



# ENVIRONMENTAL APPROACH FOR GENERATIONAL IMPACT

August 2022 | Lamia Renaud

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# 1. EXECUTIVE SUMMARY

## 1.1 Introduction

This paper presents a new system-based approach to designing and evaluating programmes in a way that fully embeds environment and biodiversity issues. It seeks to put nature back at the centre of development work in an effort to encourage stronger ambitions when it comes to mitigating or avoiding environmental degradations, biodiversity loss and climate change. This paper argues that the application of this approach in practice could better meet donor reporting and accountability commitments to citizens, intended beneficiaries and investors.

It was developed based on numerous experiences designing, delivering, and implementing international development programmes. As this is a new approach, it should be noted that it has not yet been tested on an evaluation or programme design. This limitation means that this article should be read as a theoretical framework rather than an applied methodology paper – however it is hoped that by presenting this theoretical framework, we can begin a conversation about how this might be applied in practice.

## 1.2 Objectives

The Environmental Approach for Generational Impact was developed as a step-by-step process aiming to guide practitioners in imagining the impact we would like to see and the world in which we would like future generations to live.

Each step is designed to support practitioners in conducting a critical review of potential harms and assessing the actual cost of interventions and the impact development might have on natural ecosystems in pursuit of growth and better livelihoods. The purpose of the critical review is to encourage a widespread understanding that environmental regeneration and protection is a necessity, not a *'nice to have'* that follows economic and social gains.

This approach can support donors and practitioners in better and more coherently designing and evaluating portfolios and programmes that put environmental regeneration and protection front and centre.

The application of this approach includes broadening the common understanding of *beneficiaries* (or recipients) beyond current communities. Instead, *'beneficiaries'* include **the biosphere** and **future generations of people and organisms**. Including these as beneficiaries offers the sector a new lens that, if applied systematically, can guide practitioners in addressing development problems at their core, ultimately reducing their magnitude and increasing the potential for positive, long-lasting change for people and the planet.

## 1.3 Context of this paper

The latest IPCC reports again demonstrate the unequivocal role of human influence on climate change (IPCC, 2021 and IPCC 2022) and the *"damning indictment of failed climate leadership"* (Antonio Guterres in UN News 2022). The rate and scale of change is unprecedented in at least the last 2000 years, with a stark acceleration since the nineteenth century. Human activity is contributing to many observed changes in weather and climate extremes affecting every inhabited and uninhabited region across the globe. It's estimated that 40% of the world's population are now "highly vulnerable" to climate change. However, despite repeated and alarming conclusions by IPCC experts, activists, and conservation advocates, when it comes to climate change, urgency is yet to be unanimous across the globe.

Whilst there are unequivocal positive responses to these global findings in the development sector, for example increasing climate finance, nature-based solutions financing or divestments from fossil fuels

(COP26, 2021); the mainstreaming of climate and biodiversity considerations in all aspects of development programming is still nascent and uneven and deserves more attention.

## **1.4 About this approach**

### **Theoretical underpinnings**

The Environmental Approach for Generational Impact builds on behaviour change, political economy analysis, and systems thinking theories to consider the natural ecosystem and better understand how human systems affect the biosphere and vice versa. In particular, the approach builds on the Actor-Based Change Framework (Koleros et al., 2018) and the COM-B Framework (Michie et al., 2011). It also draws inspiration from initiatives and publications, including Blue Marble Evaluation, Footprint Evaluation, Relational system thinking, Academy for Systems Change, Global Alliance for the Future of Food, and others.

The approach offers development practitioners an opportunity to take a step back, rethink and adapt the way they design, implement and evaluate development programmes in complex settings. It does so through a step-by-step process that helps practitioners to:

#### **1. Understand the problem and the system in which it exists**

Practitioners can use this approach to identify problems, break them down to investigate potential causes and consequences, applying a dual-lens that considers human systems (society and economy) and the biosphere (natural system). Practitioners can then select problems in their spheres of control or those potentially within reach to influence and explore change agendas for the selected problems through a short-term programme life cycle lens and then expand the reflection to a generational lens.

#### **2. Outline the roadmap for transformative change to be realized**

Practitioners can then refine potential pathways that respond to the generational ambition, defining what behaviour change is needed within and between the human and natural systems to realize these objectives.

#### **3. Support the design of interventions and or theory-based evaluations**

Finally, practitioners can reflect the generational ambition and transformative change pathways in the design of their interventions or theory-based evaluation scopes. By including this long-term vision in intervention design and evaluations, practitioners can maximize the potential for generational impact and evaluate programmes against generational impact questions.

### **Limitations**

Whilst this approach was developed based on numerous experiences designing, delivering, and implementing international development programmes, it remains a theoretical framework. It has not yet been tested on an evaluation or programme design.

Once tested in an evaluation or programme design, a case-based article will follow, providing an opportunity for reflections on the applicability and usefulness of the approach in the context of a live development programme.

## 2. Background to the approach

Despite a significant body of literature on systems and complexity to improve development programmes and a growing evidence base on climate change, it is rare to see applications of environmental system thinking in development or evaluation. Climate and environment considerations are too often limited to climate and environment programmes. The approach presented here originated to encourage the recognition of natural systems in all aspects of development and evaluations, expanding environmental considerations beyond programmes directly relevant to funding requirements, intent, or clearly articulated programme theory.

It builds on the work of ongoing initiatives and networks such as the Blue Marble Evaluation book and community, Footprint Evaluation, Relational system thinking, the Academy for Systems Change, Global Alliance for the Future of Food, and others.

### 2.1 Introduction to sustainability

The World Wildlife Fund (WWF) introduces its Nature in All (SDG) Goals report by reminding us that the pandemic is clear evidence that “everything is connected”, that “our health, our economies, and the natural environment are all interlinked”. The organization calls for an end to tackling problems in silos, i.e. looking at the SDGs individually (Osieyo, 2020, p4).

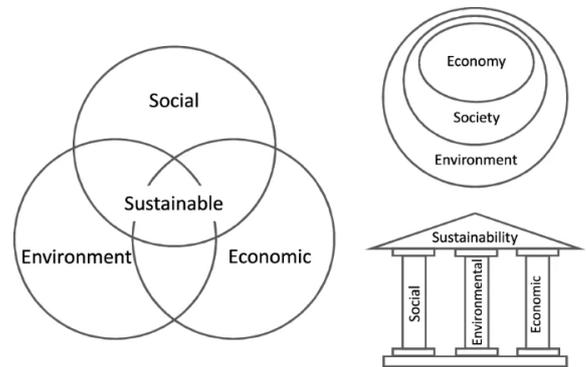
According to the UN IPBES, the way out of the collapse of humankind along with the extinction of 1,000,000 species is to develop and implement interconnected solutions that take into equal consideration the social, environmental, and economic aspects of our societies (IPBES, 2019).

These three pillars or intersecting circles of **society**, **environment**, and **economy** that underlay sustainability theory are inseparable (Figure 2, Purvis et al 2019). As WWF puts it, “Individually, the 17 goals make incremental changes but together, the goals will deliver transformational progress for the world” (Osieyo, 2020, p4).

Moving away from the traditional way of presenting SDGs as a set of 17 individual building blocks, Rockström and Sukhdev from the Stockholm Resilience Centre present them in the form of a tiered cake (figure 2). The model places invaluable natural elements of the ‘biosphere’ (water, air, land, forests) as the base of the system - on which human systems (societal constructs and the economy) depend.

In both the OECD DAC definitions and much of evaluation practice, the term ‘sustainability’ is traditionally understood as being to do with maintaining programme activities and their results over time. This definition offers a static view of sustainability that is too narrow and fails to encourage evaluators to question the cost

Figure 2: Representations of sustainability



Source: Purvis et al, 2019

Figure 2: the SDG tiered cake: a new way of viewing the economic, social, and ecological aspects of the Sustainable Development Goals.



Source: Azote Images for Stockholm Resilience Centre, Stockholm University

of achieving economic or social change, which is often a cost paid by the environment in which the programme operates (Patton, 2020).

## 2.2 Key issues in development practice

In the context of accelerated climate change, donors are increasingly asking programme teams to embed climate change considerations into their activities. In practice, this might include updating logframes to include climate change indicators, such as the UK Government's International Climate Finance (ICF) KPIs: *number of people supported to cope with climate change; the volume of greenhouse gas emissions avoided or reduced; level of installed capacity of clean energy*, (FCDO, 2019).

The inherent issue with simply retrofitting indicators to existing programmes and interventions is that it may not support the identification of potential unintended impacts on the environment and future generations. Additionally, only focusing on quantitative metrics may not encourage programmes and interventions to examine relevant aspects of climate change outside the KPI's definition(s). This may result in a missed opportunity to apply sustainable activities or stop activities that contribute negatively to ecological resilience.

In its usage in this paper, sustainability entails the protection and regeneration of natural resources that have already dwindled because of human activity, as much as avoiding further degradation of natural systems. This interpretation of the definition entails considering the current state of the biosphere in an effort to encourage the ambition necessary to face climate change challenges.

## 2.3 The Actor-Based-Change Framework

With the infusion of systems thinking and complexity theory into evaluation practice, and in the face of climate change, sustainability must become something else, something associated with major and rapid transformation of global systems and the resilience of these systems to adapt over time.

The approach presented in this paper builds on the actor-based change (ABC) framework (Koleros et al, 2018). The ABC Framework offers an approach that integrates systems thinking and behaviour change into programme theory. Through that approach, the authors demonstrate how the behaviour changes of one actor in the system will affect the practices and relationships of other actors in the system.

It also demonstrates that understanding inter-relational factors is critical for programme teams to anticipate potential impacts better and adapt programmes accordingly.

### Box 1: Defining sustainability

The 1992 Brundtland report defined Sustainability as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. Since then, the OECD has narrowed the definition to “measuring whether the benefits of an activity are likely to continue after donor funding has been withdrawn”.

The 2019 update of the OECD DAC did not move far from the original definition, and reframed sustainability as “the extent to which the net benefits of the intervention continue, or are likely to continue”

Although the definition is concise, the accompanying notes make it clear that Sustainability in Evaluations needs to be: “An examination of the financial, economic, social, environmental, and institutional capacities of the systems needed to sustain net benefits over time”.

The revised definition also makes it clear that evaluators should look at resilience, risks and potential trade-offs, **in the medium and long term**.

Although there is a clear improvement in the 2019 definition, this paper argues that the current context calls for a more explicit inclusion of climate change issues in the definition of sustainability.

However, whereas the ABC framework guides development practitioners' thinking about how behaviour change affects the practices and relationships of other actors in the system, it remains actor-focused.

Following this idea, the *environmental approach for generational impact* seeks to demonstrate that behaviour change, practices, and relationships affect other actors in the system *and* the environment in which these actors live and depend.

For example, using an urban development programme example, applying the ABC framework might mean:

- ▶ mapping actors involved in urban planning and regulation
- ▶ mapping communities living in these areas
- ▶ mapping the policies and rules as well as financial flows
- ▶ mapping the power or relational dynamics between the different human elements of the system map

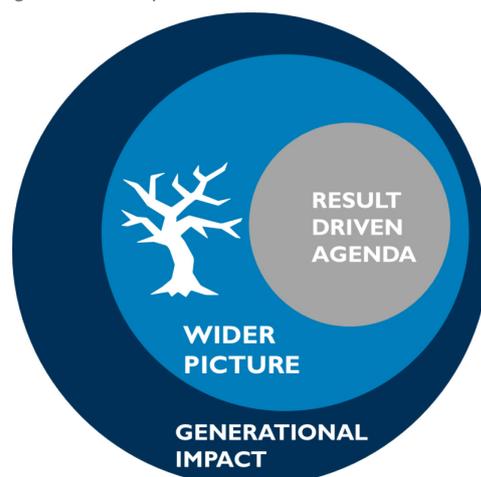
Applying an environmental lens to this system analysis – which forms a crucial part of the ABC Framework – would mean going further by conducting some of the following analyses on top of the initial system analysis:

- ▶ Community asset mapping, including the mapping of forests, rivers, waste dumps, biodiversity corridors and protected species present in the area
- ▶ Mapping indigenous communities and community organizations involved or affected by biodiversity loss and urban expansion, especially those involved in forest and biodiversity protection
- ▶ Mapping relationships between the urban and natural zones

This additional step supports a more holistic understanding of the problem, its context, and, therefore, a better understanding of the change agenda necessary to ensure the programme addresses the selected issue; without creating a new one or displacing the problem to another aspect of the system.

The following section provides a detailed hypothetical example of what this would look like in practice.

Figure 3: The model supports practitioners in expanding beyond results driven agendas, towards generational impact.



Source: Lamia Renaud 2022

# 3. Method: Theoretical application of the environmental approach for generational impact

## 3.1 Introduction to the approach

In this section, we describe how to apply the approach in practice using the hypothetical case of an evaluation of a fictional urban development programme tackling unregulated urbanization in peripheral zones. We demonstrate how practitioners can use the framework to articulate programme theory, define the scope of the evaluation, develop the evaluation framework and drive transformational adaptations.

Background to the fictional urban development programme

<b>Context</b>	Located in a tropical zone, City X and Y are the second and third largest cities in Country Z, and have grown steadily over the past 20 years. Their housing and social infrastructure are no longer adequate to host new communities. Therefore, communities are settling in informal peripheral zones (peri-urban zones) in forested areas and along the city's rivers.
<b>Problems</b>	The unplanned and unregulated urban growth creates unsafe and unsanitary settlements. Communities living in these settlements do not have access to safe and reliable water sources, rely on wood for fuel and do not have waste collection services. This situation creates conditions for health, safety and environmental risks.
<b>Programme solution</b>	<p>A programme funded by an international donor seeks to tackle unregulated settlements by launching a registration campaign that would register the communities living in these areas.</p> <p>Following registration, the programme would support the local authorities in deploying public services such as waste collection, safe water access, street lighting, policing, and road infrastructure building to make the area safer. The programme also seeks to support municipalities in relocating these communities in new build neighbourhoods to be constructed in peripheral zones currently occupied by informal settlements.</p> <p>The programme focuses on social and economic outcomes and seeks to improve access to employment, education and health services, and security and justice in these settlements.</p>
<b>Evaluation</b>	<p>Whilst the problems highlight environmental risk; the programme has not included environmental outcomes or activities in its theory of change at the design stage.</p> <p>The programme evaluation terms of reference do not specifically mention environment or climate change.</p>

# 1. Using the Generational impact framework to articulate programme theory by understanding the problem and the system in which it exists

## a. Define what problem the programme is aiming to solve

In our example, the problem is unplanned urban development leading to unsafe living conditions for poorer communities.

**Generational lens:** A generational lens could expand this problem to include negative impacts of unplanned and unsafe housing on the ecosystem and biodiversity (driving deforestation, degrading biodiversity hubs, lack of waste management driving air, water, and soil pollution, etc.)

### Donor driven

Unplanned urban development leading to unsafe living conditions for poorer communities.



### Environmental lens

Negative impacts of unplanned and unsafe housing on the ecosystem and biodiversity (driving deforestation, degrading biodiversity hubs, lack of waste management driving air, water, and soil pollution, etc.)



## b. Define the context in which the problem exists

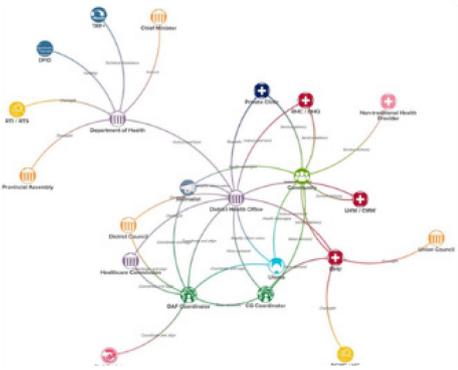
Typically, this is done using an actor-based system map. In our example, that would mean mapping<sup>1</sup> the actors involved in urban planning and regulation, communities living in these areas, policies and rules, investment flows etc.

**Generational lens:** In a generational impact approach, we can expand actor-based system maps to include natural resources and biodiversity as key influential elements of the system map. In our example, we might map natural elements such as forests, rivers, waste dumps, protected species present in the area. We might also map indigenous communities involved in forest and species protection.

<sup>1</sup> For example, by using methods such as community asset mapping. Example guides to planning and facilitating community asset mapping sessions can be found [here](#) and [here](#).

## Donor driven

Actor based system map: actors involved in urban planning and regulation, communities living in these areas, policies and rules, investment flows, etc.



## Environmental lens

Community asset mapping: forests, rivers, waste dumps, protected species present in the area;

Mapping Indigenous communities involved in forest and species protection;

Relationship between the unplanned urban zones and natural zones, etc.



### c. Identify the underlying causes and consequences

The next step identifies the underlying causes and consequences of the fictional cities' unplanned, unsafe urban expansion. A problem tree or fishbone analysis can be a helpful tool for this.

**Generational lens:** In applying a generational lens, we might expand a fishbone or problem tree analysis beyond the issues related to human systems (such as health, community safety, unemployment, etc.) and towards articulating the anticipated consequences on the biosphere (pollution, species endangerment, risks of zoonotic diseases, poaching and trafficking of wildlife, deforestation etc.).

## Donor driven

Issues affecting communities and human systems: access to health, community security, need for social protection, mobility, access to education and jobs.



## Environmental lens

Articulating the consequences on the biosphere: pollution, species endangerment, risks of zoonotic diseases, risk of violent wildlife encounters, poaching and trafficking of wildlife, deforestation, etc.

Community frictions between new and ancestral dwellers.



#### d. Understand how interactions in the system can result in transformational change

Practitioners can then reflect on the relationships between the different actors in the system they have mapped, including incentives, behaviours and influence that form the system under analysis.

**Generational lens:** In applying a generational lens, we would expand our understanding of the system we have mapped (Step 1b.), to include behaviours and relationships between the human and the natural system. This analysis would go beyond issues related to human systems and include an exploration of the relationships between the unplanned urban and natural zones, etc. In our hypothetical example, the relational analysis uncovered that some of the settlements are established on indigenous lands and have exacerbated conflicts or friction between new peri-urban communities and ancestral indigenous communities. Additionally, the close living conditions and proximity to wildlife endemic to these peripheral zones creates risks of zoonotic diseases and violent wildlife encounters.

### 2. Using the generational impact framework to outline the roadmap for transformative change to be realized

#### a. Assess what falls under the programme's scope of control and influence

Following the problem analysis, we assess what falls under the programme's scope of control and scope of influence. In an evaluation setting, we use this step to assess what part of our problem analysis the programme focused on and how that translates to programme delivery. This step guides the evaluation team in defining what hypotheses or evaluation questions the evaluation will seek to answer. In our example, we would look at the original business case or active programme theory and intervention pathways used by the programme and assess them against our actor-based system map (developed under step 1.b and 1.d). This exercise can support the identification of gaps in the programme's system understanding and lead to the identification of evidence gaps that the evaluation can address.

**Generational lens:** In our example, the programme sought to regularise the unplanned habitations already set up in an area known to be a biodiversity hub by local indigenous groups. However, the programme has not considered the impacts a long-term settlement would have on biodiversity in the area, nor has it recognized that the unplanned settlement is on indigenous lands. In applying a generational lens, the evaluation could include a question looking at unintended negative impacts (economic, social and environmental) of the programme interventions, with a particular focus on environmental risk assessments and social inclusion in selecting which settlements to regularise in an unplanned urban context.

#### Next steps:

What part of our problem analysis the programme decided to focus on?

How did it translate to programme delivery?

Identify gaps in the programme's system understanding

Identify evidence gaps that can be addressed by the evaluation

Draft key evaluation questions (KEQs) and approach



#### KEQs with an environmental lens:

What are the unintended negative impacts (economic, social and environmental) of the programme interventions in selecting which unplanned settlements to regularize?

Specific focus on environmental risk assessments, land rights, and social inclusion.

### Box 3: Types of questions to be considered in an evaluation applying the generational lens

- ▶ What impact has/will the intervention had/have on biodiversity (species endangerment, habitat destruction, increased risk of habitat destruction, reduced access to water and food, etc.?)
- ▶ What impact has/will the intervention had/have on land and soils (carbon sink, natural cover, displacement of indigenous groups, impoverishment of soil biodiversity, topsoil or subsoil pollution, degradation of roots systems and increased risks of soil instability)?
- ▶ What impact has/will the intervention had/have on water (pollution, perturbation of natural water movements, freshwater pollution, marine pollution, ocean acidification, plastic pollution, degradation of ecological and biodiversity systems in coastal waters, etc.)?
- ▶ What pollutants are/could be attributable to the intervention (chemical inputs, aerosols, CO<sub>2</sub>)
- ▶ Could/Can the intervention have mitigated / mitigate this impact with an alternative approach?

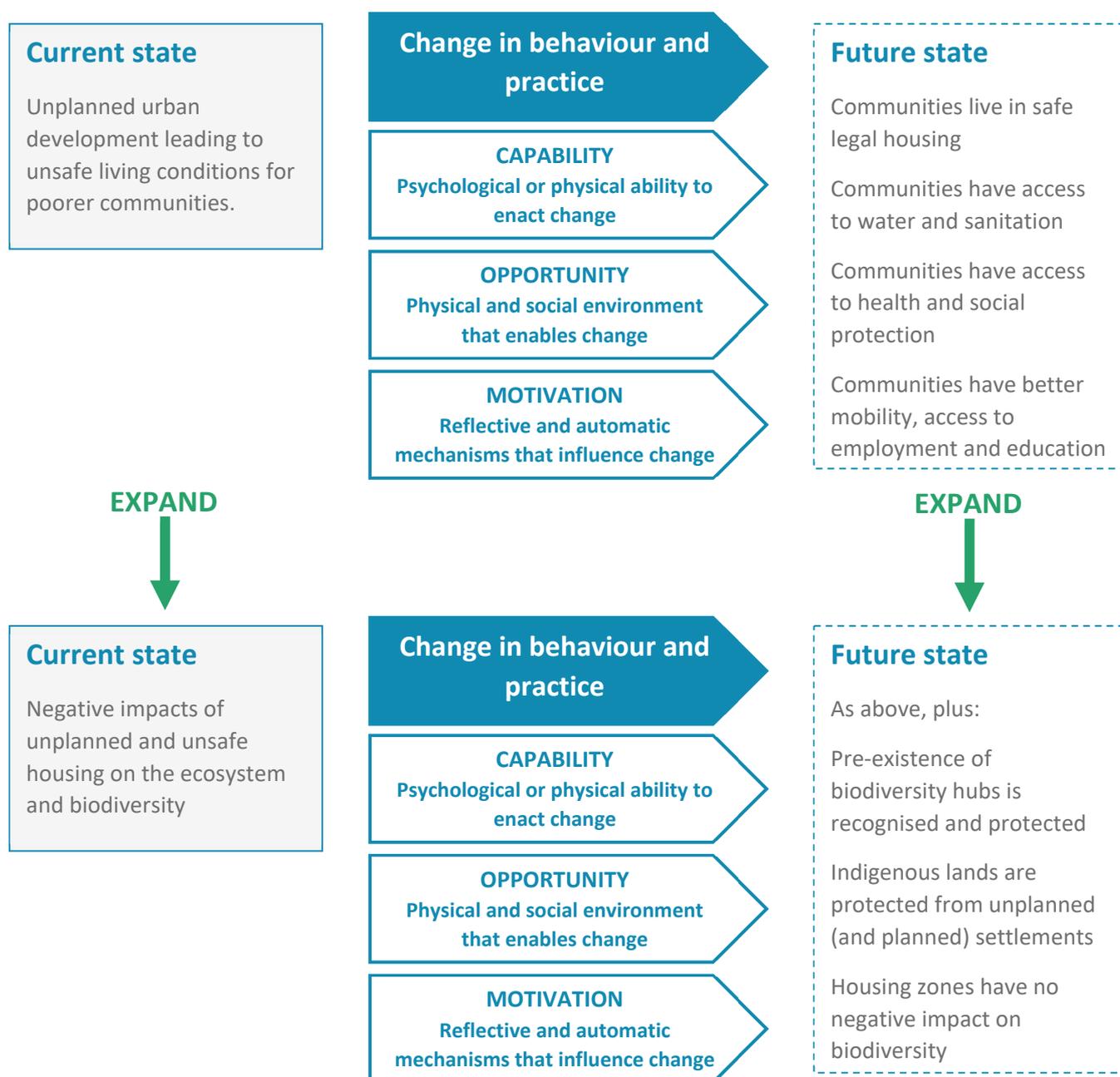
#### b. Imagine the future state

We then imagine the future state, where the identified issues are addressed. This is done through the application of the COM-B framework (Michie et al, 2011). In our example, rather than defining the future state from the sole lens of what the donor wants to achieve, we look much further than the typical 5-to-10-year future and apply a generational impact lens. We do so by looking at what a problem and its solution - the change area and its resulting behaviour, practice or situation - looks like in a minimum of 50 years.

**Generational lens:** In our evaluation example this would mean expanding the future state from: communities live in safe legal housing – towards, the programme team recognizes the pre-existence of biodiversity hubs, indigenous lands are protected from unplanned settlements; communities live in safe legal housing zones that have limited impact on biodiversity and that are not built on indigenous lands.

**Box 4:** The COM-B Framework (Michie et al, 2011) is a useful lens in developing and evaluating programme theory. It stands for “Capability, Opportunity and Motivation for Behaviour Change” and is often referred to as “COM-B”. It explores the three conditions that must be met in order to ensure the sustainability of a behaviour or practice. Each element of the framework is given equal attention and can be applied to a group, an actor, or a situation. It supports practitioners to unpack the behavioural determinants for change to realise in a given context.

Figure 4: Example application of the COM-B framework to imagine the change agenda from current to future state



Source: Lamia Renaud, 2022

### 3. Using the generational impact framework to design intervention and or theory-based evaluations that can drive transformational adaptations

#### a. Drive transformational adaptations

Finally, practitioners can reflect the generational ambition and transformative change pathways in the design of their interventions or theory-based evaluation scopes. By including this long-term vision in intervention design and evaluations, practitioners can maximize the potential for generational impact and evaluate programmes against generational impact questions.

**Generational lens:** In our evaluation example this would mean developing impact level and outcome level statements that reflect the generational ambition set out in the future state exercise (step 2b.) and working backwards from there to design interventions that can set the

necessary conditions for these objectives to be achieved in 5, 10, 20 or 50 years. This requires a shared understanding that the programme will not be able to contribute (or track) direct impacts beyond intermediary outcome or output level. For evaluation design this might mean integrating the aspects (protected lands, safe housing, protection of biodiversity hubs), in the evaluation framework, to assess whether the conditions for these generational objectives are being met, or on the contrary, assess whether the programme interventions being evaluated are establishing (or risk establishing) negative conditions for the realisation of these objectives in the longer timeframe.

## 3.2 Why it's important?

These steps are especially important in theory-based evaluations, where there may already be a theory of change. Recreating the theory of change following the above steps will support the identification of ecological blind spots in the programme design and delivery and can be a key driver of transformational adaptation.

The application of the approach also offers practitioners an opportunity to view problems of development through a different lens and encourage evaluators and programme managers to think through alternatives that offer generational benefits. It supports practitioners in exploring:

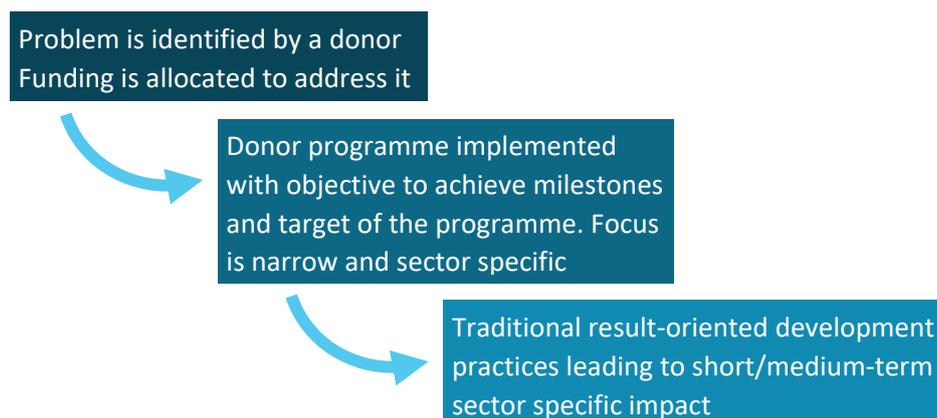
- ▶ What else could we do to support environmental protection and regeneration whilst achieving our primary objectives of improving social and economic outcomes?

and

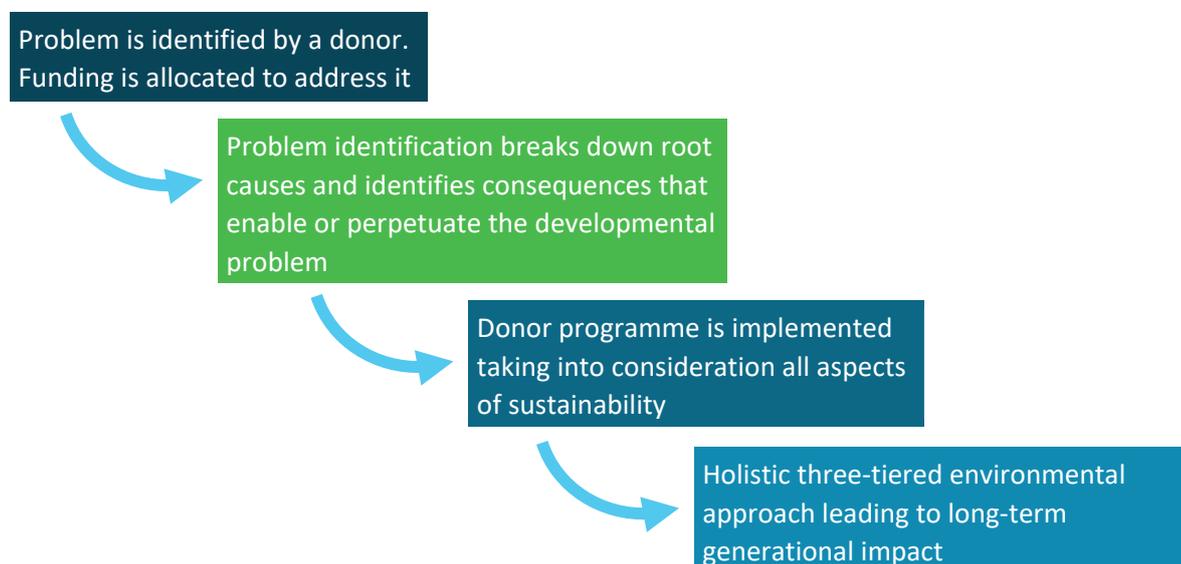
- ▶ Does an environmental protection and regeneration lens offer new opportunities to improve social and economic outcomes for communities?

This is especially interesting as programmes designed today may be implemented in future contexts where communities will be lacking the resources that exist today and where the ecosystem will be drastically different.

### Traditional approach:



### Generational approach:



Ultimately the gains can be much more significant and long-lasting with a generational approach. In some contexts, it may also have the potential to solve parallel issues linked to climate change and environmental degradation. For example:

- ▶ conflict and instability over land or resources
- ▶ unsafe migration due to climate-induced loss of livelihoods, shelter, land, etc.
- ▶ organized crime networks and the instability and violence that accompanies it, for example, trafficking of natural resources such as timber or wildlife products, deforestation for illicit culture, trade of narcotics, etc.
- ▶ incentives for recruitment into armed or terrorist groups, for example, loss of livelihoods and inadequate public services in remote regions, etc.

### 3.3 The role of evaluators in driving transformational change

The increasing focus on climate change and biodiversity loss exposes the urgent need for accountability on a larger scale to support the paradigm shift from small scale economic and social impact to generational transformational impact. In this, evaluators have an opportunity to contribute to supporting programmes and donors recognize their environmental footprint and therefore support programmes to learn and adapt (Patton, 2019). Evaluators can contribute to:

- ▶ driving a more substantial commitment and a more holistic implementation of the Sustainable Development Goals
- ▶ decolonizing development by giving a voice to marginalized communities, including Indigenous and First Nation peoples, and revalorizing ancestral nature-based solutions and know-how

In practice, for an evaluator, this might mean applying the following principles:

- ▶ **Expand your scope:** convince your client and programmes to look further than their short-term results and immediate accountability, towards generational accountability.
- ▶ **Evaluate outside of traditional silos:** across issues and sectors; across funding streams and donor priorities; across thematic areas and SDG objectives.
- ▶ **Ensure diversity of perspectives** and experiences in your evaluation teams.
- ▶ **Identify, recognize and map the environment in which programmes and evaluation operate.** Identify the climate and environment implications linked to that geography. Share these findings with programmes that might be operating blindly.
- ▶ **Look at problems through a global lens and re-value local solutions, including ancestral ones.** Advocate for programmes to systematically consider ancestral indigenous knowledge and support them in embedding potential solutions in interventions and systems.

## **Box 5: The role of indigenous knowledge in climate change and biodiversity protection**

With up to 80% of worldwide biodiversity and 24% of the world's tropical forests in areas managed by Indigenous Peoples and local communities, Indigenous communities are important keepers of biodiversity. Therefore, recognizing and valuing ancestral indigenous knowledge is a critical step in protecting the biosphere.

The development sector offers a “modern” vision of development in which nature-based solutions and especially ancestral knowledge have historically been side-lined. Although nature-based solutions have increasingly gathered attention and funding in recent years, they are not yet systematically considered in the sector.

“Approaches that take into account Indigenous Peoples’ unique ties with nature and their extensive Indigenous Knowledge are providing pathways that re-evaluate existing conservation frameworks. As such, this will open up myriad opportunities for partnerships between conservation practitioners and Indigenous Peoples to create mutual benefits”

(Garnett et al., 2018)

The Environmental Approach for Generational Impact encourages development practitioners to systematically review how they work and how the programme they evaluate works, and how else it could work, including through the application of methods that, like indigenous approaches, respect and protect the ecosystem in which they operate.

A systematic application of the approach would promote the exploration of alternatives, including nature-based solutions and ancestral indigenous knowledge as alternatives to dominant models of development.

Finally, valuing, learning from and applying ancestral indigenous knowledge to development programmes would also support efforts to empower indigenous peoples – who are often marginalized and discriminated against – through voice, recognition and celebration on an international scale.

## 4. Conclusion

Programme designers and evaluators who do not consider the natural world a central part of their work risk contributing to further environmental and biodiversity loss, and failing to contribute to local and global climate objectives.

Environmental considerations are important for all programmes, regardless of what they are working to achieve. This paper argues that by remembering and understanding that human systems operate thanks to the natural systems they rely on, environmental considerations can become much more mainstreamed in all programmes and evaluations – including those that work directly on climate issues and those which do not.

This shift is crucial for the development sector to ensure there are no downstream costs to interventions in the natural ecosystem (Shiva, 1991; IPBES, 2019; FAO and UNEP, 2020).

This shift is also important in order to move away from the current exploitative understanding of the natural world: nature provides us with resources which we use. Perceiving the biosphere only through a resource-lens sets up a development programme to see the natural ecosystem as an enabler of economic and social gains. This encourages a culture in which a balanced vision of development where social, economic, and environmental concerns are taken into equal consideration is difficult to establish. In this culture, the environment and biodiversity are not recognized as assets in their natural form but must be used, transformed, and exploited to benefit the programme and broader human systems.

The approach presented in this paper attempts to support that shift and provide a different understanding of nature which recognizes natural systems as influential actors in development programmes. This approach supports evaluators in recognizing the footprint cost of economic and social results and the hidden downstream costs generated by these results for generations. This encourages evaluators to think about alternatives in which nature does not pay the price for human system development.

The paper argues that the application of the approach better meets donor's reporting and accountability commitments to citizens, intended beneficiaries and investors. It does so by supporting practitioners in conducting a critical review of potential harms that assesses the true cost of interventions and the impact development might have on natural ecosystems in the pursuit of economic growth and better livelihoods.

It supports evaluators in assessing behaviour change within the target population and conducting assessments of the environmental and social impacts of the policies and practices supported by programmes on nature and the indigenous groups that may protect it. The application of the approach may also contribute to supporting donors in better and more coherently design portfolios and programmes, so they can work holistically to achieve national and global climate and biodiversity commitments.

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