Research findings documented
- Policy documents drafted
- Standards developed
- Coordinated observations systems constructed
- Early warning systems built
- Framework for regional cooperation

As described above, the three different levels of results exist along a number of different continuums. As you move from outputs to outcomes to impact, the *degree of control* that you have over the results decreases, the significance or level of the change increases and the time frame in which you will witness the result also increases. In this way, the longer-term results (impact) have the greatest effect and therefore there is the lowest degree of control, while the more immediate results (outputs) are the lowest level of change and hence the degree of control over these is the highest.

In order to achieve specific outputs and begin the process of effecting change, planned efforts are undertaken through the contribution of *inputs* and the use of those inputs in *activities* to deliver the expected outputs.

Activities: Actions taken or work performed through which inputs, such as funds, technical assistance and other types of resources, are mobilized to produce specific outputs.

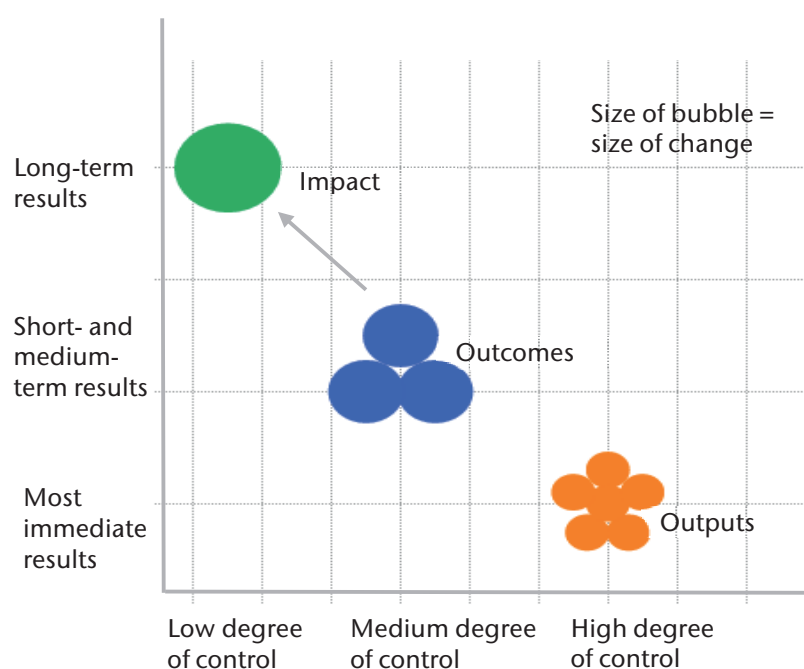


Figure 13. Time frame, level of control and size of change for different levels of results

EXAMPLES OF ACTIVITIES

- Develop a strategic plan template and guide for the NMHSs
- Organize training sessions for managers and focal points
- Conduct data processing, modelling and forecasting activities for junior meteorologists
- Facilitate networking activities with other United Nations organizations
- Conduct international and regional meetings
- Develop/implement national pilot projects
- Conduct hazards/risk analysis

Inputs: The financial, human, material, technological and information resources used for development interventions.

3.3.5.6 *The results chain*

As seen in the sections above, there are varying levels of results. The logical order in which these results contribute to each other and interact is called a **results chain**. A results chain (also known as a **logic model**) is a causal sequence for a development intervention to achieve desired results. A results chain illustrates a relationship of influence from inputs/activities to outputs, from outputs to outcomes, and from outcomes to impact, all of which are linked by causal relationships (cause and effect) and sustained by some assumptions/hypotheses about the development context or factors that can influence the causal relationship. Each level of the results chain is a requirement for achieving the next level in the chain.

Within a results chain, the inputs and activities are “how” a development intervention expects to achieve results. The outputs and outcomes are considered “what” the development intervention wants to achieve in the short- to medium-term, while the impact is a longer-term result that demonstrates “why” this intervention is being undertaken in the first place.

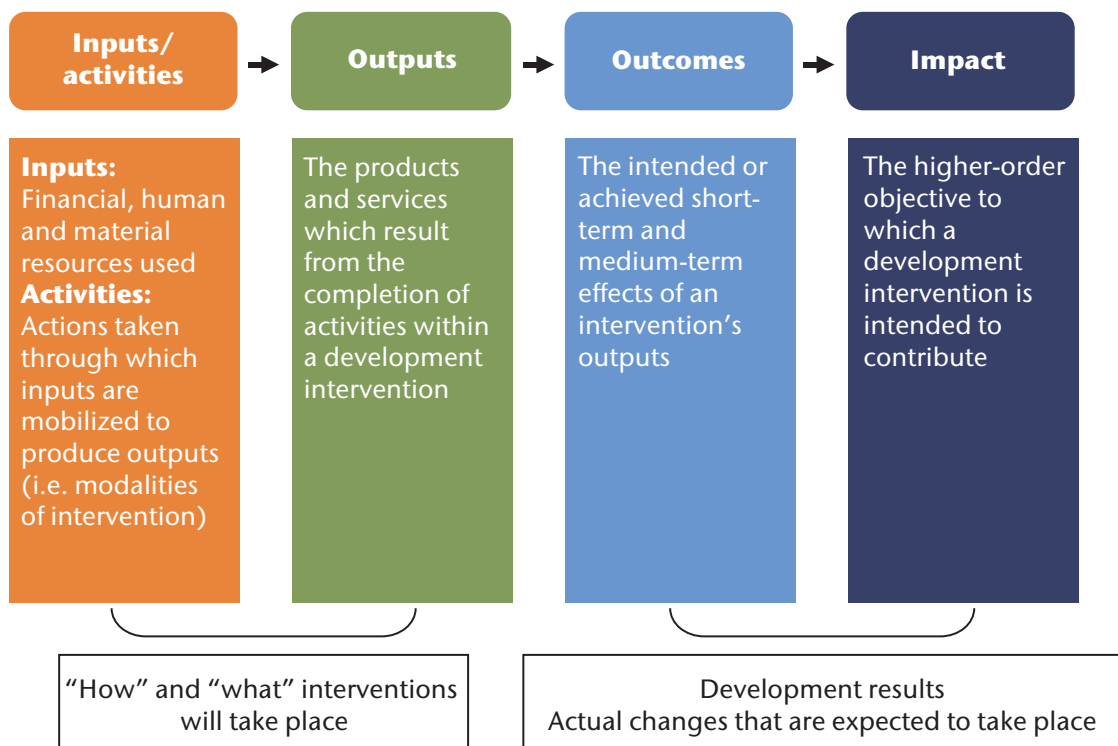


Figure 14. Results chain

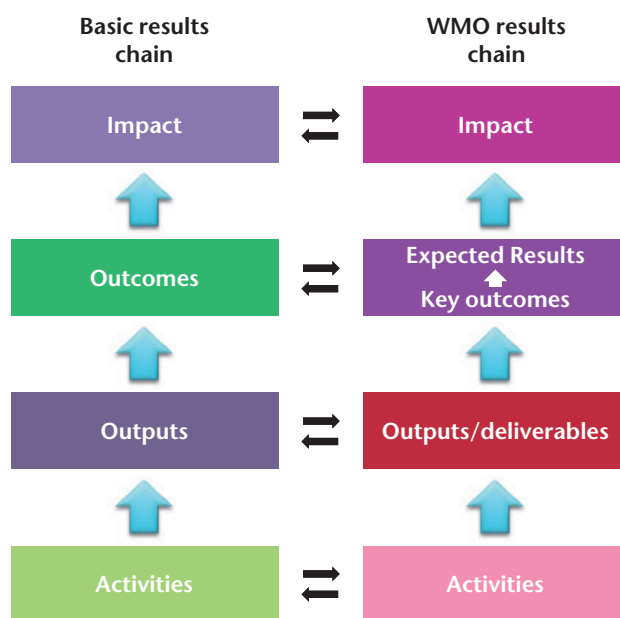


Figure 15. Basic vs WMO results chain

When developing or understanding a results chain it is important to test the logic. A simple way to do this is to use an “if/then” process. Starting at the activity level, ask the question, “if” the following set of completed activities and the assumptions hold true, “then” will the stated output occur? Continue following this process throughout your results chain all the way to the impact level. It will allow you to see where there is logic and where the logic can be improved.

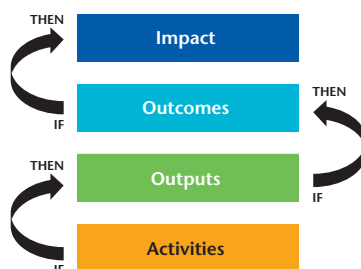


Figure 16. Testing the logic of a results chain

Results chains, however, do not simply include one set of activities leading to one output, or one set of outputs leading to only one outcome, but involve multiple groups of activities, outputs and outcomes. In this case, testing the logic is similar. A group of outputs, for instance, will lead to the achievement of one outcome and subsequently a group of outcomes together will lead to the impact, building upon each other in a pyramid fashion.

For example, in the diagram below Output 1.1 and Output 1.2 should together logically lead to the achievement of Outcome 1. Then, Outcome 1 plus Outcome 2 should logically contribute to the Impact.

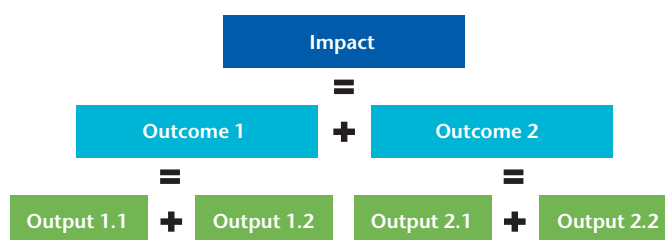


Figure 17. Results chain with multiple outcomes and outputs

A results chain is usually expressed in some form of logic model, in fact the terms “results chain” and “logic model” are often used interchangeably. In addition, a more comprehensive version of the logic model is found in the Logical Framework Approach (LFA), which includes information on indicators, data sources, assumptions and risks for each level. As demonstrated in Figure 13 (section 3.3.5.5 above), the degree of control over a development intervention moves from high to low as you move from outputs to impact in the results chain. In this way, as you move from the bottom to the top of the results chain it is more difficult to show the causality and influence of the intervention efforts on the expected results.

Steps to developing a logic model:

- (a) Start with the impact level of results, then work backwards to the outcomes necessary to achieve the stated impact level results statement;
- (b) Then, based on those outcomes (change in state/practice/behaviour), determine what outputs are necessary (product/service) to achieve them (the outcomes);
- (c) Remember, outputs are based on bundles of activities;
- (d) Use directional verbs in the past tense;
- (e) Use “if/then” to test your logic.

Table 7. Example 1 of an NMHS logic model/results chain

| IMPACT | | |
|--|--|---|
| Reduced losses of life, property and economic productivity caused by weather-, water- and climate-related natural hazards | | |
| OUTCOMES | | |
| Outcome 1: Increased use of members’ products and services to build resilience at the national level to impacts of hazardous weather, climate, water and other environmental events | Outcome 2: Improved capacity of NMHS to deliver demand-driven meteorological services and products | Outcome 3: Strengthened partnerships with global, regional and national actors to improve NMHS’s performance |
| OUTPUTS | | |
| Output 1.1: Multi-hazard early warning systems implemented | Output 2.1: Members trained on multi-hazard early warning systems | Output 3.1: Cooperation agreements developed |
| Output 1.2: Accurate forecasts and warnings delivered from the regional centre | Output 2.2: Members trained in flood management plans development | Output 3.2: Communication strategy implemented |
| Output 1.3: Flood management plans developed and implemented | Output 2.3: Information systems established and maintained | Output 3.3: Resource mobilization plan developed to support NMHS research and innovation |
| Output 1.4: Drought early warnings produced | Output 2.4: Research in the prediction of high-impact weather on timescales of hours to seasons completed | |
| Output 1.5: Climate products and information developed and implemented | | |
| ACTIVITIES ^a | | |
| <ul style="list-style-type: none"> • Attend meetings of the Commission for Basic Systems Coordination Group on Forecast Verification • Develop guidelines and best practices on use of global/regional climate products • Conduct situational assessment for strategy and action plan of the WMO Flood Forecasting Initiative | <ul style="list-style-type: none"> • Develop training programme • Conduct workshops/seminars on early warning systems • Produce guides and templates • Collaborate with universities to undertake research | <ul style="list-style-type: none"> • Conduct meetings with strategic partners • Participate in networking activities • Draw up partnership agreements • Prepare for resource mobilization mission • Establish strategic partnerships for financing and implementation of regional development projects |

a Several more activities would have to be listed for each output.

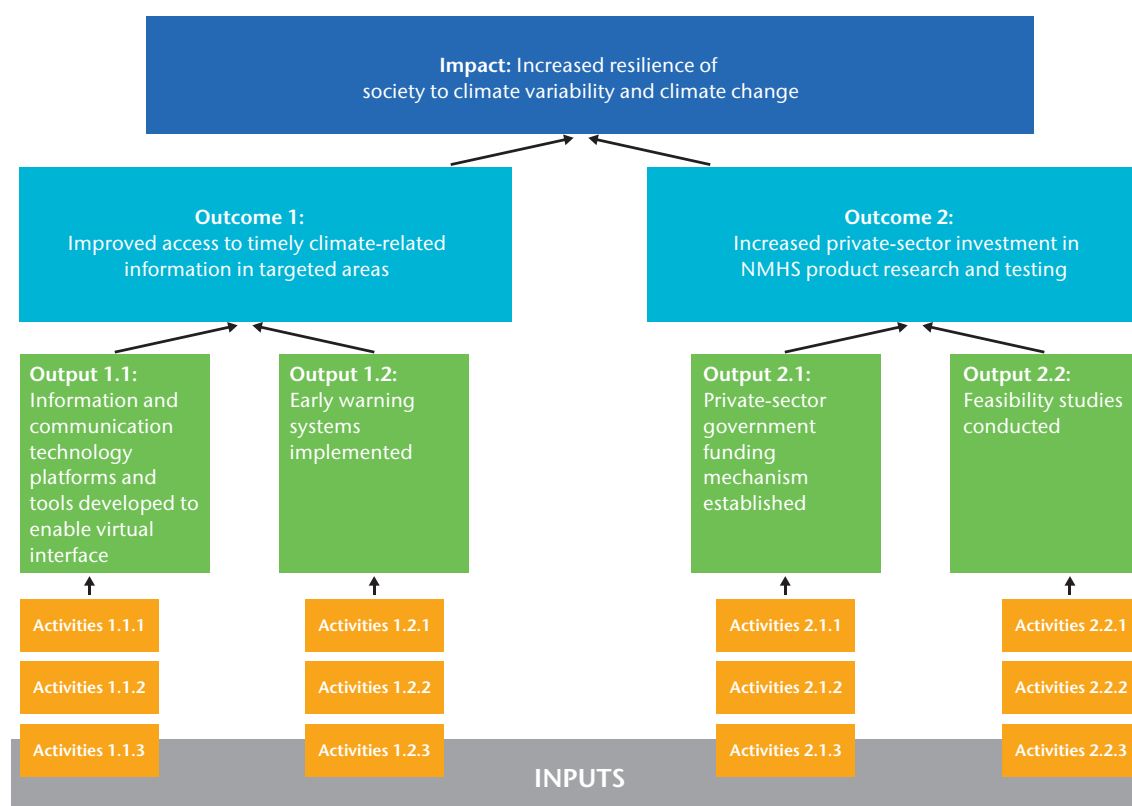


Figure 18. Example 2 of an NMHS logic model/results chain

3.3.5.7 *Formulating results statements*

When developing results statements, there are a few things to keep in mind. First, the following questions are asked:

- What do we want to change: a situation, a condition, the level of knowledge, a behaviour?
- Is the expected change absolute or relative?
- Who are the beneficiaries (the target group)?
- What is the scope of the change (for each result)?
- Do the results integrate all cross-cutting themes (gender, environment) and important issues (poverty, etc.)?
- What are the needs and priorities of responsible agencies and donors?

Second, results are the expected changes which are demonstrable and that are to take place during the project/programme life. As such, they are written using a **directional verb in the past tense**.

For example:

- **Increased** alignment of NMHS's programme of work with national development priorities
- **Improved** public awareness about the contribution of NMHSs to disaster preparedness
- **Expanded** outreach mechanisms to facilitate the participation and engagement of the private sector in NMHS product development

When in doubt as to whether the result you are formulating or reviewing is an output or an outcome, the following questions can help to clarify the level of result.

| Outputs | Outcomes |
|---|---|
| Is it something that can be delivered with a high degree of control, even when working with partners? | Does it require a change in behaviour or conditions resulting from the achievement and use of outputs, such as products and services? |
| Is it something that is possible to do with a set number of resources within a given period of time? | Can it only be achieved in direct partnership with other stakeholders, who are mutually responsible (less control)? |
| Is it an achievement that we can measure and against which we can also measure our performance? | Is it something that will be used by the country? Will we work with partners to deliver it? |
| Does it help to achieve an outcome? | Is it a change we can see and measure only after some time during implementation or even only at the end of the programme? |
| Is it the direct consequence of an activity? | |

3.3.5.8 *Results-based management tool box*

This TOC uses three primary tools to plan, manage and monitor results during the project and programme life cycle.

- Tool 1: **Logical Framework Approach** – This is a management tool used to facilitate planning, execution and evaluation of a development intervention.
- Tool 2: **Performance Measurement Framework (PMF)** – This is the main tool used for organizing and monitoring results. The PMF is explained in detail in section 3.5.
- Tool 3: **Risk analysis matrix** (see section 3.3.5.9 for an elaboration).

3.3.5.8.1 *Logical Framework Approach*

The LFA, which is today adapted in one form or another by most aid agencies and donors,¹ is a very effective analytical and management tool. It is an approach to project management that, on a single paper, organizes project components into a **hierarchy of logically linked objectives**, defines **indicators** to track accomplishment of those objectives, specifies **sources/methods of data** to measure indicators and takes into account external **assumptions and risks** that affect project success.

Developing a logical framework is like doing a jigsaw puzzle: an intermediate outcome here, an immediate outcome there ... until all the components go together logically!

Logical frameworks are a way to consider and answer the following questions prior to undertaking a project or programme:

- What does the project/programme want to achieve? (impact and outcomes)
- How will the project/programme achieve this? (outputs and activities)
- How will we know when the project/programme has achieved this? (indicators)
- How can we confirm that the project/programme has achieved this? (means of verification)
- What are the potential problems that may be experienced along the way? (risks and assumptions)

The logical framework usually takes the form of a five column by five row matrix as shown in Table 8 below. It is particularly useful to provide an overall snapshot of the project/programme for stakeholders.

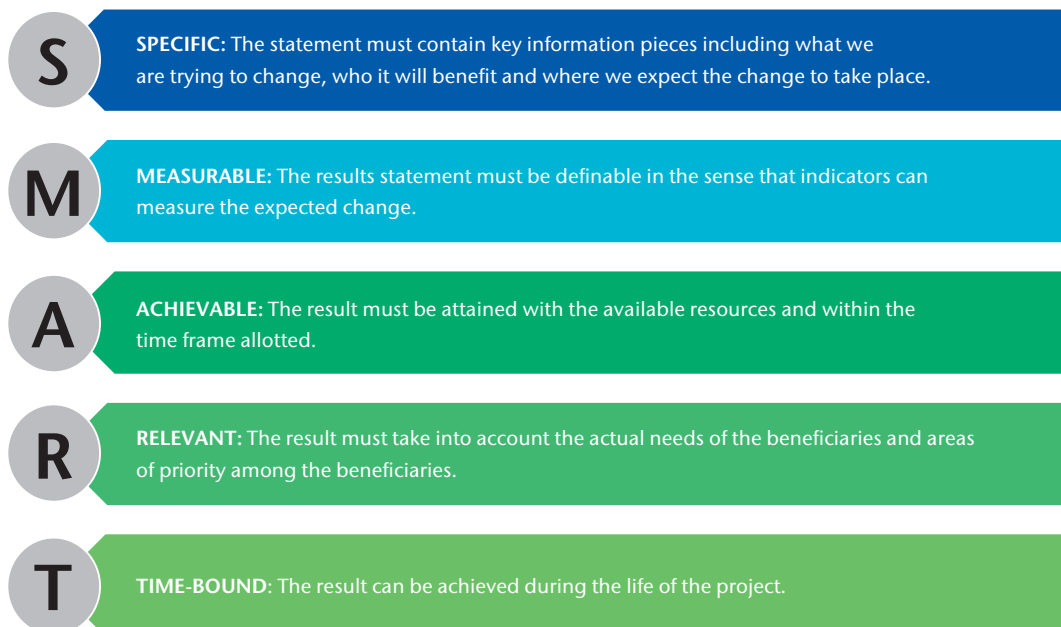
¹ The adaptation of the Logical Framework Approach by aid agencies and donors has resulted in variation in terminology of the hierarchy of objectives. A comparison between terminologies of different donor agencies for results/logical frameworks is provided in Table 6.

Tips: formulating results

When formulating results statements, the following questions can help narrow down the expected results of a development intervention:

- What do we want to change: a situation, a condition, the level of knowledge, a behaviour? (This will help you organize the different levels of results for your intervention and your results chain.)
- Is the expected change absolute or relative?
- Who are the beneficiaries (the target group)? (Keeping in mind the target population or beneficiary and making them the centre of the results statement can greatly help to write your statement, since the results are supposed to translate into the expected changes/benefits for them.)
- What is the scope of the change (for each result)? (This will serve to make sure the results will be achievable.)
- Is the statement simply worded or does it contain more than one idea? If the latter, can it be split into separate statements? Would the public and the partners be able to understand this results statement? (Results are a snapshot of what you want/expect to achieve; they should be clearly stated and easy to understand.)
- Do the results integrate all cross-cutting themes (gender, governance, nutrition) and important issues?
 - Gender: Are the results truly gender sensitive? Do they address the concerns, priorities and needs of women and men, and girls and boys?
 - Environment: Have you taken environmental implications into consideration? Will results be sustainable?
- What are the needs and priorities of responsible agencies and donors? (A sound intervention design should demonstrate clearly how it responds to the needs and priorities identified.)

In addition, results statements should be SMART:



Remember that results statements should also:



Table 8. Template for developing a logical framework

| Level of results | Summary | Indicators | Means of verification | Risks and assumptions |
|------------------|---------|-------------------------|-----------------------|-----------------------|
| Impact | | | | |
| Outcomes | | | | |
| Outputs | | | | |
| Activities | | <i>Resources needed</i> | <i>Cost</i> | |

See an example of a completed logical framework in Annex 5.

If a logical framework is done well, it will help organizations to plan activities that contribute to meaningful change.

3.3.5.9 *Risk analysis and monitoring*

Effective strategic planning means managing risks. In practical terms, risk management means:

- **Identifying** risks
- **Classifying** risks in a risk analysis matrix
- Developing a **risk management strategy**
- Developing a **risk monitoring plan**

Risks are external or internal factors that can potentially prevent results from being achieved or which can have a significant negative influence on the achievement of one or more results.

Central question: What might go wrong and how can the organization avoid it?

Risk is “a threat or uncertainty associated with an event that may have a negative effect on the achievement of the results defined in the Strategic Plans of the Organization”. (WMO, 2013)

DID YOU KNOW?

- Objective statements**, which are used mostly in logical frameworks, express the progress that is hoped to be achieved and are written in the present tense;
- Results statements**, which are used in results/performance measurement frameworks, state the achievements expected at the end of a project, programme or specified period for an organization and are expressed in the past tense;
- Both objectives and expected outcomes should apply the SMART rules as follows:
 - **Specific:** What the project intends to change. Ask: *What change is expected? Where is the change expected? Who will it benefit or what is the unit of change?*
 - **Measurable:** Precisely defined; measurement and interpretation should be unambiguous. Ask: *How will the change be measured quantitatively and/or qualitatively?*
 - **Achievable:** Verify that it is indeed possible to accomplish the specified quantities. Ask: *Is the change/result within the scope of the programme? Is it achievable within the given time frame and with the allotted resources?*
 - **Relevant:** Address real priority needs and problems. Ask: *Does the planned/anticipated result reflect the needs and priorities of the beneficiaries?*
 - **Time-bound:** Determine “when” a certain change is expected. Ask: *When/in what specific time period do you want to achieve the set objective?*



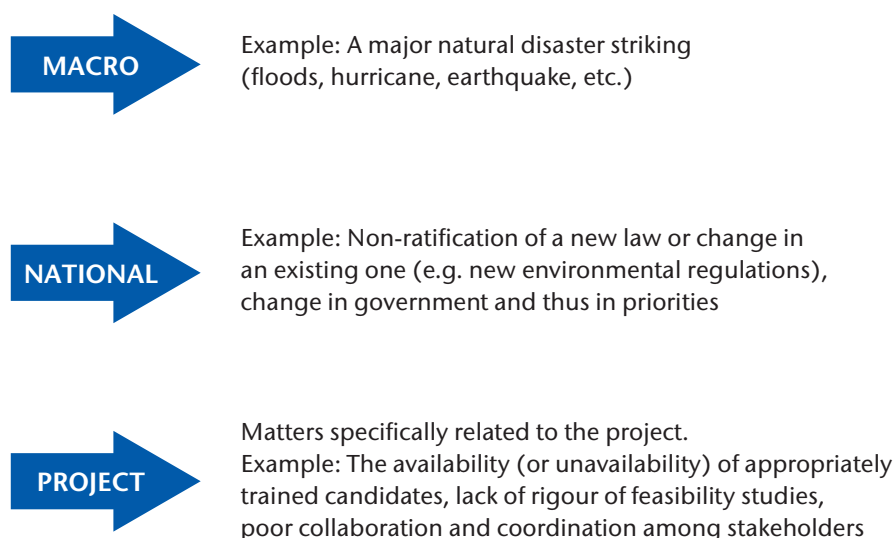
Figure 19. Risk management

Strategies should always be designed in such a way as to minimize the negative influence of risks when they occur or to mitigate against risks actually occurring.

Risk analysis means determining the odds that conditions/probabilities pointed out in a project or programme will occur. Risks must be identified (hypothesized) as specifically as possible.

Identifying potential risks and developing response strategies accordingly will help minimize their impact on the project's costs, schedule and results. It is much more effective to have a plan in place beforehand rather than trying to deal with the risk when it occurs.

Risks can be influenced by a number of factors and can occur at various levels:



Once each of the risks has been identified and described, the next step is to determine the **probability (level of occurrence)** of these risks occurring and the **effect** the risk would have if it was to occur. This allows you to prioritize risks and to maximize resource use by focusing the majority of your time and effort on the most important risks.

In terms of probability, there are three levels:

- **Low probability** (e.g. an extraterrestrial invasion – there is little probability of that happening!)
- **Medium probability** (e.g. fluctuating inflation rates)
- **High probability** (e.g. heavy traffic during rush hour)

| Effect of risk | | | |
|--|-----------------|--------------------------|--------------------------|
| Significant (3) Moderate (2) Minor (1) | Risk monitoring | Risk reduction necessary | Risk reduction necessary |
| | Acceptable risk | Risk monitoring | Risk reduction necessary |
| | Acceptable risk | Acceptable risk | Risk monitoring |
| Probability of risk | Low (1) | Medium (2) | High (3) |

Figure 20. Risk analysis matrix

In terms of the effect the risk will have on the project, for each of the risks identified, there are also three levels:

- **Minor effect** on project with little compromise to expected results
- **Moderate effect**, could threaten achievement of expected results
- **Significant effect**, would prevent achievement of expected results

For each identified risk, using the matrix as outlined above will be helpful in determining whether the risk is acceptable, whether the risk should be monitored and reviewed periodically and whether further mitigation (risk reduction) is necessary. Risks in the bottom left corner of the matrix are expected to have minor impact and low probability and you can often ignore them. On the other side, risks towards the top right corner are of critical importance. In the middle are risks of moderate importance of which you should try to reduce the likelihood of occurrence or reduce the impact if they occur. The risks retained for further analysis in the risk monitoring matrix are those considered significant enough depending on your tolerance for risk.

3.3.5.9.1 Monitoring risks

Monitoring risks involves the use of another RBM tool: the risk monitoring matrix. As risks change, so too will the need to track the use and effectiveness of the response strategies and the severity (effect) or frequency (occurrence) of each of the risks initially identified. This means that certain risks will change, disappear or be added over time.

Table 9. Example – risk monitoring matrix

| Risk area | Probability | Effect | Indicator | Frequency to monitor | Risk response |
|---|-------------|--------|--|----------------------|---|
| Weak coordination and communication with key partners and stakeholders | Low | Likely | Level of satisfaction about communication/ coordination issues | Monthly | Mitigation: Elaborate a detailed communications plan. Organize more information-sharing sessions. |
| Weak infrastructure components needed to support service delivery such as high-performance computing technologies | High | Likely | Existence of adequate infrastructure | Quarterly | Mitigation: Develop partnerships with private-sector organizations |

3.3.5.9.2 *Risk response strategies*

For those risks that are judged severe enough, by the combination of impact and probability, response strategies have to be designed. The most common risk response strategies are:

- Avoidance
- Transfer
- Mitigation
- Acceptance

Avoidance

Although it is impossible to avoid all undesirable events, some of them may be eliminated if appropriate measures are taken. Risk avoidance strategies could include:

- Changing the design of the project or output to be produced so that the risk cannot occur
- Ending or not proceeding with an intervention
- Adding more resources to ensure a critical deadline will be met

Transfer

The transfer strategy in managing risk is to give responsibility for the risk to someone outside the project. The risk does not go away; the responsibility of the risk is simply given to someone else. The transfer strategies usually allow the sharing or outsourcing of the risk, generally in exchange for financial compensation. This can be done:

- Through the purchase of insurance
- By asking a subcontractor to execute the part of the project that represents a risk

For example, transfer of risks is a common response in situations of insecurity (e.g. in conflict-affected countries). When governments channel funds through United Nations humanitarian agencies and/or partner with specialized non-governmental organizations that have a track record of working in highly insecure areas, they use a transfer strategy because they know that the experienced staff and strong systems and procedures of these organizations can better ensure delivery.

Mitigation

Mitigation is a strategy used to reduce either the probability or the impact of unacceptable risks to a point where their severity falls below the maximum risk tolerance level. For example, the installation of smoke detectors and fire-extinguishing systems, as well as the law prohibiting parking in front of a fire hydrant, are all part of a mitigation strategy. In fact, none of those steps will stop a fire from happening, but they will help reduce the impact by offering the quickest response possible to the emergency.

In the case of projects or programmes, policy dialogue and targeted capacity development are usually built precisely to mitigate risk.

Acceptance

It may happen, in some situations, that an appropriate strategy to minimize the likelihood or impact of risk cannot be found, or that the strategy developed is impractical or too expensive. In those cases, the other option is to accept the risk. Accepting a risk does not mean that nothing will be done about the risk when and if it occurs. It simply means that something will be done only if it occurs.

There are two kinds of acceptance: active and passive. Acceptance is passive when nothing is done to plan for the risk occurrence. The only actions required are documenting the risk, informing the stakeholders involved of its existence and ensuring willingness to suffer the

consequence if the risk occurs. Acceptance is active when a plan to deal with the risk is prepared to avoid improvisation if the risk occurs. It can be done, for example, by developing a contingency plan.

Residual risks

In some cases, the risk response strategy cannot eliminate or transfer the risk entirely. Risks or part of the risk that remain after the implementation of the chosen response strategy are referred to as residual risks. Residual risks also include risks that were accepted and risks for which no response strategy was found. Where the chosen strategy was to mitigate the risk, these risks should be re-evaluated according to their new impact and probability after implementing the mitigation strategy.

Key questions for consideration by the strategic planning team with regard to risks

- What could happen that would affect our ability to meet our objectives? (risk identification, consolidation and classification)
- How likely is it to occur? (likelihood of occurrence)
- How serious might it be? (prioritization: impact of the risk events)
- What are our top ten risks? (finalizing top risks)
- What else do we know about our top risks? (in-depth analysis)
- What can we do to manage the risk? (action planning – risk strategy)
- How do we monitor the risk? (risk monitoring)

3.4 Implementation phase

The success of the strategy lies not only in the strategic plan itself, but also in the organization's ability to implement it. It is known that the failure of many planning initiatives has been related to weaknesses in the implementation process. The implementation phase is focused on executing the strategic plan. It includes the development of an action plan or operational plan. A strategic plan without a realistic operational plan is completely insufficient. The details of how to develop an operational plan, focused on the logical framework methods, are summarized below.

3.4.1 Develop an action plan or operating plan

The action/operational plan details the outputs and activities necessary to achieve the outcomes in the strategic plan, as well as the operational budget and staffing requirements.

The action plan will help the organization to stay focused, and make sure that it stays on track with its goals.

An action plan is a planning document that provides details on the steps that will be followed to achieve a desired outcome, and most importantly, how each step will be implemented (who and when), how the achievement of the desired outcome will be assessed and the resources needed to carry out the action plan.

"ACTION PLANNING IS THE PROCESS THAT GUIDES THE DAY-TO-DAY ACTIVITIES OF AN ORGANISATION OR PROJECT. IT IS THE PROCESS OF PLANNING WHAT NEEDS TO BE DONE, WHEN IT NEEDS TO BE DONE, BY WHOM IT NEEDS TO BE DONE, AND WHAT RESOURCES OR INPUTS ARE NEEDED TO DO IT."

Source: Shapiro, J., *Strategic Planning Toolkit*

How to/guidance:

- Clarify the result areas on which you will be working;
- For each result area, list the steps necessary to achieve it;
- Sequence the steps in a logical order using a tool such as the Gantt Chart;
- Do a summary of the outputs;
- Assign responsibility for each of the activities involved;
- Do a summary of the human resourcing needs;
- Do a summary of likely costs;
- Put it all together in a workplan schedule.

Table 10. Basic model for building your action plan (an example)

| Outcome: Increased use of Members' products and services to build resilience at the national level to impacts of hazardous weather, climate, water and other environmental events | | | |
|---|------------------------------------|--------------------|--------------|
| Output 1.1: Multi-hazard early warning systems implemented | | | |
| Activities | Time frame (begin by, complete by) | Person responsible | Costs/inputs |
| Activity 1: Attend meetings of the Commission for Basic Systems Coordination Group on Forecast Verification | | | |
| Activity 2: Develop guidelines and best practices | | | |
| | | | |

3.5 Performance measurement phase

How will we know when we get there?

It is crucially important to measure and review the implementation and success of the strategy and accompanying operational plan in order to be able to know whether progress is being made, and to know what is not working and may need adjusting. The part of the strategic plan that summarizes how progress will be measured and reported is referred to here as an M&E framework.

QUICK DEFINITIONS

The term “**monitoring and evaluation**” is a widely used expression. Even if these words are often seen together, as if they are only one thing, monitoring and evaluation are, in fact, two distinct sets of organizational activities. They are related but not quite identical.

Monitoring is the systematic collection and analysis of information as a project progresses. It is aimed at improving the efficiency and effectiveness of a project. It helps to keep the work on track, and can let management know when things are going wrong.

Evaluation is the comparison of actual project impacts against the agreed strategic plans. It looks at what you set out to do, at what you have accomplished and how you accomplished it. More specifically, evaluation focuses on the relevance, efficiency, effectiveness, impact and sustainability of the project.

The M&E framework consists primarily in identifying indicators (measures) which can be feasibly and reliably tracked during the life of the strategy, and putting in place the necessary resources to be able to collect, analyse and report on that information. It also consists in establishing a plan for what will be reviewed and evaluated during the lifetime of the strategy, and how this will be done. In this way, the monitoring and evaluation framework is the primary support to establishing accountability of the organization regarding the implementation of its strategic plan. Experience shows that it is essential to design this system at the same time as defining the objectives of the strategic framework.

WHY MONITOR AND EVALUATE PERFORMANCE?

For accurate and up-to-date information on progress:

- To provide regular feedback and early indications of progress, or lack thereof
- To track actual performance/situation against what was planned/expected

For learning and decision-making:

- To detect early signs of potential problems and success areas
- To take corrective actions
- To improve the design and performance of ongoing programmes
- To generate knowledge about what works and what does not work

For improved accountability:

- To ensure that a programme/process continues to be relevant and achieving results as intended
- To make an overall judgement about the effectiveness of interventions

Table 11. Differences between monitoring and evaluation

| Area | Monitoring | Evaluation |
|----------------------|---|--|
| Frequency | Continuous and regular | Periodic/episodic: at important milestones such as midterm or end of a project/programme |
| Main action | Keeping track/oversight: document progress | In-depth analysis: compares planned with actual achievement |
| Purpose | Improve efficiency, inform decision-making and management during implementation | Assess effectiveness, efficiency, reach, impact and future programming and learning |
| Focus | Inputs, outputs, processes, workplans | Results in relation to costs, overall relevance, impact, sustainability |
| Answers the question | Answers what activities were implemented and results achieved | Answers why and how results were achieved |
| Information sources | Routine systems, field observations, progress reports, etc. | Same, plus surveys, questionnaires, studies |
| Undertaken by | Project managers, field staff, supervisors, funders, community | Programme managers, funders, external evaluators |

3.5.1 **Monitoring using the Performance Measurement Framework**

Specifically, the PMF guides planning of the systematic compilation of data on the progress of a project or programme based on expected and obtained results. In addition, the PMF outlines the main elements of the monitoring system and ensures that performance information is collected regularly and on time.

The basic elements of a PMF are:

- Expected results
- Performance indicators
- Baseline
- Targets
- Data sources
- Methods
- Frequency
- Responsibility

Table 12. Performance Measurement Framework template

| Expected results | Indicators | Baseline | Targets | Data sources | Data collection methods | Frequency | Responsibility |
|------------------|------------|----------|---------|--------------|-------------------------|-----------|----------------|
| Impact | | | | | | | |
| Outcomes | | | | | | | |
| Outputs | | | | | | | |

Column 1 of a PMF represents the results chain, from output to impact level, articulated in the logic model. Simply copy and paste your logic model into this column. It should be noted that in terms of the results chain, activities are not included in the PMF, only results.

Column 2 contains the performance indicators. A performance indicator is a variable that allows the verification of changes in the development intervention. See s 3.5.2 to 3.5.6 for further elaboration on indicators and examples.

Column 3 contains baseline data for each of the selected indicators. The collection of baseline data is a critical activity of any M&E framework. Baseline data refer to the existing situation or starting point of an expected result project or programme area prior to intervention, against which change can be measured over time through the use of indicators. Without baseline data, there would be an expected result and a way to measure progress towards that result (indicator), but no point from which to measure.

Column 4 displays the targets, which specify particular values for performance indicators (outputs and outcomes only) throughout the project/programme cycle and denote what is to be achieved. Targets are explicit statements of the desired and measurable results expected for an indicator at a specified point in time. They have to be set based on realism and based on the planned activities. Setting targets is intended to enable stakeholders to envision the overall change the programme is aiming to achieve and to enable managers to determine if they are on track. Targets are often set yearly, but can also be set for shorter or longer time frames (quarterly, biannually, etc.) depending on the context. Where necessary, targets should also be disaggregated, as well as specific, measurable, achievable, relevant and time-bound (i.e. SMART).

Column 5, named “data sources”, refers to “where” data can be found or “who” should be contacted to access data to inform each indicator. Data sources can include individuals, organizations or institutions, but can also include specific documentation. It is necessary to identify a data source for each indicator (and result) that has been selected. It is important to choose a wide range of data sources in order to avoid having to switch data sources midway through the project/programme and risk jeopardizing data reliability.

Column 6, called “methods”, indicates the way in which information is collected. There exist various data collection methods representing different ways to collect the required data (e.g. census, observation, surveys, etc.)

Column 7, “frequency”, reflects how often the data will be collected throughout project/programme execution. Progress being made towards the achievement of results can be reported at a variety of time periods (quarterly, semi-annually, annually or even less frequently) depending on a variety of factors. Generally though, the higher up the results chain you go, the less frequently you monitor.

Column 8, “responsibility”, outlines who is responsible for collecting, analysing and reporting on the data collected. Responsible persons can change throughout the programme implementation.

The table below outlines the structure of a PMF highlighting the eight basic elements.

Table 13. Performance Measurement Framework snapshot with examples

| Column 1: Expected results | Column 2: Performance indicators | Column 3: Baseline | Column 4: Targets | Column 5: Data sources | Column 6: Methods | Column 7: Frequency | Column 8: Responsibility |
|--|---|---------------------------------|---|---------------------------|----------------------|------------------------|-----------------------------|
| Intermediate outcome 1: Increased strategic private-sector engagement to support NMHS product research and development | Percentage change in partner’s financial contribution to research and product testing | 10% change over previous period | At least 5% increase over previous period | NMHS annual reports | Document review | Annually | WMO Secretariat |

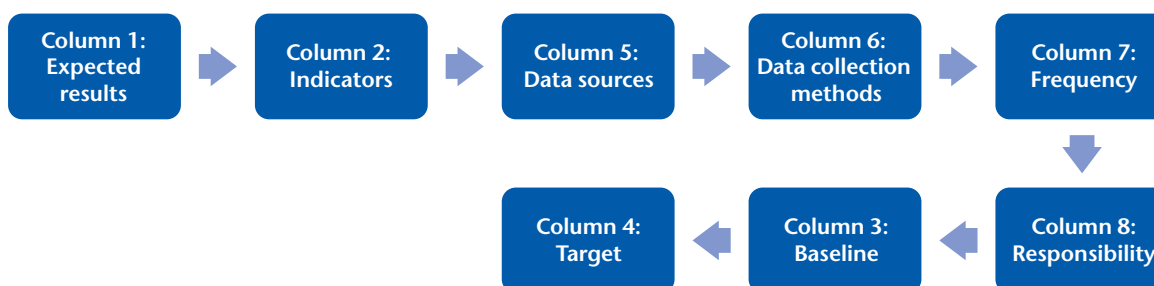


Figure 21. Order in which to complete the Performance Measurement Framework

3.5.2 **Monitoring for results: a focus on indicators**

The development of indicators is a key step to measure change over time. If indicators are not properly selected, all the PMF will be flawed as all monitoring information goes back to the indicators. To select indicators, one has to refer to the different aspects entailed in a specific result. For example, if the results refer to better meteorological services and delivery, indicators could focus on the number of sectors using the services, and/or the quality of the products/ services, and/or the average time to access the service, etc. There can be many aspects for a specific result. This is why the indicators chosen should be related as closely as possible to the intended change.

There are six criteria for selecting indicators. For each indicator, ask yourself the following questions:

- **Validity:** Does it actually measure the result?
- **Reliability:** Is it a consistent measure over time?
- **Utility:** Will the information be useful for decision-making and learning?
- **Clarity:** Is it precise and unambiguous?
- **Affordability:** Can the project afford to collect the information?
- **Simplicity:** Will it be easy to collect and analyse the information?

3.5.3 **Types of indicators**

Indicators can be either **quantitative** or **qualitative**. Quantitative indicators have a numeric value. They are typically easier to develop and collect information on since they involve hard data. An example of a potential quantitative indicator for the expected result “increased private-sector investment in NMHS product research and testing” could be: *number of official meetings convened between NMHS and private-sector partners to discuss research and product innovation*.

Qualitative indicators reflect perceptions, judgements or even attitudes. They can include the application of knowledge, quality of participation, perceived change, sense of well-being, etc. Collecting qualitative indicators requires more resources, time and analysis. An example of a potential qualitative indicator for the expected result “improved access to timely climate-related information in targeted areas” could be: *degree of use by key stakeholders of climate products/ services*.

Table 14. Examples of quantitative and qualitative indicators

| Quantitative indicators | Qualitative indicators |
|--|--|
| <ul style="list-style-type: none"> • Number of • Percentage of • Frequency of • Ratio • Rate of • Proportion of • Variance with | <ul style="list-style-type: none"> • Perception of • Quality of • Degree of • Presence of • Level of • Congruent with • Extent to which |

All of the indicators listed in the table are **neutral**, meaning that no target is specified (e.g. number of official meetings convened between NMHS and private-sector partners vs. 30 official meetings convened). The reason is that in the PMF, a separate column is allotted for targets, whereas indicators are used to measure if there is progress or not.

In addition, indicators are neutral in terms of not specifying a direction in the change you would like to see. This is reserved for the results statement (e.g. percentage of industry sectors accessing climate data to use in decision-making vs. percentage **increase** in industry sectors accessing climate data to use in decision-making).

3.5.3.1 *Levels of indicators*

Different types of indicators are required to assess progress towards results. Within an RBM framework, there are two types of indicators – development indicators and process indicators.

Development indicators: These indicators measure development results (outcome and impact levels) and are used to measure medium- and long-term changes (e.g. *% of communities who have been food secure within the last twelve months*).

Process indicators: These indicators are used at the activity and output levels (e.g. *number of people trained, type of equipment procured, amount of money invested for activities, etc.*) and are used simply to demonstrate that the activity has been completed.

Proxy indicators

Indicators are not always practical and can require extensive and expensive data gathering. Measuring the increases in rural incomes, for instance, would require a household income and expenditure survey which is time-consuming, requires larger samples and external expertise, and is costly. Instead, proxy indicators may be used to determine if rural incomes have increased through indirect ways, such as the number of tin roofs or bicycles (assets) that households may have acquired throughout the duration of the project. Other examples include using newspaper employment advertisements as a signal for trends in employment, and monitoring greater consumption of fertilizer as an early signal of greater agricultural production. Generally, proxy indicators may be used if:

- The result is not directly observable, e.g. quality of life or organization development.
- The cost of direct measurement is too high.
- The result is achievable only beyond the life of the project.

These various indicators at different levels are described in more detail below.

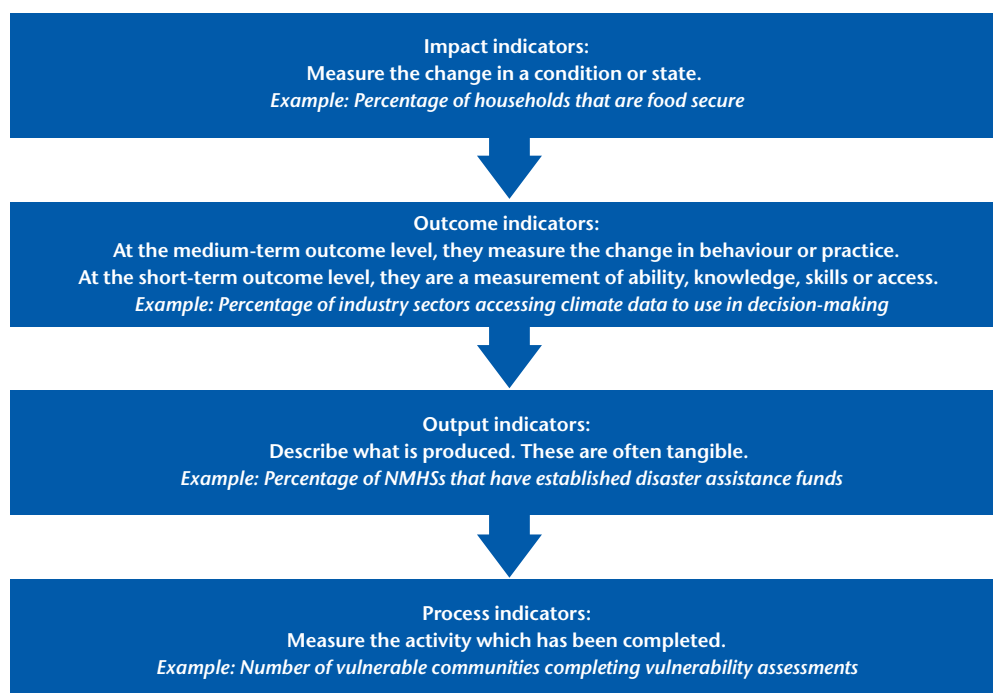


Figure 22. Examples of indicators for each level of results

| Unit of measure | Unit of analysis | Context |
|---------------------|------------------------|---|
| Number | of new laws | that have been passed to give NMHS access to weather-related data from the private sector |
| Percentage | of NMHSs (by region) | providing quarterly cyclone warnings |
| Level of confidence | of rural farmers (f/m) | in the security of police-patrolled rural roads leading to and from markets |

Figure 23. Elements of indicators

3.5.4 **Elements of indicators**

Simply put, indicators are composed of three elements:

- A unit of measure (i.e. quantitative or qualitative)
- A unit of analysis (i.e. the subject/topic which is affected)
- A context (specific situation, circumstances, factors, state of affairs, etc. to be measured)

3.5.5 **How many indicators?**

Multiple indicators are needed to measure output, outcomes and impact adequately. A general rule is to select two to three indicators per result level, some of which are quantitative and some qualitative. This is to ensure that you are measuring the same result from different angles (triangulation). Most importantly, indicators should be set to collect only what is *needed* in order to measure the relevant results. Collecting too much information is costly, timely and most often unnecessary.

3.5.6 **Disaggregation of indicators**

Indicators should be disaggregated where possible in order to ensure that the results being achieved are benefiting all and demonstrate reality.

Aggregation of an indicator (e.g. *percentage of industry sectors accessing climate data to use in decision-making*) is useful as it provides an overall picture. It does not, however, demonstrate the reality in terms of “who” or “which” sectors are accessing data and it can mask the actual change that has happened. For example, knowing which industry sectors are using data for planning and decision-making is even more useful for knowing where real change has occurred.

This is referred to as *disaggregation* whereby a specific characteristic in the measurement is highlighted. Disaggregation can be done by various dimensions – gender, income level, ability, age, geographic/topographic location, ethnicity, etc.

Some examples can include:

- *Number of meteorologists trained in the last twelve months* (disaggregated by gender, NMHS and regions)
- *Number of countries accessing weather predictions* (disaggregated by region and types of predictions)

A final word on indicators

- Select the appropriate number of indicators. Too many indicators – with little consideration of time and resources required to collect data – and too few indicators will not allow you to adequately measure the result.
- Indicators should respond to the results statement. For example, for the result “improved access to climate products and services”, “*number of research proposals developed*” would be an inappropriate indicator as this is a process indicator. It does not measure if there is, in fact, improved access to the services nor does the development of research proposals mean these services are being accessed. A better indicator would be “*number of industry sectors using climate data in their annual planning*”.
- Ensure that indicators are disaggregated and that you have sufficient gender-specific or gender-integrated indicators.
- Pay special attention to the validity of your indicators and avoid ambiguous terms (e.g. “*number of meteorologists that are demoralized*” is open to varying interpretations. A better indicator could read “*number of meteorologists that have experienced burn out in the last year*”).
- Indicators should not be compounded (e.g. use indicator “*number of meteorologists trained*” as opposed to “*number of meteorologists trained and providing mentorship to colleagues based on training*”).
- Indicators should be neutral and not demonstrate a direction. Direction is given in the results statement (i.e. do not write “*percentage increase of NMHS receiving technical assistance from private-sector partners*”, instead write “*percentage of NMHS receiving technical assistance from private-sector partners*”).

3.5.7 **Developing a monitoring system**

The development and implementation of a monitoring system in order to organize information, consolidate data, and report on results in a synergized way is important for organizations that work with RBM. A **monitoring system** is essentially a system used to monitor performance and organize data in a way that allows users to report on these results.

Building an effective monitoring system involves:

- **Diagnosis** – An assessment prior to establishing the system has to be conducted in order to adapt it to the organization. In fact, understanding the flow of information and institutionalizing a systematic flow of data upwards to the central level is essential for any monitoring system to work.
- **Preparation** – Establish data collection methods and tools, as well as analysis and reporting guidelines.
- **Management** – Designate who will be responsible for which activities and establish means of quality control.
- **Qualified and dedicated staff** – Regardless of how effective the monitoring system is, maintaining the system as well as conducting ongoing monitoring requires a certain skill set.

3.5.8 **Results-based reporting**

Using the PMF:

- Use selected indicators to capture progress being made towards expected results and compare against the baseline.
- Monitor your indicators with enough anticipation so that you have time to analyse your data and report adequately.
- Monitor on an ongoing basis throughout execution.

General:

- Describe what has changed (in relation to expected outcomes and impact, using indicators) rather than what you did.
- Brevity is key: enumerate activities but avoid writing a descriptive report on process; stay focused on the changes.
- Always connect your outputs to the “why” you do all this, and make necessary connections.
- Capture all unintended/unexpected results as well.
- State key gaps and challenges and experienced good practices that should be replicated, as well as any lessons learned and recommendations to improve the project management.

Table 15. Sample questions for reporting on results

Sample questions for results-based reporting

- What is different after activities have been completed? (this refers to outcomes)
- Who was directly involved and what are they now doing differently? (this refers to outcomes)
- Over time, what changes in an organization or community can you observe? Who is being affected? (this refers to impact)
- How do you know that any person, organization or situation has changed from the baseline situation? (this refers to indicators)
- What helped or hindered the achievement of results? (this refers to challenges or best practices); Did anything unexpected occur?
- What should be done differently in subsequent activities or projects in order to improve such programming? (this refers to lessons learned)

3.6 **Review and modify phase**

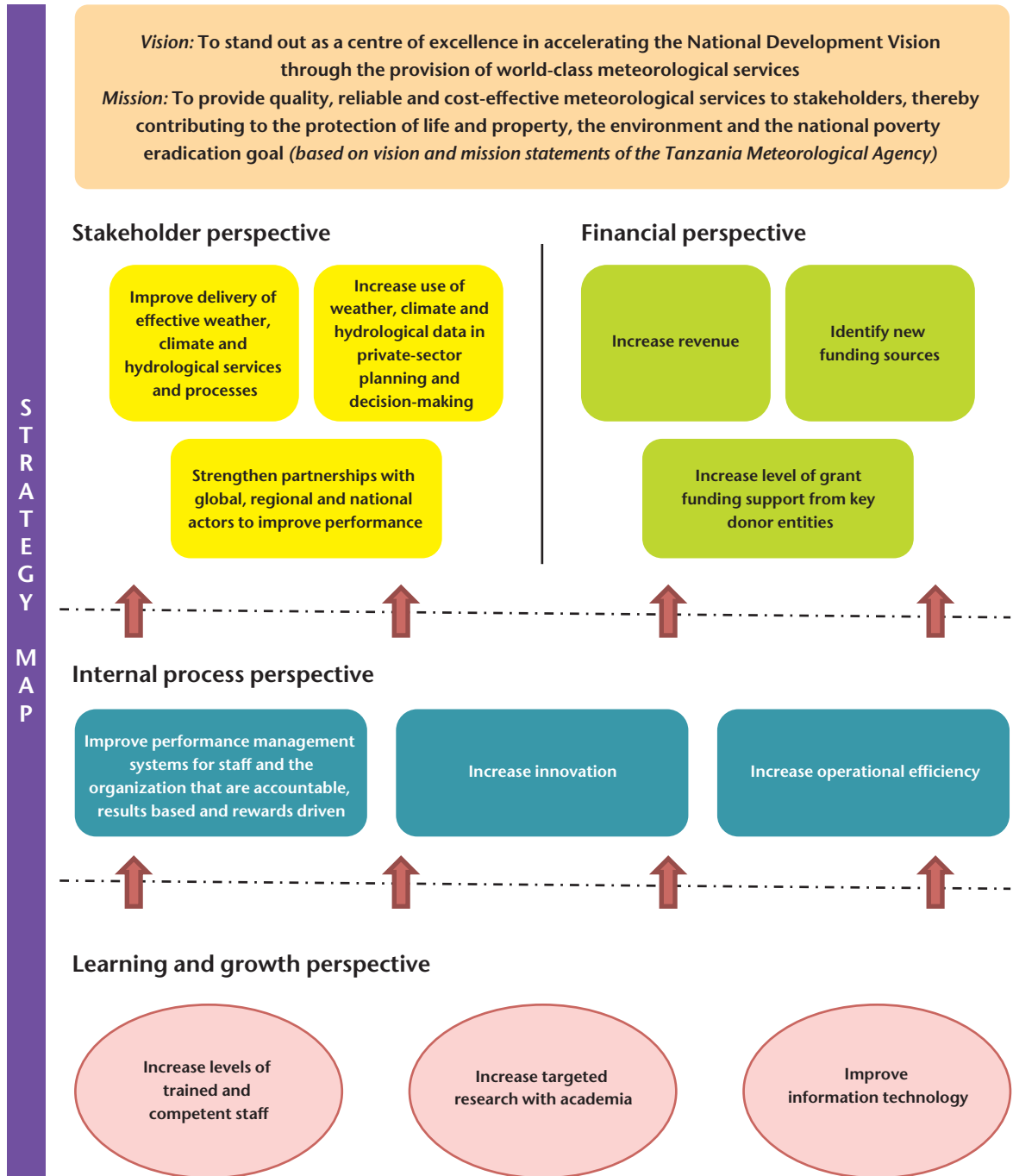
The strategic plan is not set in stone.

While care should be taken to not make frequent major changes without reasonable justification, making some corrections to the directions being taken by the organization is an important and necessary part of making sure that the strategic plan remains relevant to the needs of the people it seeks to serve and to the changing capacity of the different parts of the organization implementing it.

The strategy document is a living document. It can and should be adjusted as needed during implementation, based on new data from monitoring, studies, evaluation and other sources.

ANNEX 1. SAMPLE STRATEGY MAP AND BALANCED SCORECARD FOR NMHS

Sample strategy map



Sample strategy-based Balanced Scorecard for NMHS

Vision: To stand out as a centre of excellence in accelerating the National Development Vision through the provision of world-class meteorological services

Mission: To provide quality, reliable and cost-effective meteorological services to stakeholders, thereby contributing to the protection of life and property, the environment and the national poverty eradication goal

| Objectives | Measures | Targets | Initiatives |
|--|--|---|---|
| Financial perspective | | | |
| Identify new funding sources | Number of new funding sources (by type) identified | At least three of the new sources identified confirming interest in providing funding | Resource mobilization strategy |
| Increase level of grant funding support from key international development entities | Percentage of programmes funded by donor grant resources | 50% | Resource mobilization strategy |
| Increase revenue | Percentage change in annual sales of weather, climate and hydrological products/services | 15% per annum | |
| Stakeholder perspective | | | |
| Increase use of weather, climate and hydrological data in private-sector planning and decision-making | Percentage of private business sectors utilizing weather, climate and hydrological data in production/operation | 30% | Review of industry annual reports |
| Improve delivery of effective weather, climate and hydrological services and processes | Percentage change in the level of citizens' satisfaction with weather, climate and hydrological services and processes | 15% per annum over previous year | Implement service delivery strategy |
| Strengthen partnerships with global, regional and national actors to improve NMHS's performance | Proportion of new collaborations/relationships with businesses at global, regional and national levels contributing to the implementation of NMHS's programmes | 10% per annum | Develop partnership strategy |
| Internal process perspective | | | |
| Improve performance management systems for staff and the organization that are accountable, results based and rewards driven | Performance management and appraisal system in place | Performance management and appraisal system in place by 2018 | Implement the performance management and appraisal system |

| | | | |
|--|--|------------------------|--|
| Increase innovation | New products as a percentage of revenue | 30% | Implement staff innovation competition |
| Increase operational efficiency | Percentage waste reduction | 50% | Waste reduction plan |
| Learning and growth perspective | | | |
| Increase levels of trained and competent staff | Percentage of staff trained per annum (disaggregated by new and existing; male and female) | At least 15% per annum | Implement training plan |
| Increase targeted research with academia | Number of research papers authored jointly by NMHS and tertiary institution presented at national fora | At least two per annum | Implement research plan |
| Improve information technology | IT maturity score | 4.2 (out of 5) by 2020 | Apply life cycle assessment system |

ANNEX 2. SWOT AND PESTLE TEMPLATES

Sample of filled SWOT template for NMHS

| INTERNAL | |
|--|---|
| Strengths (<i>List here anything you can think of that makes your organization amazing! What can you rely on to deliver your services?</i>) | Weaknesses (<i>What is not quite the way it should be yet? What is missing?</i>) |
| <ul style="list-style-type: none">• Strong commitment from top management• Knowledgeable, highly qualified and experienced professionals• Well organized NMHS, operational on a 24/7 basis, covering all subregions• Robust management information systems | <ul style="list-style-type: none">• Poor visibility among government ministries, departments and agencies of products and services• Bureaucratic procurement criteria which cause delays in hiring competent staff• Lack of effective mechanisms for collaboration with the private sector and academic institutions |
| EXTERNAL | |
| Opportunities (<i>List here any potential opportunities to really push your organization forward that you have not yet taken advantage of.</i>) | Threats (<i>List here anything that might get in your way of achieving your goal, such as funding you are not sure of yet, relationships that might break down, etc.</i>) |
| <ul style="list-style-type: none">• Growing awareness of the public and the decision-makers of how everyday life and the sustainable development of society are affected by the weather, climate, water resources and the natural environment (heatwaves, floods, etc.)• Growing demand for an ever broader range of environmental services• Existence of the World Bank and other development agencies as a potential source of funding of meteorological and hydrological development projects• The possibilities of strong partnerships and cooperation between WMO and other United Nations agencies delivering as one on projects and initiatives• The possibility to use new and evolving technologies | <ul style="list-style-type: none">• Failure to cope with rapidly changing environment and framework• Lack of recognition of socioeconomic value of NMHSs and their services• Lack of government funding to support the requirements of the national meteorological and hydrological infrastructure• Attrition of trained staff |

Sample of PESTLE analysis

| Issue | Impact on business |
|--|--|
| Political | |
| (a) Growing political focus and pressure on healthcare | (a) Cutbacks (loss of business) put more pressure on pricing |
| (b) Governments looking for healthcare savings | (b) Increased pressure on pricing |
| (c) Harmonization of healthcare across Europe | (c) Reference pricing, exposing prices across borders |
| Economic | |
| (a) Global economic crisis | (a) Reluctance of consumers to spend on healthcare |
| (b) Reduction in individual disposable income | (b) Again, increased pressure on pricing; however, market is likely to grow due to ageing population |
| (c) Increasing number of buying groups putting pressure on pricing | (c) Need to introduce value-adding processes |
| (d) Reduction in pharma growth | (d) Increased pressure from shareholders |
| Social/cultural | |
| (a) Patient awareness, changing expectations | (a) More pressure on customer service, increased need for education and more price transparency |
| (b) Patient/public activism also increasing (e.g. harnessing new social networking technologies) | (b) Better intelligence-gathering required |
| (c) Increasing age of population and growth in obesity | (c) Market more likely to grow with increasing health concerns |
| Technological | |
| (a) New information and communication technologies (social media) | (a) New digital opportunities: creating new e-models |
| (b) Customized treatments | (b) Direct-to-patient communications |
| (c) Direct-to-patient advertising | (c) More responsive service facilities required |
| Legislation | |
| (a) Changes to advertising laws | (a) Need to focus on education |
| (b) Increased litigation | (b) Quality becomes key |
| (c) Global variability | (c) Unable to rationalize (US and European markets require different formulas) |
| Environmental | |
| (a) Growing environmental agenda and community awareness | (a) Identify eco-opportunities to market |

(Source: http://suranjanmktg.blogspot.com/2011_10_03_archive.html)

ANNEX 3. FILLED STAKEHOLDER ANALYSIS MATRIX

| Stakeholder | Interests | Expectations | Potential |
|--|--|--|---|
| <i>List the stakeholders</i> | <i>Highlight what is their (the stakeholders') interests in the NMHS</i> | <i>Detail what they expect from their relationship with the NMHS</i> | <i>Enumerate the contributions that they could make to the NMHS</i> |
| Other government departments (specify) | Interested in the data produced by NMHSs on ... | Get access to updated information and data | Provide NMHS with internal statistics or data |
| Private sector | | | |
| Universities | Access to research produced by NMHSs | Networking on thematic issues | Exchange of research information |
| Civil society organizations | | | |

ANNEX 4. MISSION STATEMENT WORKSHEET

This worksheet will help NMHSs to define each element of a mission statement. It follows the format of a mission statement, asking the NMHS to describe whom they serve, what they do, why they do it and how they do it. For each element, there are associated key questions that guide staff members through the process.

| Elements of the mission statement | |
|-----------------------------------|---|
| Whom does the organization serve? | <ul style="list-style-type: none"> To whom do we offer our products and services? What are the characteristics of the target population or market? Where is the target population or market located? |
| | |
| What does the organization do? | <ul style="list-style-type: none"> What products and services do we offer? What do our beneficiaries or clients need and want? How well do our current products and services meet the needs and desires of our clients or beneficiaries? |
| | |
| Why does the organization do it? | <ul style="list-style-type: none"> What are the needs and desires of our clients or beneficiaries? What can we do to address the most pressing needs? |
| | |
| How does the organization do it? | <ul style="list-style-type: none"> What strategies will be employed to provide the right products and services to our clients/beneficiaries? Can the strategies be implemented given the resources and context within which we work? |
| | |

ANNEX 5. EXAMPLE OF A LOGICAL FRAMEWORK

| Expected results | Objectively verifiable indicators | Sources of verification | Assumptions |
|--|---|-----------------------------------|---|
| Outcome 1: Improved delivery of effective weather, climate and hydrological services and processes | Level of citizens' satisfaction with weather, climate and hydrological services and processes | Country survey | Adequate budget to fund survey |
| Outcome 2: Strengthened partnerships with global, regional and national actors to improve NMHS's performance | Proportion of new collaborations/ relationships with businesses at global, regional and national levels contributing to the implementation of NMHS's programmes | Memorandum of understanding (MOU) | Willingness of partners to provide both programmatic and administrative support to NMHS |
| Output 1.1: Multi-hazard early warning systems implemented | Number of early warning systems | Annual report | Availability of resources |
| Output 1.2: Accurate forecasts and warnings delivered from the regional centre | Number of forecasts/ warnings | Weather and climate reports | Database systems are routinely maintained/ updated |
| Output 1.3: Flood management plans developed and implemented | Number of communities with flood management plans | Annual report | Availability of resources |
| Output 2.1: Cooperation agreements developed | Number of MOUs signed | Signed MOUs | Improved coordination and negotiation capacity of NMHS |
| Output 2.2: Communication strategy implemented | Number of persons reached by communication strategy | Report from communication | Availability of resources to conduct communication campaign |
| Output 2.3: Resource mobilization plan developed to support NMHS research and innovation | Number of research/ feasibility studies funded | Research and feasibility studies | Availability of resources to conduct research/studies |

GLOSSARY

| | |
|-------------------------------|---|
| Action plan | An action plan is a planning document that provides details on the steps that will be followed to achieve a desired outcome, and most importantly, how each step will be implemented (by whom and when), how the achievement of the desired outcome will be assessed and the resources needed to carry out the action plan. |
| Action planning | Action planning is the process that guides the day-to-day activities of the organization of a project. It is the process of planning what needs to be done, when it needs to be done, by whom it needs to be done, and what resources or inputs are needed to do it. |
| Activities | Actions taken or work performed through which inputs, such as funds, technical assistance and other types of resources, are mobilized to produce specific outputs. |
| Balanced Scorecard | The Balanced Scorecard is a strategic planning model that was designed to measure the performance of an organization in four perspectives, namely financial, customer, internal business process, and learning and growth. |
| Baseline data | Baseline data refer to the existing situation or starting point of an expected result project or programme area prior to intervention, against which change can be measured over time through the use of indicators. |
| Data collection method | Data collection methods indicate the way in which information is collected. There exist various data collection methods representing different ways to collect the required data (e.g. census, observation, surveys, etc.) |
| Data sources | Data sources refer to “where” data can be found or “who” should be contacted to access data to inform each indicator. Data sources can include individuals, organizations, institutions, but can also include specific documentation. |
| Evaluation | Evaluation is the comparison of actual project impacts against the agreed strategic plans. It looks at what you set out to do, what you have accomplished, and how you accomplished it. More specifically, evaluation focuses on the relevance, efficiency, effectiveness, impact and sustainability of the project. |
| Goal | The goal is what the organization believes needs to change. |
| Indicator | A performance indicator is a variable that allows the verification of changes in the development intervention. |
| Inputs | The financial, human, material, technological and information resources used for development interventions. |
| Impact | A sustainable change of state that can be attributed to the accomplishment of intermediate outcomes. An actual or intended change in human development as measured by people’s well-being. |

| | |
|--|--|
| Logical framework | The logical framework is a management tool used to facilitate planning, execution and evaluation of a development intervention. It is an approach to project management that, on a single paper, organizes project components into a hierarchy of logically linked objectives, defines indicators to track accomplishment of those objectives, specifies sources/ methods of data to measure indicators and takes into account external assumptions and risks that affect project success. |
| Objective statements | Objective statements express the progress that is hoped to be achieved and are written in the present tense. |
| Mission | The organization's purpose; what the organization does and why. |
| Monitoring | Monitoring is "the systematic and continuous collection of information to assess progress and demonstrate results" (Kusek and Risk, 1952). It is the systematic collection and analysis of information as a project progresses. It is aimed at improving the efficiency and effectiveness of a project. |
| Monitoring system | A monitoring system is a system used to monitor performance and organize data in a way that allows users to report on these results. |
| Objective | What the organization plans to accomplish so as to make progress in achieving its goals. |
| Outcome | The intended or achieved short-term and medium-term effects of an intervention's outputs. |
| Outcomes (immediate) | Change that is directly attributable to the outputs of an initiative: changes in skills, awareness, knowledge, access or ability among beneficiaries. |
| Outcomes (intermediate) | Changes that generally occur once one or more immediate outcomes have been achieved: a change in behaviour or practice among beneficiaries. |
| Outputs | Direct products or services stemming from the activities of an organization, policy, programme or initiative. Outputs are new products, goods and services or changes in skills and capabilities of individuals or institutions that result from the completion of activities. |
| Performance Measurement Framework | The Performance Measurement Framework is a results-based management tool that guides planning of the systematic compilation of data on the progress of a project or programme based on expected and obtained results. In addition, the Framework outlines the main elements of the monitoring system and ensures that performance information is collected regularly and on time. |
| Result | A result is a change which is describable, measurable or calculable as a consequence of a cause and effect relationship. |
| Results-based management | Results-based management is a management approach that considers strategies, people, processes and measurements for improving decision-making, such as transparency and accountability. It is based on results production, performance measurement, learning, adaptation and the production of performance reports. |

| | |
|-----------------------------|---|
| Results-based report | A results-based report is a document which demonstrates progress towards achieving your results and change that has occurred because of your interventions. |
| Results chain | A results chain illustrates a relationship of influence from inputs/activities to outputs, from outputs to outcomes, and from outcomes to impact, all of which are linked by causal relationships (cause and effect) and sustained by some assumptions/hypotheses about the development context or factors that can influence the causal relationship. |
| Results statement | A results statement explains the achievements expected at the end of a project, programme, or a specific period and is written in the past tense. |
| Risk | The risk is the possibility of a critical condition or occurrence that could impede the realization of expected results. |
| Risk management | Risk management consists in identifying risks, classifying risks in a risk analysis matrix, developing a risk management strategy and a risk management plan. |
| Residual risk | Risks or part of the risk that remain after the implementation of the chosen response strategy are referred to as “residual risks”. |
| Theory of Change | Theory of Change is a causal model. It defines all building blocks required to bring about a given long-term goal. It explains how and why the desired change is expected to come about. |
| Strategic plan | A strategic plan is a document used to communicate within the organization and to its stakeholders the organization’s goals, the actions needed to achieve those goals and all of the other critical elements developed during the planning exercise. |
| Strategic planning | “[A] disciplined effort that produces fundamental decisions and actions that shape and guide what an organization is, who it serves, what it does, and why it does it, with a focus on the future. Effective strategic planning articulates not only where an organization is going and the actions needed to make progress, but also how it will know if it is successful.” (Balanced Scorecard Institute, 2016) |
| Strategy | What an organization will do to meet the objectives (short term) and to play its part in making a difference (long term). |
| Targets | Targets are explicit statements of the desired and measurable results expected for an indicator at a specified point in time. They have to be set based on realism and based on the planned activities. |
| Vision | The vision is a futuristic view regarding the ideal state or conditions that the organization aspires to change or create. |
| Values | The values refer to the principles, beliefs and underlying assumptions that guide the organization. |

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