planning, monitoring & evaluation
Department:
Planning, Monitoring and Evaluation
REPUBLIC OF SOUTH AFRICA

SAMEA
South African Monitoring and Evaluation Association

2030 NDP

Evaluation Guideline **No 2.2.25**

GUIDELINES FOR APPLYING THE CLIMATE AND ECOSYSTEMS HEALTH CRITERION IN THE COMMISSIONING, DESIGN AND IMPLEMENTATION OF EVALUATIONS

Created: December 2022

Addressed to	Government departments who are undertaking evaluations (programme managers and M&E staff) as well as evaluators of government programmes and policies
Purpose	The purpose of this guideline is to introduce the CEH criterion/lens and provide technical guidance on how to apply the climate and ecosystem criterion in the commissioning, implementation and management of evaluations.
Reference documents	• National Evaluation Policy Framework,2019 • Department of Planning, Monitoring and Evaluation (DPME) Evaluation Guidelines • Environmental, climate, ecosystems and biodiversity policies listed in the guideline
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PART A: BACKGROUND TO THE GUIDELINE AND CRITERION FOR CLIMATE AND ECOSYSTEMS HEALTH

1. Introduction

1.1 Background

There is increasing recognition internationally of the threats faced by humanity as a result of global warming and the breakdown of climate stability and natural ecosystems, and that it is the poorest and most vulnerable who are most seriously impacted. There is also greater understanding that people and natural ecosystems form a single inter-dependent system, and that human activities – particularly unsustainable consumption and production practices – are contributing significantly to the environmental crisis. The United Nations make it clear that urgent action needs to be taken at local, national and global levels to make the changes necessary to slow down or halt these processes and repair the damage already done. There is also a growing recognition that we have to move towards social and economic practices that are regenerative – that is, which align or harmonise with and support the natural ecosystems with which they are engaged – and that bring about social justice and equity for all.

What role can evaluations play in contributing to these efforts? All government interventions – from infrastructure development projects and small-scale farmer support initiatives, to literacy programmes, school nutrition feeding schemes and the restoration of wetland areas – are both impacted by and impact on climate and ecosystems health (CEH).[1] Seeking the CEH implications of the intervention requires taking a systemic view of the intervention in its interactions with wider natural systems. Evaluations of interventions have the potential to offer invaluable insights into these impacts and make recommendations about what changes could be made to address them. As such, evaluations can ask the following questions of interventions:

- In what ways does the intervention interact with the natural environment? What natural resources does the intervention depend upon and what impacts do the intervention's activities have on CEH?
- Does the intervention design include ways in which the intervention can adapt to or mitigate the effects of the climate and ecosystems crises? Are the practices and activities of the intervention degrading or helping to restore and regenerate CEH?
- In what ways are the climate crisis and ecological breakdown impacting on the intervention? What are the implications of these impacts for the future sustainability of the intervention?
- In the light of likely changes occurring in climate and ecosystems does the intervention logic still hold and is it still a relevant and appropriate way of responding to challenges, otherwise it can lead to systemic maladaptation and missing out on better adaptation opportunities?
- If it does still hold, what changes can be introduced into the intervention's design, theory of change and/or activities that will make a positive contribution to CEH, improve its sustainability going forward, as well as the ability of beneficiaries to adapt to changes in CEH?
- How can the intervention best balance CEH considerations with social justice and equity? This implies considering the guidance provided in the transformative equity guideline.

Bringing CEH considerations into the evaluation also serves to raise awareness among and educate the implementers, beneficiaries and other key stakeholders of the intervention about these critical issues. In these ways, evaluations can be important catalysts for change.

1.2 Purpose, objectives and structure of the guideline

In order for CEH considerations to be included in the evaluation of all government interventions, a new evaluation criterion entitled 'Climate and Ecosystems Health' has been developed, which is to be applied alongside the existing OECD DAC criteria of relevance, coherence, effectiveness, efficiency, impact and sustainability. [2]

The main **purpose** of this guideline is to introduce the CEH criterion and to provide guidance on how to apply the criterion in the commissioning, implementation and management of evaluations. The guideline is targeted at the programme managers and monitoring and evaluation (M&E) staff within government departments at national, provincial and local levels that are tasked with undertaking evaluations[3]. The guideline will also be of value to the evaluators (internal or external) commissioned to do the evaluations.

The guideline provides a roadmap, flagging at which points in the process of commissioning, implementing and managing evaluations CEH-related considerations could and should be taken into account. As such, it covers the steps involved in preparing for an evaluation; developing the terms of reference (ToR) for an evaluation; managing the evaluation; and the post-evaluation development of an improvement plan and communication of the evaluation findings and recommendations.

Given the often technical and complex nature of CEH-related issues, the guideline also provides an overview of the key concepts and features of CEH that underlie the rationale and dimensions of the evaluation criterion. As such, the guideline also functions as a resource document with suggestions for additional readings, tools and so on provided throughout.

The guideline is structured as follows:

- **Section 2:** defines the key concepts related to CEH that are used in the guideline and provides an overview of the main features of the climate and ecosystems crises, globally and in the South African context. A systemic view of the interrelationship between the socio-economic and environmental is also offered as a way of understanding how interventions fit into the wider systems within which they operate.
- **Section 3:** explains the new CEH criterion by unpacking its various dimensions.
- **Section 4:** outlines the principles that underpin a CEH focus which commissioners, implementers and managers of evaluations need to apply within their respective roles.
- **Section 5:** discusses how to incorporate CEH into the evaluation process in a way that encourages the likelihood of use of the evaluation
- **Section 6:** considers what CEH considerations need to be addressed in the preparation for the commissioning of the evaluation.
- **Section 7:** focuses on the various elements of the ToR, offering suggestions for how to incorporate CEH into the TORs.
- **Section 8:** considers the management of the evaluation, and how CEH can be brought in.
- **Section 9:** considers the post evaluation process and how CEH should be brough in.

Annex 4 includes examples of applying CEH to the TORs of some evaluations.

1.3 Other relevant guidelines

It is important to note that this is not a standalone guideline and must be applied in conjunction with the following DPME guidelines, as applicable. These are listed in Annex 1 and available here.[4] The drivers and impacts of the climate crisis and ecological breakdown are closely linked to equity-related issues of poverty and inequality.

1 See section 2 below for definitions of this and other key concepts used in this guideline.
2 The OECD DAC refers to the Organisation for Economic Cooperation and Development's Development Assistance Committee (https://www.oecd.org/dac/development-assistance-committee/). A brief overview of the DAC criteria is available here: https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm. These criteria were further refined and elaborated in 2019 (see https://www.oecd.org/dac/evaluation/revisedevaluation-criteria-dec-2019.pdf).
3 Chapter 3 of the National Environmental Management Act (NEMA) provides useful planning and implementation context for government departments whose mandates impact on the environment.
4 https://evaluations.dpme.gov.za/pages/guidelines-other-resources.

In this regard, a new criterion, 'Transformative Equity', and its associated guideline have been developed which focus on the extent to which interventions' objectives, design, implementation and impact contribute (or not) to addressing social inequities. As the drivers of climate change and ecosystems breakdown are also linked to inequality (e.g. the top 1% by income produce 15% of all greenhouse gas emissions), the equity guideline should also be taken into account in the application of this CEH criterion (also available on DPME website).

2. An overview: Climate and ecosystems health

Talking about climate and ecosystems health often refers to a wide range of scientific, economic, social and political issues. This section provides a basic overview of the main elements of CEH to lay the foundation for the CEH criterion. The overview includes definitions of key concepts, brief discussion of the drivers and impacts of the climate and ecological crises, and how CEH is inextricably linked to socio-economic justice and equity issues. The section also highlights the main strategies currently being explored and adopted that are aimed at limiting and reversing climate change and ecosystem breakdown. These can be drawn upon in the evaluation terms of reference (ToRs) and designs.

2.1 The climate crisis

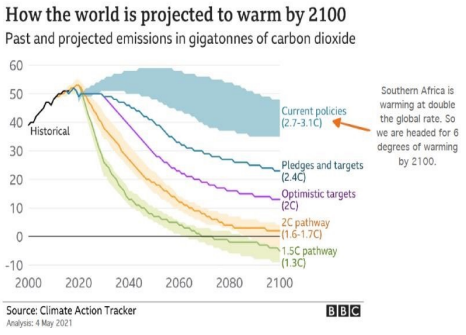
Climate change refers to long-term shifts in temperatures and weather patterns. Changes in climate can be the result of natural processes. However, since the 1800s, human economic and related activities have been the main drivers of climate change (IPCC, 2021). Key among these is the burning of fossil fuels (coal, oil, gas) that release greenhouse gases (GHGs) which trap heat in the Earth's atmosphere, resulting in the rise in global temperatures. This is referred to as global warming and is at the heart of the climate crisis, since unmitigated increases in global temperatures destabilise the climate equilibrium we have had for the last 10 000 years (the Holocene) and will cause climatic swings that will make the planet uninhabitable (see Box 1 and Figure 1).

A recent report of the United Nation's Intergovernmental Panel on Climate Change (IPCC) [5]

(IPCC, 2022: 11-13) highlights a multitude of climate impacts on land, freshwater and ocean ecosystems as well as on human systems, settlements and infrastructure as a result of rising temperatures and the increasing frequency of extreme weather events. Melting glaciers and rising sea levels, tropical cyclones and floods, heatwaves, wildfires and drought are threatening food security; disrupting water, sanitation and energy systems; causing forced migration and even violent conflicts; and generally having deleterious health and economic consequences, and exacerbating poverty and inequality. As the IPCC report notes, the hardest hit by these kinds of climate impacts are regions in the Global South and vulnerable groups and communities such as small-scale food producers, low-income households, children, the elderly, and pregnant women (ibid.: 11).

Box 1: CO2 emissions and global warming projections

Carbon dioxide (CO2) emissions are a commonly used measure of the effects of GHGs on global warming. Recent projections show that current carbon emissions are likely to result in a 3°C or more rise in temperatures. This would be catastrophic, particularly as Southern Africa is warming at double the global rate (Figure 1). Conservative estimates are that by mid-century, the South African coast will warm by 1-2°C and the interior by 2-3°C, and double these figures by the end of the century.[6]



At the 2015 UN climate change conference in Paris, a legally binding international treaty on climate change – known as the Paris Agreement – was adopted by 196 countries. The goal of the Paris Agreement is to limit global warming to well below 2°C, and preferably to 1.5°C, compared to pre-industrial levels. To achieve this long-term temperature goal, countries aim to reach global peaking of GHGs as soon as possible to achieve a climate neutral world by mid-century. Each country is required to submit their plans for climate action, known as nationally determined contributions (NDCs), to the UN Framework Convention on Climate Change (UNFCCC), in which they outline the actions they aim to take to reduce their GHG emissions.

South Africa is a signatory to the Paris Agreement and submitted its first NDC to the UNFCCC in 2015 and an updated version with new targets in 2021. In addition to the NDCs, South Africa has taken other steps to address the climate crisis and these are listed in Annex 2.

Bringing climate back to health means via a reduction in GHG emissions as well as adequate, regenerating carbon sinks, bringing CO2 levels to a level of around 350 ppm.

5 The Intergovernmental Panel on Climate Change (IPCC) is the UN body assessing the science related to climate change. The IPCC has recently produced a series of reports which constitute the most up-to-date and comprehensive scientific evidence about the causes and impacts of climate change. Working Group I examined the physical science underpinning past, present and future climate change: Climate Change 2021: The Physical Science Basis; Working Group II assessed the impacts, adaptation and vulnerabilities related to climate change: Climate Change 2022: Impacts, Adaptation and Vulnerability; Working Group III focused on climate change mitigation, assessing methods for reducing greenhouse gas emissions, and removing GHGs from the atmosphere: Climate Change 2022: Mitigation of Climate Change.
6 South African State of the Environment Report 2021: https://soer.environment.gov.za/soer/CMSWebSite/Content.aspx?menuId=9536,9536#.
7 For further information about the Paris Agreement, visit the UNFCCC website: https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement.

2.2 Ecosystems breakdown and biodiversity loss

The surface of the Earth is made up of a series of connected ecosystems which are critical to the survival of humans. An ecosystem refers to a geographic area "where plants, animals and other organisms, in conjunction with the landscape around them, come together to form the web of life." [8] Ecosystems include forests, lakes and rivers, grasslands and savannahs, mountains, oceans and coasts, farmlands, and urban areas. Ecosystems are delicately balanced; changes in one aspect (such as temperature) force changes in other aspects (such as what plants and animals can survive there). Biodiversity is one of the bedrocks of healthy ecosystems. Biodiversity refers to the "diversity of genes, species and ecosystems on Earth, and the ecological and evolutionary processes that maintain this diversity" (SANBI, 2019: 202).

Ecosystems and biodiversity are integral to many of the economic, development and wellbeing needs in society through: the provision of food, fresh water, animal feed, fuel, timber, fibres and medicines; non-material services such as tourism revenues, job creation,[9] recreational opportunities, and a sense of place and connection to cultural identities; as well as critical natural processes such as nutrient cycling, the regulation of air quality and infectious diseases, the mitigation of natural hazards (such as fires and floods), and waste processing and detoxification (DFFE, 2021; Hassan et al., 2005; IPBES, 2019, Millennium Ecosystem Assessment, 2005; SANBI, 2019).

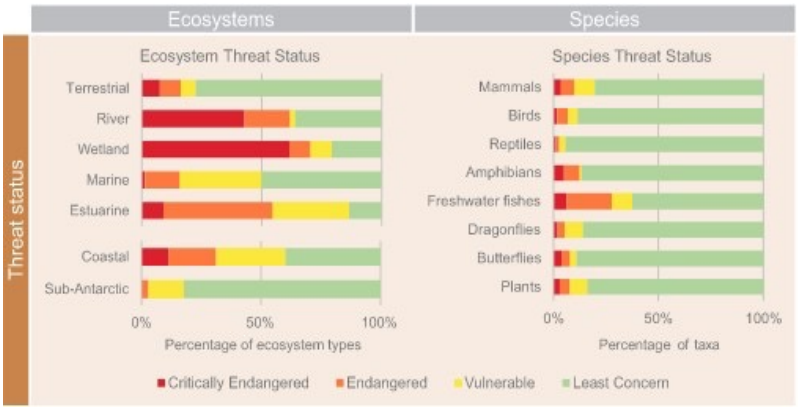
While human development has benefited tremendously from the use of ecosystem resources, it has also contributed significantly to ecological breakdown and biodiversity loss. A key driver of this is unsustainable production and consumption practices in what is referred to as the 'take→make→use→dispose' model of extracting resources, using them in production processes and then disposing of waste by-products.[10] Thus, for example, economic and development activities typically result in the loss of natural habitats through the clearing of land for agriculture, human settlements, plantation forestry, mining and infrastructure development, or through practices such as overfishing. Ecosystems are further damaged by air pollution through the burning of fossil fuels or chemicals in industrial production; the pollution of rivers and oceans through the use of pesticides, micro and single-use plastics; and the increasing numbers of toxic landfill sites.

As a consequence, societies' resource consumption is causing ecosystems to fall into deficit (i.e. ecosystems cannot regenerate fast enough to match the speed of our extraction) and as such the resources consumed on an annual basis cannot be regenerated in a single year (Kresge Foundation, 2015; WEF, 2018). And, as with climate change, the impacts of ecosystem breakdown are more profound for the poor and vulnerable – not only do they often depend directly on particular ecosystems for their subsistence and/or livelihoods, but they have limited resources to protect themselves against or recover from these impacts.

Internationally, there are various initiatives aimed at addressing ecosystem degradation, such as the UN Convention on Biological Diversity[11] and its draft Global Biodiversity Framework[13] which contains goals to be achieved by 2050.[12] South Africa has taken various steps to address ecosystem breakdown and biodiversity loss through the production of legislation, policies and strategies. These are also listed in Annex 2.

Despite these efforts, recent research shows that while South Africa is renowned for its exceptional and rich biodiversity, many of these resources are overexploited and many of our precious ecosystems and species are under threat (Figure 2).

Figure 2: Ecosystems and species under threat in South Africa



Source SANBI (2019:1)

Bringing ecosystems back to health refers to the capacity of ecosystems to remain stable, sustainable and resilient to external influences thereby supporting a diversity of life forms and being able to provide key benefits to society such as the provision of clean water and food.

2.3 The link between CEH and socio-economic justice and equity

As has been highlighted in previous sections, the impacts of the climate crisis and the breakdown of ecosystems affect different groups of people within society and in different parts of the world disproportionately. For instance, rural people, most of whom are usually relatively poor and whose livelihoods depend directly on croplands, rivers, forests or oceans, are particularly vulnerable to the effects of ecosystem mismanagement or climate change (Hassan et al., 2005: 2). Conversely, wealthier sectors of society are better-equipped to buffer themselves against, for example, extreme weather events through technology or the effects of ecosystem breakdown through the replacement of some resources with others (ibid.).

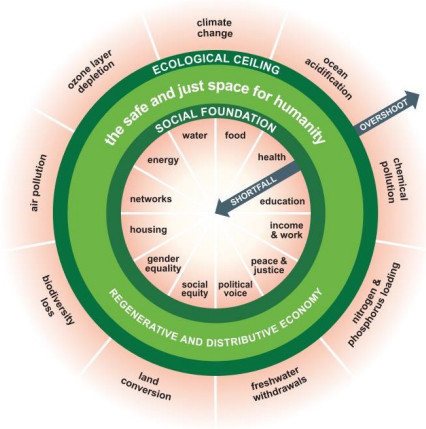
10 The South African State of the Environment Report 2021 provides a comprehensive overview of the drivers of environmental destruction, depletion and degradation in the country, available here: https://soer.environment.gov.za/soer/CMSWebSite/Content.aspx?menuId=9536,9536#.
11 The Convention came into being in 1993 and has three objectives: the conservation of biological diversity; the sustainable use of the components of biological diversity; and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources
12 Due to be agreed on in latter half of 2022: https://www.cbd.int/conferences/post2020.
13 The draft Framework has four long-term goals for 2050 related to the 2050 Vision for Biodiversity: (1) Enhanced integrity of all ecosystems; (2) Valuing, maintaining, or enhancing nature's contributions to people through conservation and sustainable use; (3) Fair and equitable sharing of the benefits from the utilization of genetic resources; and (4) Closing the gap between available financial and other means of implementation, and those necessary to achieve the 2050 Vision.

It is in this sense that the climate and ecosystem crises are exacerbating poverty and inequality. Baloyi et al. (2022) use the term "socio-ecological crisis" by way of describing the interwoven human- and naturecentred challenges faced in South Africa today. This interplay and interdependence between the social and ecological are well represented in the doughnut-shaped framework (Figure 3) for depicting how "an environmentally safe and socially just space for humanity to thrive in" is created by staying within ecological limits, sometimes referred to as planetary boundaries, whilst meeting societies' basic needs (Raworth, 2012: 4).

The term 'just transition' reflects the idea that people and nature are part of the same, interdependent system and refers to the intersection of environmental and social justice imperatives. It stems from the recognition that addressing CEH considerations cannot be at the expense of social and economic equality and vice versa. In 2021, the Presidential Climate Commission produced a draft just transition framework – a planning tool which sets out the actions that the government and its social partners will need to take to achieve a just transition, and the outcomes to be realised in the short, medium, and long term (see PCC, 2022). 'The framework does not deal with climate mitigation and adaptation policies per se, but rather with managing the social consequences and economic upside of those policies, while putting human development concerns at the centre of decision-making. A just transition builds the resilience of the economy and people through affordable, decentralised, diversely-owned renewable energy systems; the conservation of natural resources; equitable access of water resources; and sustainable, equitable and inclusive land-use for all, especially for the most vulnerable'

In order to change the current trajectories of climate and ecosystem crises, a fundamental rethinking of the ways in which our economic and social systems interact with and depend on ecosystems, and value the common good, are necessary. Key strategies and thinking around this are considered in the next section.

Figure 3: The 'doughnut' - the safe and just operating space within which human development stays within nature's limits



Source: Raworth (2012)

2.4 Approaches to improving climate and ecosystems health

Many strategies for addressing the climate and ecosystem crises have been advanced and are being implemented – with varying degrees of success.[14] There is also considerable scientific and political contestation about which strategies are appropriate, desirable and most likely to be effective. It is beyond the scope of this guideline to cover these comprehensively or in any detail. Instead, a selection of key strategies is presented which form the foundation for the CEH evaluation criterion and its application. These strategies and associated measures are often interrelated and address more than one aspect of CEH.

Mitigation of climate change and ecosystem breakdown

The term 'mitigation' is usually used in reference to climate change – although mitigation measures themselves, as well as the mitigation of climate change, are ultimately beneficial in addressing ecosystem breakdown too. As such, mitigation refers to actions taken to reduce GHG emissions and to enhance what are referred to as 'carbon sinks' – that is, a forest, ocean or other natural environment which is able to absorb carbon dioxide from the atmosphere. Examples of climate mitigation measures include the following:

- Increased use of renewable energy;
- Changes in transportation methods – e.g. electric cars to reduce emissions; greater reliance on public transport or bicycles;
- Shift to plant-based diets in order to reduce emissions produced by the meat industry;
- Regenerative agriculture storing soil carbon, expanding forests and other carbon sinks;
- Improving the design of appliances to make them more energy efficient and reduce emissions.

Examples of ecosystem mitigation measures would include:

- Ensuring that sewage plants are working effectively and not discharging raw sewage;
- Controlling deforestation and encouraging forest regeneration;
- Creating protected areas to safeguard ecosystems.

Adaptation measures for addressing climate impacts and ecosystem breakdown

Adaptation points to the need for countries and communities to plan for and implement processes, practices and infrastructures that will aid them in responding to, and being more resilient in the face of, existing and future climate impacts. The South African State of the Environment Report (DFFE, 2021) defines adaptive capacity as: "the ability of a system to adapt to the impacts, cope with the consequences, minimise potential damages, or to take advantage of opportunities offered by climate change or climate variability."

While adaptation usually refers to addressing the impacts of climate change, adaptation strategies can also be developed and applied in the context of coping with wider environmental degradation.

Examples of adaptation measures include the following:[15]

- Extreme weather events: building flood defences such as sea walls; setting up early warning systems for cyclones; improving flood and storm water management
- Reducing reliance on fossil fuels: move to renewable energy, infrastructure and incentives for switching to public transport, cycling and walking, car-pooling etc.;
- Land conservation: switching to drought-resistant crops, protecting coastal wetlands;
- Drought and water scarcity: setting up water harvesting and grey water systems; managing water demand management (reuse, recycling); desalination

14 It is worth noting here that climate change is both an outcome and driver of ecosystem breakdown.
15 See South Africa's National Climate Change Adaptation Strategy.

Green and eco-friendly/environmentally sustainable products, processes and economy

'Green' or 'eco-/environmentally-friendly' products and processes are designed in such a way as to minimise their environmental impacts during and after their life-cycle by reducing waste and maximising resource efficiency. Typically, green products and processes are characterised by reduced or zero toxic chemical use, carbon footprint and plastic footprint; based on the least use of resources such as water and energy and the use of renewable energy. Green products are usually designed to be recyclable, reused or biodegradable and come in eco-friendly packaging.

The move towards green products and processes has given rise to 'green industrial sectors' and 'green jobs', and many countries have adopted the discourse of 'green economies' as key components of sustainable development paths.

Circular and regenerative practices

More recently, there has been increasing recognition that in order to address the climate and ecosystems crises effectively, there is a need to transform production and consumption systems in fundamental ways by redesigning our economy away from the destructive and unsustainable 'take→make→use→dispose' model towards a circular economy based on regenerative principles and practices.

A circular economy refers to "an economic system designed with the intention that maximum use is extracted from resources and minimum waste is generated for disposal" (Deutz, 2020: 193). It is underpinned by a move towards renewable energy and materials, and practices that regenerate natural systems.

The basic principles of a circular economy are eliminating waste and pollution, circulating products and materials, and regenerating nature.[16] These practices can be beneficial to addressing both climate change and biodiversity loss (EMF, 2021a; EMF, 2021b):[17]

Figure 4: Elements of a circular economy

Source: UNIDO (2020: 3)

- By **eliminating waste and pollution,** GHG emissions are reduced across the value chain; biodiversity is preserved because the natural environment is less polluted and via redesign where, for example, plastics can be reused, recycled or composted.
- **Circulating products and materials** retains their embodied energy, thereby reducing the demand for energy overall; keeping products (such as clothing or electronics) in circulation for longer reduces demand for land clearing or mining, thereby preserving ecosystems
- **Regenerating nature** (such as planting trees or through regenerative agricultural practices) contributes to carbon sequestration (i.e. capturing and storing atmospheric carbon dioxide and thus reducing global warming).

Circular and regenerative approaches are often captured in various versions of the 'Rs', for example: **refuse** – items such as single-use plastic which will simply end up in landfills, or the use of energy derived from fossil fuels; **reduce** – consumption in general (buy only what you need, go virtual rather than fly), and the production of waste and pollution; **reuse** – switch to reusable or sustainable alternatives; **repair** – rather than throw out and buy a newer version; **recycle** – as a last resort; and **rot** – turn organic waste into compost which can be used as a regenerative resource in growing food.

Responses to the climate and ecosystems crises fall on a spectrum, as per Figure 5 below.

Figure 5: Spectrum of responses and strategies to addressing CEH

'Business-as-usual'/status quo
No action is taken and the conventional 'take□make□use□dispose' approach continues to cause harm, further destroying ecosystems, generating waste and pollution, and contributing to global warming. This will result in catastrophic changes to the habitability of the planet in the next 50 years.

'Limited efforts to 'green' the current system
Economic processes and products that seek to reduce the environmental harm done by conventional practices. While an improvement on 'business-as-usual', such practices alone are not sufficient: on the one hand, what is being 'sustained' might be harmful practices and systems (i.e. the status quo) (Gabel, 2015); on the other hand, such approaches do not bring about the more fundamental socio-cultural and economic system changes required to address the root cause of the CEH crises. Furthermore, products or processes labelled as 'green' are not necessarily environmentally friendly[18] and may be subject to 'greenwashing'[19] (Durif et al., 2010). While these may have been sufficient 50 years ago when climate change was first recognised these are completely insufficient now.

'Regenerative' practices
Represents fundamental system change, away from the 'take>make>use>dispose' approach towards practices that constantly (re)circulate or regenerate resources for future use thereby reducing resource dependence and waste.[20] Requires a reconceptualisation of the relationship between people/culture and nature as part of a single, co-evolving system rather than as nature in service to human activity.

15 See South Africa's National Climate Change Adaptation Strategy.
16 Ellen MacArthur Foundation website: https://ellenmacarthurfoundation.org/topics/circular-economyintroduction/overview.
17 The Ellen MacArthur Foundation core focus is on developing circular economy practices. Two very useful, practical resources for the purposes of this guideline available on their website are Completing the Picture: How the circular economy tackles climate change and The Nature Imperative: How the circular economy tackles biodiversity loss.
18 For instance, a cleaning product that does not contain toxic chemicals (making it environmentally preferable to those that do) might consume significantly larger amounts of water or energy to produce.
19 'Greenwashing' "is a form of marketing spin in which green PR and green marketing are deceptively used to persuade the public that an organization's products, aims and policies are environmentally friendly. Companies that intentionally take up greenwashing communication strategies often do so in order to distance themselves from the environmental lapses of their suppliers." (https://en.wikipedia.org/wiki/Greenwashing). Thus, for example, new packaging might be introduced and marketed as 'biodegradable' when in fact it is not.
20 The circular economy discourse is gaining traction in South Africa. The DFFE has recently developed a circular economy guideline for the waste management sector.

3. The climate and ecosystems health evaluation criterion: Definitions and dimensions

3.1 Focus and definition of the criterion

The primary focus of this criterion is on assessing the impacts that result from the interaction between intervention activities/practices and climate and ecosystems, and making recommendations about how intervention practices can be improved in order to make more positive contributions to CEH, and to make the intervention and its beneficiaries more adaptive.

The focus and dimensions of the CEH criterion are captured in Figure 6 and Table 1 below. The dimensions are described in greater detail in the following section.

Figure 6: Focus and dimensions of the CEH criterion

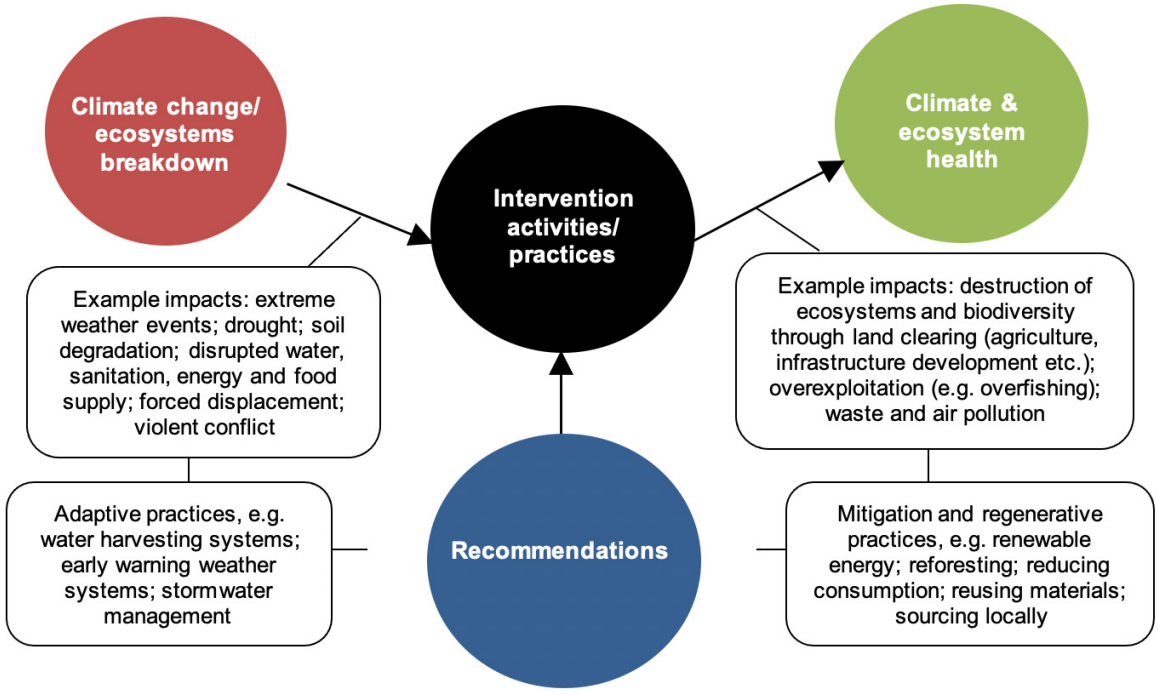


Table 1: Definition of the climate and ecosystems health criterion

Criterion	Climate and ecosystems health (CEH) – does the intervention degrade or regenerate CEH and how will it be affected by changes in CEH?
Brief description	Assessing the intervention in terms of: 1. The impacts (degenerative, neutral, regenerative) on CEH in the implementation of the intervention, such as of the resources consumed, the waste/pollution generated, or job creation and economic growth strategies predicated on natural resource extraction or in sectors which degrade the environment like carbon or water-intensive activities; 2. The impacts of climate change and ecosystem degradation on the operation, outcomes and sustainability of the intervention; 3. The extent to which the intervention design facilitates or inhibits the capacity of the intervention and its beneficiaries (human and non-human[21]) to adapt to the effects of climate change and ecosystem degradation. Making recommendations regarding: 1. How detrimental practices can be reduced or eradicated and what new practices can be introduced that could make positive contributions to CEH (mitigation and regeneration); 2. How the adaptive capacity of the intervention and its beneficiaries can be strengthened via new practices and skills.
Notes	• 'Climate health' refers to global temperatures returning to a safe level • 'Ecosystems health' refers to the capacity of ecosystems to remain stable, sustainable and resilient to external influences thereby supporting a diversity of life forms and being able to provide key benefits to society such as the provision of clean water and food.

21 It is important to recognize that humanity only exists as part of a viable ecosystem/nature, and that if non-human species don't survive humans will ultimately not survive.

3.2 Dimensions of the CEH criterion

There are three main dimensions of the CEH criterion: (1) the impacts of the intervention on CEH, (2) the impacts of the climate crisis and ecosystem breakdown on the intervention, and (3) the adaptive capacity of the intervention. These are described in greater detail below, using the South African government's National School Nutrition Programme (NSNP) as an example to illustrate how each dimension applies.[22]

3.2.1 Dimension 1: Impacts of the intervention on CEH

The activities and practices associated with the implementation of an intervention impact on CEH in three key ways; resource consumption, the generation of waste and pollution in implementing the intervention, and impacts from the outcomes of an intervention on climate and ecosystems e.g. job creation and economic growth strategies predicated on natural resource extraction or in sectors which degrade the environment like carbon or water-intensive activities.

The implementation of an intervention relies on the use of various resources, including material and human resources. For the purposes of the CEH criterion, the focus is on resources drawn from natural ecosystems such as water, trees, energy and land – for instance, as would be utilised in the construction of a road or a housing project.

Most human activities generate pollution of some form or another, whether it be from the exhaust fumes of vehicles or the contamination of wastewater through the use of chemical cleaning agents. Similarly, waste and by-products of resources are generated throughout the life-cycle of an intervention. The CEH criterion encourages evaluations to consider the environmental impacts of the outputs of interventions and to assess approaches to reducing negative impacts.

In addition, the outcome of the intervention may create changes that can be detrimental to CEH, such as where the jobs created or activities implemented degrade the environment.

Box 5: Applying Dimension 1 to the NSNP

The NSNP relies on a range of nature-based material resources in order to produce the food supplied to schools. Aspects that could be considered include the following:

- Where the ingredients for the meals are sourced (locally or from large supermarkets) and how far these ingredients travel to the site of preparation – using produce from local farmers serves to stimulate and support the local economy; the shorter the distance the ingredients travel, the less petrol is used and the less carbon emissions from vehicles.
- The type of energy used in the preparation of the meals (e.g. electricity, gas, paraffin, solar) and where it is generated – the ideal would be the use of renewable energy generated locally (e.g. solar-produced energy based at the school or the caterers).
- The water used for irrigation of the school food gardens – is it municipal potable water or is it rainwater captured at the school site or grey water generated from the school?

Positive contributions to CEH in terms of resource consumption could include:

- Generating clean energy through the installation of solar panels;
- Setting up water harvesting systems (e.g. grey water or rainwater tanks);
- Purchasing ingredients locally in order to reduce fuel consumption and carbon emissions.

The NSNP also generates waste and may be contributing to pollution as a result of its activities. Considerations in this regard would include the following:

- Transport – is the model minimising the use of fossil fuels (petrol/diesel) and carbon emissions by sourcing materials locally?
- Pollution – is the food grown using pesticides affecting human and ecosystems health?
- Leftover food or ingredients – are these thrown out, ending up in municipal landfills generating methane, or are they shared with poor and vulnerable in local communities and/or used to make compost for the food gardens?
- Packaging – is food distributed to learners using single-use plastic or are biodegradable or reusable materials utilised?
- Are the food gardens helping the community be more resilient to potential food shocks from climate change?

Positive contributions to CEH could include regenerative practices such as:

- Using the food waste for compost which, in turn, is used to produce the food;
- Giving community members access to collect useful materials like empty tins in order to stimulate the waste economy;
- Providing nutrition education so that people understand how to reduce waste, grow food etc. and so are more resilient.

22 The NSNP aims to enhance the learning capacity of learners through the provision of a healthy meal at schools. Where it is implemented, the programme has shown to improve punctuality, regular school attendance, concentration and the general wellbeing of participating learners. One nutritious meal a day is provided to primary and secondary school learners from poor backgrounds. The menu is informed by the South African Food Based Dietary Guidelines. The meals are prepared by unemployed members of the community appointed by the School Governing Body. Some provinces implement a decentralised model where local communities produce and cook the food, while others use a centralised model with central procurement and delivery. The schools are encouraged to grow food gardens so that the educators and learners can learn how to grow vegetables and fruit, and in order to supplement the school meals with fresh produce. Parents and community members are encouraged to donate to the programme; for example, cooking, eating and garden equipment, detergents and protective clothing. (Source: Department of Basic Education website: https://www.education.gov.za/Programmes/NationalSchoolNutritionProgramme.aspx, accessed 2 March 2022.)

3.2.2 Dimension 2: Impacts of the climate crisis and ecosystem breakdown on the intervention

Climate and ecosystems breakdown could affect the intervention in a number of ways. This could be through direct effects of extreme weather events and disasters (e.g. floods or wildfires); drought; soil degradation; disrupted water, sanitation, energy and food supplies; forced displacement; or unrest and conflict. These may directly affect the intervention that is being evaluated – both its implementation and its sustainability going forward.

Box 6: Applying Dimension 2 to the NSNP

The implementation of the NSNP could be affected by the effects of climate change and ecosystem breakdown, for example:

- Disasters and extreme weather events could affect the supply of food available locally; transport links for supplies; the ability of schoolchildren to receive the meals provided by the Programme (as happened during COVID-19 when schools were shut); damage to school buildings or electricity and refrigeration capacity.
- Heatwaves and droughts resulting in challenges for local food production, or food spoiling quickly.
- Soil degradation, destruction of biodiversity, and drought – reducing capacity for growing food gardens.

It might also be that in the future, local production may no longer be viable with climatic changes, or that different technologies may be needed.

Dimension 3: Adaptive capacity of the intervention

This dimension asks to what degree the intervention increases the adaptive capacity and resilience of the intervention itself and of its beneficiaries or other stakeholders to withstand the damage from disasters, heatwaves, droughts etc. This could be immediate (e.g. dealing with a disaster); a short-term measure (e.g. planting crops that can withstand droughts or higher temperatures); medium-term, avoiding a potential disaster (e.g. building better water storage, or infrastructure that can withstand high winds and heavy storms that previously have been 30 year events but are now likely to be every five years).

It is important to also avoid maladaptation where changes made in the intervention actually worsen the situation for the human system and the ecosystems. Aside from wasting time and money, maladaptation is a process through which people become even more vulnerable to climate change. For example, increasing agricultural productivity in areas that experience increasingly frequent drought without proper thinking on the potential demand on water tables in times of drought may ensure farmers a harvest in the short-term, but can also increase water and food insecurity if the water tables decline. An intervention can also lead to unintended adverse effects for some groups of people, and failure to account for differentiated vulnerabilities will lead to increased inequalities It is important to understand whose adaptive capacity is most at risk and how adapting the intervention affects this. This signals the importance of involving in the evaluation voices of those most affected but often disempowered (covered in more detail in the transformative equity guideline).

Box 7: Applying Dimension 3 to the NSNP

The NSNP could foster adaptive capacity and resilience by incorporating the following kinds of measures into its design:

- Immediate – keeping more food and energy stocks on hand in the event of a disaster. These could also be used to help the wider community in such a case.
- Short-term – encouraging local producers supplying the school to use crop varieties that are drought- and heat-tolerant, and using several sources so that if one fails, another may have supplies?
- Medium-term – encouraging schools to store water that can be used for cooking; ensuring that designs of food stores are better protected from rain; encouraging solar-powered energy in schools which can be used for cooking. These could also have wider impacts in the community, and make schools better able to serve as emergency centres in the case of disasters. For local food production different technologies such as greenhouses may be needed to conserve water and control temperatures.

In terms of avoiding maladaptation, for example it may be important to consider whether if a very water-stressed area whether even with technological adaptation it is viable to grow food locally in the future, or better to import from areas better suited, or in some places people will have to move away because of climate change.

4. CEH-related principles guiding the commissioning and undertaking of evaluations

Those responsible for the commissioning of evaluations have a vital role to play in imbuing the ToRs and evaluation design from the start with principles appropriate to CEH. These principles should also inform how the evaluation itself is undertaken as well as the (re)design of the intervention in terms of eliminating existing and/or introducing new activities and practices within interventions.

Drawing on the definitions and descriptions provided earlier, this section of the guideline distils the key principles that should guide the design and implementation of the intervention so that it has a regenerative effect on CEH rather than degrading it. Then we consider how to apply these in the evaluation itself.

- Awareness of the broader and interrelated systems within which the intervention operates, so that CEH effects across linked systems can be seen and if appropriate, evaluated (e.g. food production practices in the NSNP case).
- Awareness of the evolution of climate and ecosystems breakdown and so designing/redesigning to address these changes.
- Be prepared to address the transformations needed to address the transformational changes needed in terms of the systemic changes needed, scale and speed of change.[23]
- Reflecting how the intervention can consciously and purposively shift to regenerative and restorative practices ideally using international standards or good practice via creative application of the 'Rs' where possible; for example:
  - Using renewable energy
  - Refusing the use of single-use plastic
  - Reducing the consumption of water or the generation of waste
  - Reusing containers or repurposing them for another use
  - Repairing rather than replacing faulty equipment
  - Recycling paper, glass and tin, and other waste materials
  - Composting organic matter for use in farming or food gardens.
- Incorporating a CEH educative component into the intervention through which both the implementers/managers and beneficiaries/stakeholders of the intervention can learn more about the impact of their activities on CEH and strategies for mitigating these.
- Identifying and building skills for the transitions needed to move from CEH-negative to CEH-positive practices (e.g. setting up recycling and water harvesting systems, learning about composting, carbon sequestration by planting trees).
- Building awareness and responsiveness to the increasing changes arising from climate and ecosystems breakdown (among others) in order to strengthen the management of the intervention to adapt.

These can be reflected in the evaluation questions (see Table 4). The following principles would apply specifically to the evaluation itself, which is in itself an intervention:

- The evaluation should apply these principles in the way it is undertaken so helping to promote awareness and understanding of the urgent need for action on CEH, and how to CEH issues could be addressed.
- The evaluation should seek to identify both negative and positive consequences of the intervention on CEH and identify opportunities for change and the skills that will be required to bring about such change.
- The evaluation needs to intentionally explore both the intended and unintended CEHrelated impacts/consequences of interventions. Climate and ecosystem health issues often lie within the unintended outcomes of the intervention (e.g. within activities involving basic operations such as transport, product sourcing, waste disposal etc.).
- The evaluation should also seek to identify who is affected by these unintended CEH impacts/consequences, and who among these 'win' and 'lose' as a result and these stakeholders need to be involved in the evaluation so their views emerge.[24]
- Linked to this, the evaluation should investigate how the power of different stakeholders affects their ability to act on CEH issues or has consequences for different groups, including the specific target groups of the intervention as well as more widely. This has implications for who is consulted in the research, who participates in steering committees etc. and may require bringing in subject matter experts and civil society organisations which represent ecosystem regeneration and climate change response groups or advocate around these impacts.

23 See the five dimensions of transformational change at https://www.climateinvestmentfunds.org/tclp
24 This is covered in detail in the linked equity guideline

5. Incorporating CEH into the evaluation process in a way that encourages the likelihood of use of the evaluation

It is very important that the findings of the evaluation, now with CEH implications, are used and acted upon. Goldman and Pabari (2020) draw out lessons for maximising the likelihood of the use of evidence. They discuss how evidence-use interventions are undertaken to build awareness, agreement and trust amongst others, thereby building the motivation and capability of decision-makers and their opportunity to use evidence. This has to start before the evaluation is undertaken, and so must be actively planned for in the preparation stage. A key element is ensuring that key stakeholders, potentially including those affected by CEH concerns, are included in the steering committee (see section 8.1).

As well as instrumental use (were the recommendations of the evaluation acted upon?), Goldman and Pabari also point to the importance of conceptual use (building understanding of the intervention and why it is or isn't working) and process use (learning from the evaluation during the process, such as from a theory of change workshop). This points to planning the process of the evaluation carefully to keep stakeholders involved throughout.

Some of the evidence-use interventions that could be applied here to maximise the likelihood that attention is given to using the findings of the CEH aspects of the evaluation are captured in Table 3 below, and should be reflected in the planning for the evaluation.

Climate and ecosystems concerns are closely interlinked with how power plays out in society. Evaluators and commissioners of evaluation should be attentive to the dynamics of power and voice that are at play in:

- how interventions are funded, designed and implemented;
- how evaluations are carried out and evaluators are perceived; and
- how evaluation results are presented and used.

Key from the outset is creating a process where stakeholders are likely to own the evaluation and use the results. Above all it is critical that stakeholders are meaningfully engaged throughout the entire evaluation process, from conception through to presentation of findings and development of improvement plans. Table 3 (drawing on work by Goldman and Pabari, 2020) presents some possible approaches that can be used to engage stakeholders that will increase the likelihood of evidence use.

Table 3: Possible interventions to maximise use of transformative equity findings

Change to bring about	Evidence use interventions
Building agreement/ understanding/ trust and commitment to using the results	• Steering committee to include key stakeholders, potentially including those affected by the intervention • Running capacity-building (e.g., learning-by-doing, workshops and formal training courses) around the climate and ecosystem health criterion • Involving insiders e.g., from government and possibly the area if a specific geographical area is prioritised
Facilitating a process of understanding the importance of transformative equity issues among stakeholders (buy-in)	• Face-to-face feedback of findings involving equity specialists (perhaps sector-specific, e.g., social development, economics) who can assist stakeholders to understand the evidence • Encouraging active engagement and dialogue around the implications and challenges of making suggested changes, including adjustments to theory of change or intervention design; trade-offs or contradictions with other elements of the intervention • Organising meetings with stakeholders adversely affected by the intervention, e.g. excluded from social benefits plan
Strengthening ability and confidence of stakeholders to use the evidence	• Involving equity specialists to assist stakeholders to understand the implications of the evidence and possible ways to address this • Facilitating workshop(s) with implementers and stakeholders about how to incorporate evaluation improvement plan recommendations?
Institutionalising/ formalising use of the evidence	• Use of management responses and improvement plans to formalise action needed
Ensuring access to the evidence	• Producing accessible 1/5/25 page reports and policy briefs • Report being available on a knowledge repository

6. Preparing for commissioning of the evaluation

This section provides guidance regarding how CEH dimensions and CEH principles can be incorporated into the evaluation process, from commissioning to dissemination and use of findings.

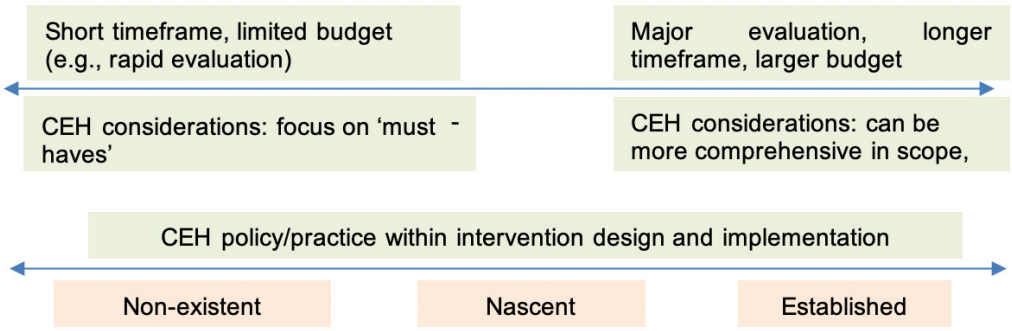
6.1 Deciding on how far to include CEH in the evaluation, and with what focus

As with all evaluations, decisions need to be made about the nature and scope of the evaluation – in this case, specifically the nature and extent of the inclusion of CEH considerations in the evaluation ToR, design and implementation. This is addressed in detail in terms of scope in the ToR below. At this point it is important to think of this in overall terms. The application of the CEH criterion in the evaluation of interventions does not follow a onesize-fits-all approach. This recognises that different factors affect what is possible to include in terms of CEH such as:

- The timeframe and resources available to undertake the evaluation;
- The type of evaluation that is being undertaken (diagnostic, implementation, outcome, impact, economic etc.);
- Whether the intervention operates at local, provincial and/or national levels;
- Whether any CEH considerations have been explicitly incorporated into the objectives and design of the intervention, or its theory of change[24];
- The availability of relevant sources of data and expertise (e.g. regarding resource use); and
- The extent to which those managing the intervention are already aware of and have data on the outcomes and impacts of the intervention.

While this guideline indicates that it is critical that CEH considerations are incorporated into the design and implementation of evaluations, there is a risk that the CEH components might be treated as an afterthought, given time, budget and capacity constraints. It is thus important that the ToR for the evaluation are appropriately tailored to the specifics of the evaluation and realistically can be accomplished. This guideline is structured in such a way as to provide commissioners with the necessary guidance to make relevant and appropriate choices about how to apply a CEH lens in the commissioning and design of the evaluation.

Figure 5: Nature and extent of CEH considerations based on evaluation parameters[25]



Furthermore, while funders and government place a strong emphasis on the need to incorporate gender into evaluation objectives and designs, CEH considerations are likely not yet treated as an imperative. There might thus be a need to advocate for this among staff in government departments, possibly even with funders and external evaluators, and train them on the guideline.

A section of the ToR describes what CEH aspects to focus on in the evaluation (and so what not to cover) (see section 6.3 below). Decisions could be based on, for example, the timeframe and available resources for the evaluation; intervention components to be covered; geographic and institutional coverage of the evaluation; sector and thematic areas. The scope should also indicate areas that will not be covered. The shorter the timeframe and the smaller the budget, the more focused the CEH considerations must be. Another consideration is the extent to which CEH considerations are already embedded in the intervention design and implementation.

6.2 Addressing capacity and expertise requirements

Initially, when incorporating the CEH criterion into the ToRs of evaluations, those responsible for commissioning and undertaking of evaluations will be faced with the challenge of limited capacity, expertise and experience in using this lens.

[24] It might be difficult to address CEH in cases where this was not explicit at evaluation design/development of the ToC and it might make sense to recommend reconstructing a ToC which takes CEH and equity into consideration. [25] This would also be applicable if CEH was a main focus of the intervention. Given that this is a new area of evaluation practice – both within government departments and among evaluation practitioners – it is critical that adequate and appropriate capacity and expertise is both sourced and developed. Some of the ways in which this could be supported include the following:

24 It might be difficult to address CEH in cases where this was not explicit at evaluation design/development of the ToC and it might make sense to recommend reconstructing a ToC which takes CEH and equity into consideration.
25 This would also be applicable if CEH was a main focus of the intervention.

- Developing a network for peer learning so that commissioners and evaluators can learn from one another. SAMEA has established a Community of Practice on Just Transition M&E.[26]
- Training(s): for staff of government departments (both M&E and programme staff) on CEH considerations and how these can be applied in evaluations, and potentially also for evaluators. This is being piloted in July 2022.[27]
- A roster of experts familiar with CEH issues, who can make inputs into and provide advice on preparing the ToRs, guide and support the evaluation team, and assist with quality assurance of the evaluation. Such experts could be in the technical working group (TWG), evaluation team, evaluation steering committee or be peer reviewers. They might include someone with experience of the relevant policy arena – for example, an environmental expert who specialises in the agricultural sector.
- Information packs for commissioners and evaluators: selected readings, summaries on CEH issues to familiarise themselves and to aid in developing ToRs and evaluation design. This should assist in guiding thinking to answer questions such as: How will we know when an intervention is contributing positively or negatively to CEH?

The inclusion of CEH considerations will possibly require a wider net of stakeholders involved in the evaluation.

7. Developing the terms of reference (ToR)

7.1 Evaluation purpose

For many interventions the main focus of the evaluation is likely to be on how the intervention is performing and how it can be improved. Only for an environmental intervention is it likely to be the main focus. In the case where it is not the main focus, for the CEH component of the evaluation to be insightful and meaningful and not just an afterthought, it will be necessary to build the various elements of this criterion into the ToR. Suggestions for how this can be approached are presented in this section. This section of the guideline should be read along with the DPME's How to Develop Terms of Reference for Evaluation Projects[28] and it follows the same structure.

CEH considerations could be included in the evaluation purpose, particularly if these are likely to be large or the intervention is an environmental one, or closely related such as around energy, or food systems. Table 4 shows how the evaluation purpose could be adapted to incorporate explicit CEH dimensions. In many cases the purpose would not change, and CEH will be brought in at the evaluative question level. Note that Table 4 and Table 5 can seem overwhelming but you only need to look at the evaluation type(s) that are relevant to your evaluation.

Table 4: CEH-related evaluation purpose for the different types of evaluation

Type of evaluation/ questions	Timing	Typical core question in the purpose[29]	Possible adapted purpose, if a major focus on CEH is required
Diagnostic	At key stages prior to design or planning	What is the current situation/ root cause of the problem and possible interventions to address it?	What is the current situation and root cause of the problem, how does it relate to CEH issues, and what are possible interventions to address it?
Design	Prior to implementation on, or after intervention designed	Is the logic of the intervention design robust and likely to work?	Is the logic of the intervention design robust and likely to work and what is the likely impact on CEH?
Implementation	Once or several times during the intervention	Is the intervention being implemented as specified, are the outcomes likely to be achieved, and why?	Is the intervention being implemented as specified, are the outcomes likely to be achieved and why, and are there likely to be positive or negative CEH outcomes?
Outcome	Designed early on, Baseline implemented early	Have short-term outcomes[30] or medium-term outcomes[31] been achieved as a result of the intervention?	Have short-term outcomes[32] or medium-term outcomes[33] been achieved as a result of the intervention, and what have been CEH outcomes, intended or unintended?

26 Contact info@samea.org.za for details.
27 Contact seirah@dpme.gov.za or coordinator@samea.org.za for details.
28 Available here:
http://evaluations.dpme.gov.za/images/gallery/DPME%20Evaluation%20Guideline%202.2.1%20How %20to%20develop%20TORs%20for%20Evaluation%20Projects(Full).pdf.
29 And in almost all cases this would also include: and how can the intervention be strengthened?
30 Changes in capacity and systems.
31 Changes in behaviour or performance.
32 Changes in behaviour or performance.
33 Changes in capacity and systems.

Type of evaluation/ questions	Timing	Typical core question in the purpose[29]	Possible adapted purpose, if a major focus on CEH is required
Impact (if a service delivery intervention) (if a support intervention)	At any stage	How have beneficiaries' lives changed as a result of the intervention? What have been the intended or unintended impacts of the intervention on the intended beneficiary organisation?	How have beneficiaries' lives changed as a result of the intervention, and have there been impacts on CEH? What have been the intended or unintended impacts of the intervention on the intended beneficiary organisation(s), and have there been impacts on their ability to manage CEH?
Economic	After a number of evaluations are completed	What are the costs in relation to the benefits? Is the programme providing value for money?	What are the costs in relation to the benefits and have environmental costs been factored in, for whom[34]? Is the intervention providing value for money when externalities are accounted for?
Evaluation synthesis	Can be at any stage	What is the evidence from all evaluations related to the topic in question?	What is the evidence from all evaluations related to the topic in question in relation to CEH?

7.2 Evaluation questions

Having defined the purpose and scope, the next task is is how CEH dimensions can be incorporated effectively into the evaluation questions that will guide the evaluation? Table 5 below provides examples of the kinds of CEH-related questions which can be linked to different types of evaluation. Once again you can just select the relevant evaluation type to focus on. Some of these questions are directly about CEH effects, while some relate to the OECD DAC criteria of:

- Policy relevance and stakeholder appropriateness;
- Effectiveness of policy/programme/project/service delivery;
- Efficiency of resource utilisation, as well as management and administration;
- Coherence: the compatibility of the intervention with other interventions in a country, sector or institution;
- Impact: evidence the theory of change is working; and
- Sustainability: of funding, institutionalisation and expertise.

And we have added:

- Climate and ecosystems health: – does the intervention degrade or regenerate CEH and how will it be affected by changes in CEH;
- Transformative equity: the extent to which an intervention's objectives, design, implementation and impact contribute to, or do not contribute to, addressing systemic inequities and promote a more inclusive society.

7.3 Identifying evaluation users/stakeholders

Identifying the core and potential users of and stakeholders in the evaluation is part of developing the ToRs (as per the DPME's Guideline on ToRs). Additional thought will need to be given to who else might be included insofar as CEH considerations are concerned. These stakeholders could be producers' or suppliers' services at the input level, or they could be secondary end users or those affected by ecosystem consequences.

Box 9: Evaluation users/stakeholders for NSNP

One user group for an evaluation of the NSNP would be local producer groups producing food for the schools. They might use the findings to reflect on the regenerative nature of the production methods they are using. In addition, there could be users who are adversely affected by the upstream or downstream aspects in relation to the environment. For example, if waste products are affecting the local ecosystem, there might be users of that ecosystem who are affected. If this is significant these might need to be considered as users of the evaluation.

There might also be potential users/stakeholders in the public sector and NGO spheres who would not only benefit from the CEH-related findings but also play an important role in making changes to improve the intervention's impact on CEH (e.g. policy, resource allocation, capacity building). For example, in the IPCC reports the enabling conditions for adaptation and mitigation are suggested as:

- Adaptation: Political commitment and follow-through, institutional frameworks, policies and instruments (such as legal frameworks)
- Mitigation: finance, technological, innovation, policy instruments, multi-level governance.

34 This should also consider costs over the lifespan of the intervention and intergenerational costs

Table 5: CEH-related evaluation questions for the different types of evaluation

Type of evaluation/ questions	Possible adapted core question, if a major focus on CEH is required	Basic and in-depth evaluation questions related to CEH (and in brackets the DAC criteria these relate to, or equity)
Diagnostic	What is the current situation and root cause of the problem, how does it relate to CEH issues, and what are possible interventions to address it?	What problem areas related to CEH need to be considered in looking at the problem, its causes, and domain of intervention? What alternative modes of intervention should be considered in the design and implementation of the intervention that are more CEH-friendly? What alternative modes of intervention should be considered in the design and implementation of the intervention to promote adaptation to CEH impacts? (effectiveness/impact/Sustainability)
Design	Is the logic of the intervention design robust and likely to work and what is the likely impact of the intervention on CEH or effect of CEH on the intervention?	Does the intervention explicitly relate to any climate or ecosystem policies, strategies, or agreements? (coherence) Are the objectives of the intervention likely to have a positive or negative effect on CEH and how vulnerable is the intervention to CEH effects, now and in the future? (effectiveness/impact/sustainability) How should the design of the intervention address current and future CEH concerns including adaptation to climate/ecosystem effects? (relevance) Which activities will need to be phased out over time or brought in? What skills are required? (effectiveness/impact/sustainability) Whose interests are affected positively or negatively by CEH considerations in the intervention? How does this need to be considered in the design? (equity/ effectiveness/coherence) What alternatives need to be considered in the design and implementation of the intervention that are more CEH-friendly and resilient? Will these have effects on equity? (effectiveness/impact/ sustainability)
Implementation	Is the intervention being implemented as specified, are the outcomes likely to be achieved and why, and are there likely to be positive or negative CEH outcomes?	What is the level of awareness of CEH considerations among implementers and beneficiaries, including those affected by unintended outcomes? During implementation is there any explicit attempt to understand and mitigate or adapt to CEH effects? For whom? Are CEH considerations reflected in the implementation of the intervention? (e.g. consumption patterns and practices, waste management) (effectiveness/ coherence) Whose interests are affected by a focus on CEH considerations? (equity) What CEH outcomes can be anticipated now and in the future? (effectiveness/ impact)
Outcome	Have short-term outcomes[35]or medium-term outcomes[36] been achieved as a result of the intervention, and what have been CEH outcomes, intended or unintended?	What have been the CEH outcomes, intended or unintended? (effectiveness/impact) What CEH outcomes can be foreseen as a result of the intervention? (effectiveness/ impact) In what ways are beneficiaries and other stakeholders impacted with regard to environmental considerations? (effectiveness/impact) Is the intervention causing or reducing environmental harm and potentially contributing to regeneration of the environment? (effectiveness/impact) Is the intervention changing to minimise vulnerability to CEH effects? (effectiveness, sustainability)
Impact (if a service delivery intervention) (if a support intervention)	How have beneficiaries' lives changed as a result of the intervention, and have there been impacts on CEH? What have been the intended or unintended impacts of the intervention on the intended beneficiary organisation(s), and have there been impacts on the implementer's ability to manage CEH effects?	In what ways are beneficiaries and other stakeholders (including vulnerable individuals, groups or communities) impacted with regard to environmental considerations and how do power relations affect these? (impact) In what way has the ecosystem changed as a result of the intervention (e.g. a housing project could have been built in an ecologically sensitive site)? (impact) What further CEH impacts can be foreseen happening? (impact) What impact have CEH effects had on the intervention (impact)

35 Changes in capacity and systems.
36 Changes in behaviour or performance.

Type of evaluation/ questions	Possible adapted core question, if a major focus on CEH is required	Basic and in-depth evaluation questions related to CEH (and in brackets the DAC criteria these relate to, or equity)
Economic		What are the social/environmental cost-benefits or cost-effectiveness of different implementation option, now and in the future? (effectiveness/efficiency/impact) What is the social/environmental cost-benefit or cost-effectiveness of the intervention, now and in the future? (effectiveness/efficiency/impact) What social/environmental cost-benefit or cost-effectiveness of the intervention can we foresee going forward? (effectiveness/efficiency/impact)
Evaluation synthesis	What is the evidence from all evaluations related to the topic in question in relation to CEH?	What appear to be the best options to address CEH concerns in the sphere of the intervention? What appear to be the main CEH outcomes of this type of intervention? (effectiveness/impacts) What CEH outcomes and impacts can we foresee happening in the medium and longer term? (effectiveness/impacts)

In addition, there may be key private sector stakeholders that are also key in relation to that intervention, e.g. commercial agriculture. Suggestions for what to consider in identifying relevant stakeholder groups are contained in Appendix 2.

7.4 Scope of the CEH application in the evaluation

See section 4.1.

7.5 CEH implications for evaluation design

The evaluation design must enable the evaluator to accomplish the purpose of the evaluation, and in the process to assess the nature and extent of the intervention's impact on CEH as a result of its use of resources and the waste/ pollution that it generates and which practices or activities can be strengthened in light of their regenerative or negative impacts on CEH and those which need to be adapted or phased out.

Key elements of design include whether the evaluation is mixed method/quantitative or qualitative; case study37; ethnographic; empowerment38; realist39or whether a theory-based approach40 will be used (testing out the theory of change). The way this design is developed and implemented can have major implications for use (see section 5).

Broadly speaking then, the evaluation design will be selected according to the main focus of the evaluation. However ideally it would be adapted to include exploration of the following:

- Any explicit reference to/focus on CEH in the intervention's aims, objectives, theory of change and implementation activities, or any implicit outcomes that are not explicitly recognised;
- Does the intervention design include ways in which the intervention can adapt to or mitigate the effects of the climate and ecosystems crises??
- In what ways does the intervention interact with the natural environment? What natural resources does the intervention depend upon and what impacts such as waste do the intervention's activities have on CEH? Are the practices and activities of the intervention degrading or helping to restore and regenerate CEH
- The need to analyse the system and the boundaries (possibly explored in the theory of change process);
- How the stakeholders/beneficiaries of the intervention impacting on CEH considerations, including if they have any vested interests in the status quo;
- In what ways are the climate crisis and ecological breakdown impacting on the intervention? What are the implications of these impacts for the future sustainability of the intervention?
- CEH-related international, national and sectoral policy frameworks (e.g. NDCs), strategies or plans that could be used to guide alignment of intervention objectives, design and implementation with CEH considerations and help to legitimise the CEH component.
- What changes can be introduced into the intervention's design, theory of change and/or activities that will make a positive contribution to CEH, improve its sustainability going forward, as well as the ability of beneficiaries to adapt to changes in CEH?
- How can the intervention best balance CEH considerations with social justice and equity?

Table 6: Implications of evaluation questions for evaluation design

Type of evaluation/ questions	Basic and in-depth evaluation questions related to CEH (and in brackets the DAC criteria these relate to, or equity)	Implications for Evaluation design
Diagnostic	What is the current situation and root cause of the problem, how does it relate to CEH issues, and what are possible interventions to address it?	Document review, root cause analysis Good to cover in workshop process
Design	Is the logic of the intervention design robust and likely to work and what is the likely impact on CEH?	Explore in theory of change Explore in document review Stakeholder analysis Explore in interviews and workshops
Implementation	Is the intervention being implemented as specified, are the outcomes likely to be achieved and why, and are there likely to be positive or negative CEH outcomes?	Explore in interviews, surveys, focus groups Specific mapping of resources used /waste Stakeholder analysis Explore in interviews, surveys, focus groups, analysis
Outcome	Have short-term outcomes[41] or medium-term outcomes[42] been achieved as a result of the intervention, and what have been CEH outcomes, intended or unintended?	Explore through interviews, surveys, focus groups, participatory research etc., with affected stakeholders.
Impact (if a service delivery intervention) (if a support intervention)	How have beneficiaries' lives changed as a result of the intervention, and have there been impacts on CEH? What have been the intended or unintended impacts of the intervention on the intended beneficiary organisation(s), and have there been impacts on their ability to manage CEH?	Could be process or counterfactual, e.g. similar communities elsewhere From literature, interviews, surveys, focus groups, participatory research, with affected stakeholders, analysis
Economic	What are the costs in relation to the benefits and have environmental costs been factored in, for whom[43]? Is the intervention providing value for money when externalities are accounted for?	Analysis of costs and analysis of benefits Workshopping/ expert panels
Evaluation synthesis	What is the evidence from all evaluations related to the topic in question in relation to CEH?	Systematic review/synthesis methods of a range of studies

Table 6 suggests how the questions are covered in the purpose of different evaluation types, now adjusted to include CEH.

Commissioners/evaluators may wish to look at the DPME guidelines on these different types of evaluations.[44]

7.6 Methodology: Types of data and data collection methods

Some methodology issues to consider here could include:

- What quantitative measures and indicators would be appropriate and useful?
- Qualitative interviews and focus groups – with whom and about what?
- Process tracing – e.g. from resource use to waste outputs – which stakeholders would need to be involved in this?
- Any environmental sampling (e.g. of water quality, or visual ratings of waste);
- how to ensure use the evaluation as a way of learning and expanding understanding of CEH issues and ways of promoting health.

At the centre of the CEH component of the evaluation design is identification of what (natural) resources the intervention consumes in carrying out its activities (inputs), what waste products it generates, and how these are dealt with. These, in turn, can be assessed as making either positive or negative contributions to climate and ecosystem health.

Examples of positive and negative contributions:

- Positive contribution – e.g. biodiversity conservation and restoration (such as reforestation); use of/investment in renewable energies; generative practices such as circularity, composting; focus on re-use and repair; recycling; finding ways to reduce consumption in general (such as limiting travel, conserving energy), etc.
- Negative contribution – e.g. destruction/degradation of natural habitats (such as deforestation); generating pollution (into land, water or air); wasteful practices (food, water, energy etc.); reliance on fossil fuels; etc.

An example of a useful resource is provided at https://www.cedrig.org/. Three categories of depth are used: light, strategic and operational. Where the primary focus of the evaluation is not environment, the first two are relevant and could be adapted for the particular purpose.

The light is used as an initial filter to assess whether strategies, programmes or projects are at a significant risk from climate change, disasters, and/or environmental degradation (risk perspective). The focus is on whether risks could potentially

41 Changes in capacity and systems.
42 Changes in behaviour or performance.
43 This should also consider costs over the lifespan of the intervention and intergenerational costs
44 See guidelines 2.2.10-2.2.15 at https://evaluations.dpme.gov.za/pages/guidelines-other-resources

have a significant impact on CEH and create new risks or exacerbate existing risks (impact perspective).

The results are used to decide whether a detailed assessment should be conducted (CEDRIG Strategic or CEDRIG Operational) [45].

The strategic module is characterised as participatory in supporting systematic integration of CEH and disaster risk reduction into an existing or planned strategy or programme. It covers two perspectives: A risk perspective (adaptation to climate change, to degraded environments and integration of disaster risk reduction measures) and an impact perspective (avoiding negative impacts on the climate and on the environment and avoiding the creation of new risks or the exacerbation of existing risks linked to natural hazards). [46]

7.7 Evaluation team

The ToR suggests the type of team and competencies required to cover the domains of expertise needed, including CEH expertise. This could be covered through familiarity in one of the main team members, or it could be specific inputs by an environmental expert to address the CEH issues.

In terms of the competencies, referring to the generic competencies in DPME's Guideline on ToRs, relevant competencies would include those shown in Table 5.

Table 5: Specific CEH competences to look for in the team

Competence	CEH considerations
Composition of the team	Do they have specific capacity to look at CEH issues in the team?
Evaluation craft	Is there experience in the team in terms of understanding system dynamics and interactions. Does the team have appropriate experience in the area of CEH in addition to expected evaluation experience.
Evaluative discipline and practice	No specific CEH issues
Research practice	Does the team have experience of specific research methods in the field of domain of CEH?

8. Managing the evaluation

8.1 Steering Committee

The Steering Committee is the key decisional structure for evaluations. As per the discussions on users in 5.2, and the importance of ownership in section 4.3, it is important that the Steering Committee includes representatives of those involved in and affected by the intervention. Normally the Steering Committee is chaired by the programme manager. If there are significant environmental effects, then these should be represented, either through particular groups affected, particular regions affected, or if not by a group which is interested in those effects such as the national or provincial department of environment (DFFE) or a relevant NGO. It may be important to run a training session for the Steering Committee members so they are better equipped to consider CEH and equity issues in the evaluation.[47]

8.2 Peer reviewers

DPME typically suggests two peer reviewers per evaluation – one on content and one on methodology.[48] Questions that will be important to ask with regard to CEH include the following: Do these peer reviewers understand climate and ecosystems health? Is this an aspect that would be important to bring to peer reviewers for this evaluation, especially where there are likely to be significant impacts? It would be very helpful to have someone with an understanding of climate/ecosystems to review the evaluation questions. In addition, specialist peer reviewers on key topics of concern could be brought in.

8.3 The role of sponsors/funding partners

Funder support for the achievement of national climate and ecosystems-related monitoring and evaluation should take account of the existence of local capability, existing developmental agendas, and existing climate policy ambition and progress toward achievement. Funder support may provide much needed impetus toward achieving greater ambition.

Funding for the interventions envisaged in this guideline is likely to be from government, development banks, private or international funders (e.g. donors, the World Bank, newly established global green funds etc.). Some interventions will have non-government funders, particularly those implemented by NGOs. While these distinct entities will have their own systems for evaluation, as per the Paris Declaration on Aid Effectiveness, funders should align with the national evaluation system, otherwise their fragmented proprietary systems could end up weakening local capacity or undermining locally relevant developmental interests.

45 Available here https://www.cedrig.org/sites/default/themes/cedrig/img/CEDRIG_Light_EN.pdf
46 Available here https://www.cedrig.org/sites/default/themes/cedrig/img/CEDRIG_Strategic_EN.pdf
47 DPME's model TOR for steering committees is here http://evaluations.dpme.gov.za/images/gallery/Terms%20of%20Reference%20for%20Evaluation%20Steering%20Committees.pdf
48 The DPME guideline on peer reviewing of evaluations is available here: https://evaluations.dpme.gov.za/images/gallery/GL%202.2.2%20Revised%20Peer%20Review%20Gu ideline.pdf.

Funders would often wish to be a member of the steering committee of the evaluation.

A useful resource to explore in this regard is the Independent Philanthropy Association South Africa's toolkit and resource pack on how to understand the climate crisis and how donors can respond.[49]

8.4 Minimising resource consumption and waste/ pollution when undertaking the evaluation

In the spirit of incorporating CEH considerations into the evaluation of interventions, evaluators themselves should be encouraged and guided on how to minimise their own ecological footprint in the undertaking of evaluations. This would involve looking at the evaluation plan and activities in terms of what resources will be consumed and how choices could be made in this regard that are more CEH-friendly; similarly, what waste/pollution will be produced and how this could be handled optimally. Examples could include the following:

- Limiting travel distance in order to reduce GHG:
  - Meetings with the commissioners of evaluations, intervention stakeholders and beneficiaries: could these be held virtually in order to save on emissions (e.g. flights, telephone interviews)? Will this exclude any stakeholders?[50]
  - If virtual meetings are not appropriate or possible (for instance, when participatory sessions with community members need to be facilitated in person) how can these be best organised to limit travelling long distances? Could local evaluators be used?
- Reducing use of other resources:
  - The use of computer-based surveys instead of paper-based surveys where applicable, as well as use of tape recorders instead of writing notes on paper during observations.
  - Pens and notepaper could be re-used at a later stage in the evaluation or in another evaluation, or recycled where possible.
- Reducing the carbon emissions or waste associated with food: in terms of the food and beverages that might be provided during workshops, focus groups and other types of interactions:
  - Can these be sourced and prepared locally?
  - Can plant-based options be made available?
  - Can single-use plastic be eliminated by, for instance, using tap water rather than bottled water?
  - How can food and beverage waste be minimised?

8.5 Validation of findings

It is important that the evaluation findings and recommendations are validated by stakeholders. This can be in the form of a validation workshop, in which case the participants should be carefully selected to include groups differently affected by the intervention, for example those affected by CEH implications of the intervention, as well as stakeholders with a diversity of views. The process should encourage participation by all groups and create meaningful interaction with the findings and the potential to make recommendations.

8.6 Quality assessment of the evaluation

The evaluation quality assessment system should be based on the evaluation standards set for government[50] as well as CEH-related considerations. The latter may need to be developed by DPME.

9 Bringing a CEH lens into the follow-up to the evaluation

9.1 Improvement plan and progress report

Following from approval of the evaluation report, the National Evaluation System indicates that a management response should be prepared[51] by the custodian department, and based on this an improvement plan developed with stakeholders.[52] The improvement plan sets out the improvements needed to the intervention, and this is a key creative strategic moment to embed regenerative practices and skills into the intervention. The workshop to prepare the improvement plan should also involve representatives of affected groups. The improvement plan should include how to incorporate CEH considerations into the intervention design and, if appropriate, the theory of change, considering current and future effects. It should also capture what records need to be kept/data to be generated going forward so that more CEH-related data is available for future evaluations.

For national evaluations these reports and the improvement plans are submitted to Cabinet, again raising the importance of embedding regenerative practices in the operations of the intervention. There are meant to be six-monthly progress reports on the improvement plans, and these provide an opportunity to check that these improvement measures are progressing.

9.2 Communicating the results of the evaluation

National and provincial government guidelines related to planning, monitoring and evaluation have aspects relevant to public engagement. Ideally, communications should begin during consideration of the evaluation, when meetings with stakeholders may be held, through the publicly available TORs, cover the consultation processes that will be followed

49 The toolkit is available here: https://ipa-sa.org.za/the-climate-crisis/.
50 https://www.dpme.gov.za/keyfocusareas/evaluationsSite/Pages/Quality-Assurance.aspx
51 The DPME guideline on how to develop a management response to an evaluation report is available here: https://evaluations.dpme.gov.za/images/gallery/GL%202.2.5%20Revised%20Management%20Respo nse%20Guideline.pdf.
52 The DPME guideline on how to develop an improvement plan to address evaluation recommendations is available here: http://evaluations.dpme.gov.za/images/gallery/Guideline%202.2.6%20Improvement%20Plan%2014% 2007%2018.pdf.

in the course of the evaluation, the timeframes that will be associated with feedback on draft findings, and then the final dissemination of results. Communication of evaluation results should be factored into the evaluation budget. The whole process is potentially important in raising awareness of stakeholders of the critical nature of CEH challenges, and this should be explicitly considering in designing the process of the evaluation.

Once CEH aspects are included in the evaluation, it may be necessary for awareness raising activities to explain the importance, safe operating spaces for humanity-linked climate and ecosystems indicators, and to understand how CEH considerations may be involved in the intervention. Information communicated should be accompanied by graphics including baseline data relevant to the evaluation.

Appropriate communication is needed with key politicians (e.g. Ministers) and senior managers including both formal and informal briefings prior to and during the evaluation. This is an important role that M&E units must play.

Results ought to be presented in multiple accessible formats, such as briefs, written reports, and presentations, formal as well as informal, so that all participants have the opportunity to learn about what was found as a result of the data collected. For example, evaluation products released online may exclude some key stakeholders due to the digital divide, and technical reports are not necessarily accessible to community groups.

Consultation processes including research with the public, validation workshops, should allow sufficient time for consideration and consultation, and participation in public meetings should take into account negative consequences (e.g. on loss of income if these occur during working hours).

Once the reports are available (both a full report and the summary 1/5/25 page report), improvement plans have been prepared, and these have been approved by relevant authorities (for example national evaluations go to Cabinet), then short summaries can be prepared.

Unfortunately, government often has restricted resources available for communication. Ideally there should be media engagement around the findings, and engagement with relevant think tanks who can share the findings widely. Directly affected communities should be prioritised in planning for targeted communications, with translation of materials into the most important official languages for particular provinces, along with using popular communication tools (e.g. radio segments, social media messaging and targeted SMSs).

Signed:

Annexes

Annex 1: Sources

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DPME guidelines

- GL 2.2.1 How to Develop ToRs for Evaluation Projects (Revised)
- GL 2.2.2 Peer Review of Evaluations
- GL 2.2.3 Implementation Programmes
- GL 2.2.4 Inception Phase
- GL 2.2.5 Management Response
- GL 2.2.6 Improvement Plan
- GL 2.2.8 Communication
- GL 2.2.10 Diagnostic Evaluation
- GL 2.2.11 Design Evaluation
- GL 2.2.12 Implementation Evaluation
- GL 2.2.13 Impact Evaluation
- GL 2.2.14 Economic Evaluation
- GL 2.2.15 Synthesis Evaluation
- GL 2.2.17 How to Develop Actionable Recommendations
- GL 2.2.24 Gender Responsive Evaluation Guideline

Annex 2: South African government CEH-related policies

A2.1: Key policies and initiatives to address the climate crisis in South Africa

- The National Development Plan 2030 (NDP) dedicates a full chapter to 'Environmental Sustainability: An equitable transition to a low-carbon economy'.
- The National Climate Change Response Policy White Paper (2011) represents government's comprehensive policy framework for responding to climate change, including provisions for adaptation and mitigation.
- The National Climate Change Adaptation Strategy (2019) aims to give effect to the NDP's vision of creating a low-carbon, climate resilient economy and a just society.
- The Climate Change Bill (forthcoming) will form the legislative foundation for the climate change adaptation and mitigation response.
- South Africa's Low-Emission Development Strategy 2050 (2020) centres on measures being implemented by government to address mitigation in the energy, industrial (including agriculture), forestry and land use, and waste sectors.
- The Presidential Climate Commission (PCC), established in September 2020, is a multistakeholder body tasked with advising on the country's climate change response and pathways to a low-carbon climate-resilient economy and society.
- At the UNFCCC 26th Conference of the Parties (COP26) held in 2021, a commitment was made to South Africa of USD8.5 billion by the US and EU member states to assist the country to shift from a high carbon emission economy dependent on coal to a low-carbon economy.

A2.2: Key policies and initiatives to address the ecosystem and biodiversity crises in South Africa

- South Africa's National Biodiversity Strategy and Action Plan 2015–2025 identifies the priorities for biodiversity management in order to conserve, manage and sustainably use biodiversity to ensure equitable benefits to the people of South Africa.
- The National Waste Management Strategy (2011) covers, among others, the promotion of waste minimisation, reuse, recycling and recovery of waste; delivery of waste services; and growing the contribution of the waste sector to the green economy.
- A Circular Economy Guideline for the Waste Sector: A driving force towards sustainable consumption and production (2020)
- Key legislation relating to National Environmental Management: Biodiversity Act (No. 10 of 2004, as amended); Air Quality Act (No. 39 of 2004, as amended); Protected Areas Act (No. 57 of 2003); Integrated Coastal Management Act (No. 24 of 2008)
- National policies: White paper on National Environmental Management of the Ocean (2014); White Paper on Integrated Pollution and Waste Management (2000); Environmental Management Policy White Paper (1998);

White Paper on Conservation and Sustainable Use of Biodiversity (1997); White Paper on Marine Fisheries Policy (1997)

- Sector-specific strategies such as those relating to the protection of conservation areas; desertification and land degradation; biological invasions; and the breeding, hunting and trade of elephant, lion, leopard and rhinoceros

A2.3 The green economy and sustainable development in South Africa

South Africa currently adopts the green economy and sustainable development discourse. According to the Department of Forestry, Fisheries and Environment website,55 the country's sustainable development vision is outlined in the National Framework for Sustainable Development (2008) as "South Africa aspires to be a sustainable, economically prosperous and self-reliant nation state that safeguards its democracy by meeting the fundamental human needs of its people, by managing its limited ecological resources responsibly for current and future generations, and by advancing efficient and effective integrated planning and governance through national, regional and global collaboration." A green economy is viewed as a sustainable development path based on addressing the interdependence between economic growth, social protection and natural ecosystem. More specifically, it is defined as a system of economic activities related to the production, distribution and consumption of goods and services that result in improved human well-being over the long term, while not exposing future generations to significant environmental risks or ecological scarcities. The green economy is based on growing economic activity (which leads to investment, jobs and competitiveness) in the green industry sector, and a shift in the economy as a whole towards cleaner industries and sectors.

Annex 3: Considerations in identifying relevant stakeholder groups

Considerations	Context
Who are the relevant stakeholder groups or individuals affected by the intervention and who are the most vulnerable?	Demographics Economic conditions Dependence on natural resources/Access to natural resources Environmental values Gender roles
Are there any identifiable groups or subgroups?	Representation of subgroups according to: Geographical location; Profession/Income; Interests; Values Interests; Race; Age; Ethnicity; Class; Gender; Disability
What are the past and present relationships between them?	Have there been any past programmes like this? If so, were the programmes successful in achieving their goals? What were the important factors that contributed to your success?
Who trusts whom?	What is the relationship between stakeholders? Do they have conflicting interests?
Who and what groups have power and what is their source of power?	Differentiation between different stakeholders:[53] · Primary stakeholders: Who will be affected by the intervention directly (intended) and indirectly? Whose approval is required before the intervention can take place? · Secondary stakeholders: Who will be affected by the intervention positively and negatively? · Tertiary stakeholders: Who is not directly or indirectly affected but can have significant impact (either positive or negative) on the program by influencing others?
Who are the formal and informal leaders in the field?	Political leaders Religious/faith based Traditional leaders Business forums
How do people exchange information?/Communication methods/Feedback and reporting systems	The focus should be on effective communication methods Identify potential barriers to communication Re-establish broken relationships and re-create a connection with stakeholders The use of an external facilitator for communication might be useful Determine which sorts of communication tools or medium stakeholders may require further training in order to use effectively
Does the influence of stakeholders change?	What factors can shift the sphere of influence?
What else is important in this particular field?	Are there any other important factors that could influence the outcome of the intervention? (e.g. community basic needs such as water, energy, health, housing and sanitation)

53 https://pdf.usaid.gov/pdf_docs/PA00T9XH.pdf.

Annex 4: Case studies: Applying the CEH criterion to evaluation TOR

These case studies are intended to show how the TORs for an evaluation could be adjusted to take on CEH considerations, taking evaluations which have been completed and seeing how the TORs could be adjusted. Note this is not endorsing the basic TOR (for example there were too many questions in the Smallholder evaluation TOR). We use evaluations of three types of interventions

- An intervention which could be regenerative - Smallholder farming;
- A social intervention – National School Nutrition Programme;
- And an example of an environmental intervention - Berg River Improvement Programme.

The purpose is to draw on what is being proposed above and link back to existing evaluations to demonstrate retrospectively how the CEH criterion could have been applied. Note it is not suggested that all these additional questions would be taken on, but they give an idea of the possible questions that could be included in these specific examples.

A4.1 Potentially regenerative intervention - Smallholder farming57

Table 6: Applying the CEH guideline to the Diagnostic Evaluation of the Government Supported Small Holder Farmer Sector

Original TOR	Possible changes to take on CEH (in italics)
1.2 Purpose of the evaluation	
This evaluation will synthesise the lessons from relevant existing evaluations to develop the basis (diagnostic) for a coherent overall policy framework to support smallholder farmers	This evaluation will synthesise the lessons from relevant existing evaluations to develop the basis (diagnostic) for a coherent overall policy framework to support smallholder farmers that strengthens both their productivity, resilience and their contribution to climate and ecosystems health.
2 Focus of the Evaluation	
2.1 Evaluation Questions	
2.1.1 Focus - How are smallholder farmers defined within these programmes? How has this affected the design, development, implementation, and coordination of these programmes (positively or negatively)? What definitions of smallholder farmers should we use going forward (ranging from household gardening to small-scale commercial)?	
2.1.2 Objectives and measures of effectiveness and sustainability - What are the objectives of the different programmes. How should we view success/impact – sustainable farmers, income, food security, environmental issues? Which smallholder farmers have been addressed, which have been successful, which not and why? What evidence is there of impact on these target groups? How much did this cost per success unit?	**2.1.2 Objectives and measures of effectiveness and sustainability** - What are the objectives of the different programmes. How should we view success/impact – sustainable farmers, income, food security, their contribution to climate and ecosystems health? Which smallholder farmers have been addressed, which have been successful, which not and why? What evidence is there of impact on these target groups and on climate and ecosystems health? How much did this cost per success unit?
2.1.3 What evidence was used - To what extent and in what manner has research and development informed the development of these programmes or what alternative approaches is current research suggesting? (Including looking at studies in other African and other middle-income countries with which RSA can compare).	Add: Including relevant research/reports like IPCC and others that point to need to consider effects on ecosystem health.
2.1.4 Services - What services/interventions are provided and to whom and what is the underlying theory of change? What processes do smallholder farmers follow to access programmes (between and within the departments)? How are services for different commodities addressed (cash crop; livestock, horticulture, forestry & fisheries) by smallholder farmers? What are the lessons learnt? Should support programmes be customised according to commodities?	**2.1.4 Services** - What services/interventions are provided and to whom and what is the underlying theory of change? What processes do smallholder farmers follow to access programmes (between and within the departments)? How are services for different commodities addressed (cash crop; livestock, horticulture, forestry & fisheries) by smallholder farmers and what is their resource impact? Has support been provided for smallholders to better understand CEH issues and to maximise the regenerative potential of their farms? Is there discussion on CEH and adaptation? If not why not? What are the lessons learnt? Should support programmes be customised according to commodities?

Original TOR	Possible changes to take on CEH (in italics)
2.1.5 Success factors - What are the key success factors and shortcomings of current programmes e.g. market access, insurance. How far did they manage for risks such as foot and mouth, climate change etc.?	**2.1.5 Success factors** - What are the key success factors and shortcomings of current programmes e.g. market access, insurance? How far did they manage for risks such as foot and mouth, climate and ecosystems health, both now and in the future etc.? What examples exist of viable approaches to minimize resource overload/pollution/to improve ecosystem regeneration and circular economies?
2.1.6 What support is needed for different target groups? To what extent does everyone who accesses land want/know how to farm? What change is needed in target groups, selection criteria, and services for these target groups? Are different theories of change needed for different groups and what should they be so as to ensure the likelihood of sustained and cost-effective improvements in productivity, income, environmental sustainability and cost-effectiveness of support programmes (consider the different settlement programmes – progression from small holder to commercial)?	**2.1.6 What support is needed for different target groups?** To what extent does everyone who accesses land want/know how to farm? What change is needed in target groups, selection criteria, and services for these target groups? Are different theories of change needed for different groups and what should they be so as to ensure the likelihood of sustained and cost-effective improvements in productivity, income, promotion of climate and ecosystems health and cost-effectiveness of support programmes (consider the different settlement programmes – progression from small holder to commercial)?
2.1.7 Institutional arrangements - What coordination structures exist to ensure integrated support across departments and stakeholders including the private sector? What lessons emerge around the strengths and weaknesses of the institutional arrangements, administrative processes and procedures?	**2.1.7 Institutional arrangements** - What coordination structures exist to ensure integrated support across departments and stakeholders including the private sector? What lessons emerge around the strengths and weaknesses of the institutional arrangements, administrative processes and procedures? What would be needed if regenerative practices were to be mainstreamed into support for smallholders?
2.1.8 Efficiency - What lessons emerge around the effectiveness and efficiency of resources used by these programmes, including the skills of staff and infrastructure, and how this should be revised going forward?	**2.1.8 Efficiency** - What lessons emerge around the effectiveness and efficiency of resources used by these programmes, including the skills of staff and infrastructure, and how this should be revised going forward to be more effective, more circular and regenerative?
2.1.9 Managing risks - What do we need to do to address risks and improve the resilience of smallholder farmers?	**2.1.9 Managing risks** - What do we need to do to address risks and improve the resilience of smallholder farmers and their contribution to a more resilient and regenerating ecosystem?
2.1.10 Proposed approach going forward - Based on the above what should be the key target groups going forward, and the approach and types of services provided for each? Who should provide these services? What institutional mechanisms will be needed and what resourcing? How should the current suite of interventions be changed to address these? What does this imply for the roles to be played by key actors including DAFF, DRDLR, provincial departments of agriculture, private sector, NGOs?	**2.1.10 Proposed approach going forward** - Based on the above what should be the key target groups going forward, and the approach and types of services provided for each to secure their livelihoods in the future and strengthen the ecosystems on which they depend? Who should provide these services? What institutional mechanisms will be needed and what resourcing? How should the current suite of interventions be changed to address these? What does this imply for the roles to be played by key actors including DAFF, DRDLR, DFFE, provincial departments of agriculture/environment, private sector, NGOs?

A4.2 Social intervention (National School Nutrition Programme)

Table 7: Applying the CEH criterion to the Implementation Evaluation of the National School Nutrition Programme (NSNP)

Original TOR	Possible changes to take on CEH
2 Purpose of the evaluation	
The main purpose of the evaluation is to assess whether the NSNP is being implemented in a way that is likely to result in significant health and educational benefits to primary school learners.	The main purpose of the evaluation is to assess whether the NSNP is being implemented in a way that is likely to result in significant health and educational benefits to primary school learners and whether it could be implemented in a way that maximises benefits to and reduces impact on CEH.
3 Focus of the Evaluation	
3.1 Evaluation Questions	
1. Is the programme implemented as planned?	
2. Are operational procedures effective to ensure the timely delivery of food?	2. Are operational procedures effective to ensure the timely delivery of food, to minimise resource use and waste (both emissions, food waste, plastic, water, energy etc)?

Original TOR	Possible changes to take on CEH
3. Are learners receiving quality meals and services?	3. Are learners receiving quality meals from products/ingredients that are locally sourced, include tasty meat alternatives and minimal processed foods, served on reusable tableware, and prepared in a way that minimises resource use and waste.
4. What are the variations of implementation at different sites or by different provinces?	4. What are the variations of implementation at different sites or by different provinces? Do these variations have implications for resource use, waste, and the quality of the food consumed?
5. Is the programme reaching the intended beneficiaries?	5. As well as learners who are eating the meals provided and are they also being educated on healthy and tasty nonmeat alternatives.
6. Is there evidence that NSNP enhances learning behaviour? (Likely Impact of the Programme) Are there any other intended or unintended impacts?	
7. Are there other spinoffs of the NSNP	7. Are there other spinoffs of the NSNP including school and community awareness of CEH, whether learners are being educated on healthy food, the climate risks from meat, and regenerative food production? Are there spinoffs such as composting/ school gardens and recycling programmes?
8. Should NSNP be up-scaled? How can it be strengthened and up-scaled for better impact?	8. Should NSNP be up-scaled? How can it be strengthened and up-scaled for better impact on learners and also on promoting climate and ecosystems health?

Note: The TORs, reports and quality assessment are available here https://evaluations.dpme.gov.za/evaluations/520

A4.3 Design and Implementation of the Berg River Improvement Plan (BRIP)

Original TOR	Possible changes to take on CEH
2 Purpose of the evaluation	
The type of evaluation must analyse the approach and processes of design and implementation of the BRIP to achieve its objectives.	The type of evaluation must analyse the approach and processes of design and implementation of the BRIP to achieve its objects and how revisions to the design and implementation could strengthen the contribution to climate and ecosystems health?
3 Focus of the Evaluation	
3.1 Evaluation Questions	
1. Is the BRIP programme addressing the issues and concerns of the catchment?	1. Is the BRIP programme addressing the issues and concerns of the catchment and the contributions to climate and ecosystem health? How are the catchment issues and concerns contributing to climate and ecosystem health (both positive and negative)? Is the BRIP programme contributing to catchment/ecosystem regeneration /resilience?
2. To what extent does the BRIP programme structures, governance and partnerships support the implementation activities and outputs of the BRIP programme?	2. To what extent does the BRIP programme structures, governance and partnerships support the implementation activities and outputs of the BRIP programme and how do the structures, governance and partnerships support climate and ecosystem health? Are additional structures, governance or partnerships necessary to support climate and ecosystem health?
3. How can transversality and governance within the BRIP including the BRIP programme structures and governance be revised and strengthened?	How can transversality and governance within the BRIP including the BRIP programme structures and governance be revised and strengthened, for positive contributions to climate and ecosystem health? What specific transversal and governance support are necessary to address improved climate and ecosystem health?
4. What can be done to advance the overall implementation of the BRIP programme going forward?	What can be done to strengthen the overall design and implementation of the BRIP programme going forward and its impacts on climate and ecosystem health?

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Created 8 December 2022