Monitoring, Evaluation and Learning Guidance

2022 – 2023

April 2022

Biodiversity Challenge Funds:

Darwin Initiative

Illegal Wildlife Trade Challenge Fund

Darwin Plus

Glossary

Additional	Is the extent to which an activity is larger in scale, at a higher quality, takes place more quickly, takes place at a different location, or takes place at all as a result of intervention (project). It is the net result of the project, taking in to account the baseline and other projects.
Biodiversity	"Biological diversity" means the variability among living organisms from all sources including, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.
Biodiversity Challenge Funds	Collective name for Defra's Darwin Initiative, Illegal Wildlife Trade Challenge Fund and Darwin Plus.
Capability & Capacity	Capability refers to the types of ability (skills and knowledge) required for a task; Capacity refers to the amount of ability at a point in time to deliver a task.
Complementary	Whilst distinct, activities are compatible and support the delivery of results, as opposed to having a negative impact on each other such as duplication or competition for resources.
Country	Normally refers (unless otherwise stated) to any country on the eligible country list, and not countries such as the UK.
Defra	Darwin Initiative is a programme of the Department for Environment, Food and Rural Affairs (Defra), UK Government.
DEC	Darwin Expert Committee is a group of independent experts in biodiversity and sustainable development that provides strategic advice, assesses proposals and makes recommendations to Defra on funding decisions.
Ethics	The values, such as fairness, honesty, openness, integrity, that shape how an individual or an organisation operates and interacts with others.
Evidence	Ranges in format, quality and relevance and include, documented and undocumented experiences, data, studies, policies, best practices etc. but is particularly valued when it is quality assured, accessible and applicable.
Fellows	Funding for Fellowships is now possible within any of the grants to strengthen the capability and capacity of eligible countries, if it is justified and demonstrates value for money.
International organisations	Organisations that may have a presence in an eligible country, but a head office located in a country not listed as an eligible country.
Innovation	The implementation of a new/novel or significantly improved approach (product, ways of working, and/or process) that differs from previous approaches.
Lead Applicant	The individual who leads on the submission of the application and supporting materials, and will be the project contact point during the application process.

Lead Partner	The partner who will administer the grant and coordinate the delivery of the project, accepting the Terms and Conditions of the Grant on behalf of the project.
Local/national organisations	Organisations of an eligible country, with either a national or local remit within that context and typically led by a national of the country.
Logframe	Logframes are a monitoring tool to measure progress against the Results Chain, comparing planned and actual results along selected causal pathway, and include indicators, baselines, and targets.
Matched Funding	Additional finance that is secured to help meet the total cost of the project, including public and private sources, as well as quantified in-kind contributions.
NIRAS-LTS	Darwin Initiative Administrator, and first point of contact for projects and applicants.
ODA	Official development assistance – commonly known as overseas aid – is when support, expertise or finance is supplied by one government to help the people of another country via activities that promote economic development and welfare as a main objective.
Partner(s)	Have a formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.
Poverty	Poverty is multi-dimensional and not solely about a lack of money; encompassing a range of issues to fulfil basic needs and better one's life with dignity.
Project Leader	The individual with the necessary authority, capability and capacity, and a full understanding of their role and associated obligations to take responsibility for delivering value for money, managing risk and financial controls whilst fulfilling the terms and conditions of the grant.
Safeguarding	Broadly means preventing harm to people – and the environment – in the delivery of development and humanitarian assistance. In practice, efforts often focus on taking all reasonable steps to prevent sexual exploitation, abuse and harassment (SEAH) from occurring, and to respond appropriately when it does.
Scale	The ability to take a proven approach and evidence to deliver greater impact either through larger grants or through uptake by stakeholders or other mechanisms.
Stakeholder	Are consulted, engaged and/or participate in project activities as they have an interest or concern in the project and its impact. They can also be partners, but if not, they would not have a budget management, or a formal governance role, within the project.
Theory of Change	Explains the process of change by outlining causal linkages in an initiative, explicit about assumptions of the causal pathways, and includes an analysis of

	barriers and enablers as well as indicators of success. Often set out in a diagram and narrative form.
Value for Money	Good value for money is the optimal use of resources to achieve the intended outcomes. Value for money is not about achieving the lowest initial price.

Content

Monitoring

Effective monitoring, evaluation and learning (MEL) is critical for good project management and maximising performance by supporting informed and timely decision making, ongoing learning, and demonstrating results.

The guidance in this document sets out to help you monitor, evaluate, and share your learning.

Table 1: What is Monitoring, Evaluation and Learning?

Monitoring	The routine monitoring and data collection of project resources, activities and results. This would include logframe and indicators.
Evaluation	The periodic assessment and analysis of a project resources, activities and results that can assure or inform a project's design and decisions to achieve the desired impacts. This can take the form of Annual Reviews, mid-term or final evaluations.
Learning	The process through which evidence and information is reflected upon and used to address evidence gaps and identify what works or doesn't to continuously improve the ability to achieve results by the project and others working in the area.

Design – what are your aims and objectives

Developing a pathway to impact

We want the projects to make a real difference on the ground to the objectives of each fund. This means that it is important to measure the effect of the funded projects and learn lessons from what works and what does not in order to scale the impact.

Assessment of need and engagement

All projects are expected to articulate the need or the problem that you are trying to address.

In preparation to designing a logframe, **best practice includes reviewing evidence about what has worked and consider lessons learned from past efforts** while factoring in the current context.

This assessment helps clarify the need or the problem that your project is looking to address by understanding the underlying causes, evidence for to support this understanding, the impact on target communities or biodiversity, and successful activities that have worked in previous projects.

This evidence helps inform the Theory of Change and Results Chain; enabling the identification of what change can you realistically target in you project lifetime.

It is useful to consider and discuss with your partners and stakeholders the following questions about your proposed project:

- What is the problem the project trying to address?
- What change is expected?
- How will it achieve this? What activities need to be carried out?
- What resources, people, and equipment will you need?
- What potential problems or risks may affect your delivery?
- How can you mitigate and manage these problems or risks?
- How will the progress and ultimate success of the project be demonstrated and measured?

Theory of Change

A Theory of Change diagram and narrative is **only required** for Darwin Initiative Extra…., but all projects are expected to articulate the **change that they expect**.

A Theory of Change (ToC) describes how change is assumed to come about through an intervention. They are flexible and able to capture the complicated and real-world nature of projects. This aspect has made them popular tools for those working in complex and changeable contexts.

The theory is usually laid out in a diagram showing the connections between interventions and outcomes. But more than this, it makes clear that these connections rest on a set of assumptions. These assumptions will have varying degrees of evidence to support them.

Theories of Change need to be tested and revised, for example if new information or evidence comes to light that might challenge an assumption. This reflection and response is often prompted during the mid-term evaluation and annual review process.

This continuous learning and adaptation as the project progresses support projects to strengthen their approach, enhance performance and increase their ability to deliver the desired impact.

Why do we need a theory of change?

A Theory of Change for a project takes our assumptions about what we want or expect to happen and tests those assumptions to see if they hold true.

A Theory of Change can be used as a:

Strategy tool

- To assist teams to work together to achieve a shared understanding of a project
- To make projects more effective by understanding outcomes and their causes
- To identify any hidden assumptions and their importance (or lack of)

Monitoring and evaluation (M&E) tool

- To determine what needs measuring (and what does not) to support evaluation activities
- To encourage teams to think about evidence in a more focused way
- To act as the basis for claims about attribution

Communication tool

- To provide a quick visual picture of the project's aims
- To highlight and describe the process of change
- To improve partnership-working through development of a shared understanding.

Theory of Change and Logframes

The ToC plays an important role in the development of the logframe, and should ideally be created before your logframe, remembering that the scope of the Theory of Change is often much greater than that of the logframe.

Logframes are a monitoring tool to measure progress against the Results Chain, comparing planned and actual results along selected causal pathway, and include indicators, baselines, and targets.

A ToC is of particular value for evaluation processes as they can be used to prompt critical reflection and re-thinking of approaches.

Logframes usually start with a designed project and then outline the key components, in comparison a ToC takes the intended project impact as the starting point, and then looks at what approaches are required to achieve it – i.e. it is a backwards mapping exercise.

They might be a **graphic representation of project components**, but is often less rigidly structured than a logframe, allowing a better demonstrate interlinkages within your project design. Any ToC diagram should be accompanied by a narrative that explains the context, what the logic is based on, and how success will be measured – i.e. the other elements of your application form.

The essential distinctive elements of ToC compared to other approaches are to:

- identify **specific causal links** among outputs and outcomes, with evidence
- describe the causal pathways by which **interventions are expected to have effect**, and **identify indicators** to test their validity over time
- be explicit about **assumptions** about these causal pathways, which includes an analysis of **barriers** and **enablers** as well as indicators of **success**.

A good Theory of Change will be:

Meaningful	representing action that's valued and worth doing; influencing the design, management and M&E.
Plausible	making good sense; is logical, comprehensive, clear and understandable
Feasible	it can actually be carried out; it's practical and focussed
Testable	results chains and assumptions can be verified. Evidence gaps are noted.

Theory of Change Requirements:

You are welcome to use whichever format you would like for your Theory of Change but there are some **key elements** we would expect your Theory of Change to include:

- **inputs/activities**, **outputs**, **shorter-term outcomes**, **longer-term outcomes** and **impact**. The specific terminology may vary but as much as possible we would encourage you to align the terminology that you use in your logframe.
- Use **arrows** and **lines** to clearly mark how the elements of your project link to each other
- Outline key **risk** and **assumptions** as well as **enabling conditions**

- You may use **colour coding** and different **shaped boxes** to clearly identify project elements.
- **This should be in PDF and fit on one page** (A4)

Your Theory of Change should closely correspond with your application form and in particular the logframe – i.e. they should "talk" to each other – and be directly supported by the narrative included in your answer to your **Pathway to Change**.

Further resources:

- Intro to Theory of Change: https://www.theoryofchange.org/what-is-theory-of-change/
- Global Environment Facility – Theory of Change Primer: https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF_STAP_C.57_Inf.04_Theory%20of%20Change%20Primer_0.pdf
- Creating your Theory of Change. NPC's practical guide. https://www.thinknpc.org/resource-hub/creating-your-theory-of-change-npcs-practical-guide/
- Conservation Standards – Case Study in Laos - https://conservationstandards.org/library-item/theory-of-change-study-of-successful-use-in-laos/
- FCDO: Review of the use of 'Theory of Change' in International Development

Results Chains (Pathway to Change)

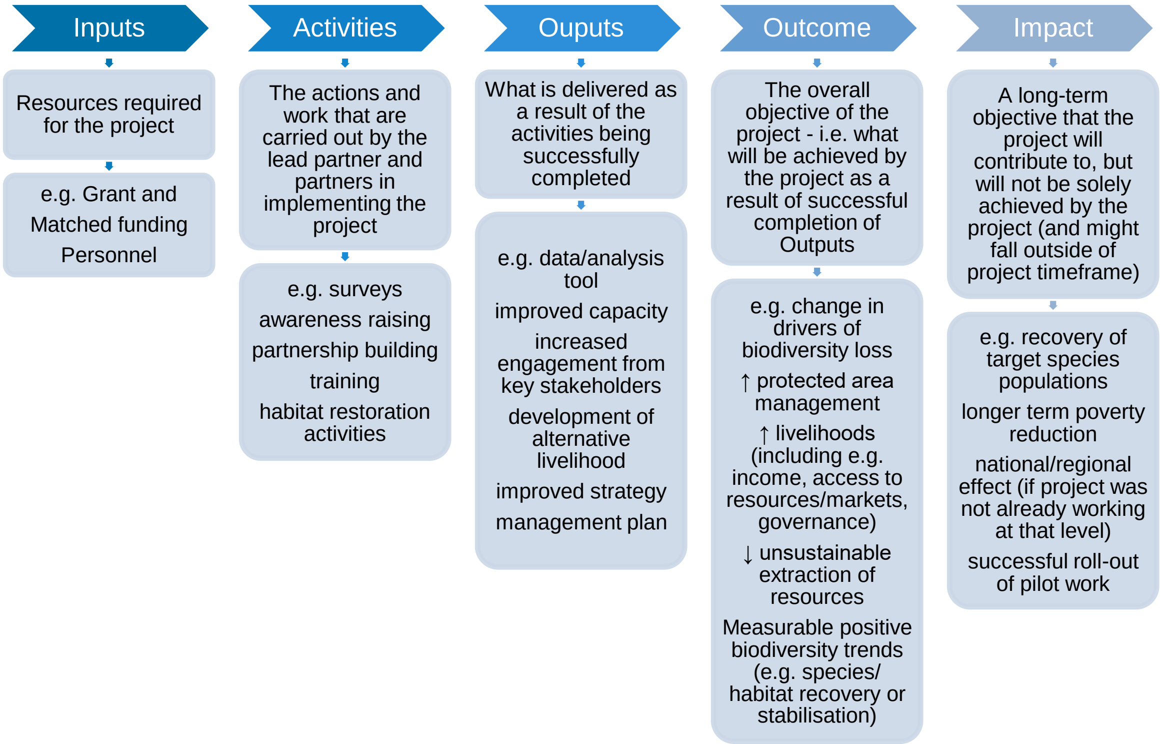
All applications require a Results Chain to be articulated.

While Theory of Change can appear to be complex and messy with multiple pressures and links, the Results Chain shows the linear pathway your project will act through to achieve its chosen impacts.

A logframe is an expression of a Results Chain: a logical and linear relationship (a chain) between the processes (inputs and activities) and the results (Outputs, Outcome and Impact).

Once you have your pathway to change outlined, you need to consider how you will evaluate your project. This is discussed in more detail in Section 0 Evaluation and Learning, but is useful to consider at an early stage to make sure you have set yourself up to measure and assess you impact.

Figure 1: An example of a Results Chain



Monitoring

All projects are required to effectively monitor their projects.

Effective monitoring is critical for good project management. It supports informed and timely decision making, ongoing learning and accountability for achieving results.

Better monitoring leads to improved outcomes for beneficiaries by ensuring that project teams make well informed management decisions based on good quality information about project performance.

What is monitoring and what does it cover?

Effective monitoring is critical for good project management. It supports informed and timely decision making, ongoing learning and accountability for achieving results.

Project monitoring is the routine collection, analysis and use of information about project progress and results being achieved. Effective project management requires monitoring of the different aspects of each individual project, including:

- **Results monitoring** (Outputs, Outcome and Impact) whether the project is on track against intended milestones and targets, and any unintended consequences (positive or negative).
- **Activities monitoring** (processes) tracks the use of funding and resources into how activities are delivered and whether they occur according to a pre-defined work plan.
- **Compliance monitoring** ensures delivery is in accordance with local, national government laws, within donor requirements and to ethical standards.

- **Situation/context monitoring** examines the project's operating environment, monitoring risks and assumptions, as well as political and institutional factors that may influence project progress.
- **Financial monitoring** tracks the use of input funds for activities and Outputs, with attention paid to accurate forecasting of costs and budget monitoring, clear and audited accounting procedures, and adequate safeguards to prevent fraud and corruption.
- **Organisational monitoring** covers the internal capacity of institutions involved with the project and partners to utilise and manage the project funds, undertake activities and delivery expected results.

Monitoring should be systematic, based on a predefined plan that meets the needs of stakeholders to make well-informed management decisions.

This guidance focuses on Results Monitoring through the logical framework, or logframe.

Guidance on the logical framework ("logframe")

All projects are required to….

Logical frameworks or logframes, (also known as Results Frameworks) inform decision-making including identifying options and risks, designing the project, monitoring and evaluation.

Logframes are the essential for reporting results from the project level to Darwin Initiative's programme level and beyond to national and international reporting. At the project level, in addition to results collection, logframes help us to:

- **Monitor programme performance**, identifying where we are, quantifying the results regularly to determine whether or not we are on track to deliver our intended outcomes and impact.
- Carry out **Annual Report Reviews** (see Reporting Information Note), which are based on an assessment of Annual Reports and reported progress against the logframe, to assess performance and make recommendations to strengthen performance.
- Carry out **Final Report Reviews** (see Reporting Information Note), similar to the Annual Report Reviews, which occur at project completion and are based on an assessment against the logframe to compare planned and achieved results.
- Support **evaluation**, as evaluators can use logframes to identify lessons learnt to inform future project design to strengthen the likelihood of success.

Impact, outcome, outputs, activities – what's the difference?

Your logframe will act as a project plan and used to monitor performance. It will quantify the results regularly to determine whether or not you are on track to deliver our intended outcomes and impact.

It is based on the project's Results Chain: Impact, Outcome, Outputs, and Activities. An example logframe is included to show how these steps are used in practice (Section 7: Example Logframe).

Impact

The Impact Statement is a shared vision of your project's **long-term objective**, as a contribution to a wider advance on, for example, conservation and poverty reduction. Note that the Impact:

- will **not be achieved solely** by the project
- will (often) be achieved **outside of the timeframe** of the project

There should be a **single Impact Statement**.

Outcome

The Outcome Statement is a project's objective; what overall **change do you expect** to achieve as a result of this project?

There can only be one Outcome for a project which should identify **what will change**, and **who will benefit**. There should be a clear link between the Outcome and the Impact.

Outputs

Outputs are the specific, **direct deliverables of the project**; they are tangible results from the completion of more than one activity. Their delivery is totally **attributable to your project**; they would not happen without your project.

Outputs will provide the conditions necessary to achieve your intended Outcome; **if the Outputs are achieved (and the assumptions hold true) then the logic is that the Outcome will also be achieved.** The logic of the results chain from Output to Outcome therefore needs to be clear.

Most projects will have **three or four Outputs** in order to achieve the intended Outcome. More than five Outputs for a project is likely to be excessively complex, so should be avoided.

It is important not to consider or confuse activities (inputs) as Outputs, for example the number of participants in a workshop is an input, the Output might be what those participants are now capable of as a result, e.g. higher quality practices, secure new funding, train communities etc.

Indicators

Indicators are the tools and mechanisms that are used to measure the changes your project is making. Indicators should be useful for project planning, monitoring and reporting externally and via your logframe to demonstrate progress towards outputs and outcomes.

Indicators can be **quantitative or qualitative**, and typically between 2 to 4 indicators are used to inform you if an Output or Outcome will or has been delivered.

Do not select indicators that are not able to be measured within cost and time parameters of your project. Though data is needed to see progress, setting complex indicators can mean measuring progress is difficult or costly.

We recommend that you select from the agreed BCF standard indicators whenever possible (Annex 1).

If alternative or additional indicators are needed, always consider using internationally agreed standardised indicators whenever possible (Annex 2).

There is normally no need to design new indicators as many have already been designed by sector (programme area) experts, and the use of non-standardised indicators places additional unnecessary demands on national reporting and project staff.

The Biodiversity Challenge Funds (BCF) requires the use of **SMART indicators**, these are:

- **S**pecific
- **M**easurable
- **A**chievable
- **R**elevant, and
- **T**ime-bound

For an example of how indicators can be used in Logframes effectively see Section 7: Example logframe.

We do not ask for indicators at the Activity or Impact level.

Key tips when selecting indicators:

- Where possible **use standardised indicators**, as these will have established methodologies to help you in their collection.
- Use your experience from other projects and **adapt indicators** accordingly.
- Keep your indicator as **straightforward** (pragmatic) as possible.
- Do not try to measure multiple elements within an indicator or combine indicators to a single indicator. An indicator should only be **measuring one part of the intervention**.
- Make sure your indicators can be **measured objectively**.
- Make sure you are clear on your **means of verification** of the indicators.

Baselines

The overall purpose of establishing the baseline your chosen indicators before project intervention you provide a benchmark of where you are starting from. This benchmark can be used to compare and evaluate progress.

Targets and milestones

Each indicator within your Logframe should also have an end of project target. These should be realistic based on your projects scope and evidence base for change.

These targets should be broken down into annual milestones so that project progress can be regularly (annually) assessed towards the target.

Milestones should be accumulative, each year adds to the previous year, and uses absolute numbers rather than percentages/proportions when possible.

As part of the Annual Review cycle, it is possible to revisit milestones and indicators to adjust them if it is justified and accepted via the Change Request process.

It is also important to consider the reporting timeframes of indicators if you are using data sources that are external to your project and differ from the standard timeframe.

Means of verification

The **means of verification** are the sources of evidence (databases, surveys, reports etc.) you will use to track and demonstrate achievement of your indicators.

There is no need to include means of verification in the drafting of a SMART indicator, but before finalising your logframe, assess your means of verification in terms of its quality i.e. **validity**, **reliability**, and **availability**:

- ✓ Specify the **data sources** i.e. not just the organisation but give the specific data collection method as well e.g. a survey / report.
- ✓ **Frequency** should be clear and consistent with milestones and targets.
- ✓ Provide availability of **disaggregated data** as required.
- ✓ Data collection and reporting **responsibilities** are clearly specified.

Activities

Activities do not need indicators; their completion should be sufficient. Only summarised main activities are required in the logframe, numbered against the Output that they relate to.

Understanding important assumptions and managing risks

Project achievements will often be **dependent on external conditions** outside the control of the project. Project's should **identify**, **reflect** and **monitor** these risks and assumptions.

Output risks and assumptions are more likely to be within the project's context to mitigate than higher level Outcome risks and assumptions.

If the external context or situation evolves, the project's approach may need to be changed.

Logframe Checklist

- ✓ Is the results chain clear and logical?
- ✓ Do the Outcome indicators measure what will change and who will benefit?
- ✓ Do the Output indicators measure the tangible results of your activities that will be delivered by the project?
- ✓ Are all indicators relevant to the results chain?
- ✓ Are all indicators clearly defined and measurable (SMART)?
- ✓ Have you considered using standard indicators / best practice indicators / learning from other projects?

Logframe Summary

1. If your **Activities** are delivered as planned, then the tangible results of your activities that will be delivered at the **Output** level.
2. If your **Outputs** are delivered, and the **Assumptions** that you have made hold true or risks effectively mitigated, then the change that you are targeting at the **Outcome** level should occur.
3. If the **Outcome** is delivered, and the **Assumptions** that you have made hold true, then the project will contribute to the ultimate result (**Impact**) that you hope will be achieved.

Figure 2: Logframe elements

	Project Summary	Indicators	Means of Verification	Assumptions
Impact	The ultimate result to which the programme contributes			
Outcome	The change that occurs if the project Outputs are achieved; the primary purpose of the project	Quantitative ways of measuring and qualitative ways of judging progress towards the project's Outcome.	Sources of information and methods used to verify progress against the indicators	External factors and conditions necessary to meet the project impact from being achieved
Outputs	The specific, direct deliverables produced by undertaking project activities	Quantitative ways of measuring and qualitative ways of judging progress towards the Outputs.	Sources of information and methods used to verify progress against the indicators	External factors and conditions necessary to meet the Outcome or which prevent the outcome from being achieved
Activities	The specific tasks to be carried out in order to produce the expected Outputs			

Evaluation and Learning

Evaluation

Biodiversity Challenge Funds expect to see proportional evaluations designed-in during project design, unless there are exceptional circumstances which make this infeasible.

The evaluation plan will enable gaps within data collection, monitoring and logical framework design to be addressed early, ensuring the evaluation itself will be able to draw firm and robust conclusions around project impact. If this approach is not feasible for a proposal, the justifications must be clearly explained.

The evaluation approach will be specific to each project, and depend on the project characteristics, evaluation purpose and feasibility of available methods (timescale and resources). The design should seek to build on outputs and understanding of the intervention and context.

The following resources will provide more detail on designing evaluations:

- The Magenta Book: HM Treasury guidance on what to consider when designing an evaluation
- Better Evaluation - https://betterevaluation.org/

Learning

All projects are expected to share and promote lessons learnt through mir-term, annual and final reviews, along with any other opportunity.

The process through which information generated by projects is reflected upon and used to continuously improve a project’s ability to achieve results.

In mid-term reviews this learning can help feedback potential changes to the project to keep it on track to achieve its impact.

Learning at the end of project can reflect on the projects delivery. It allows development of the evidence base, filling evidence gaps that may have existed in initial project assessment, and a better understanding of what worked. This project level learning must be shared and used to build on the project’s success in the future and/or to support the development of new projects.

Annex 1: Biodiversity Challenge Fund Indicators

To enable your results at the project level aggregate upwards and enable the monitoring and reporting of results at the fund level, we need to, where possible and appropriate, utilise indicators capable of being added together.

All projects are expected to report people related indicators disaggregated by gender.

Work is currently being conducted on programme level indicators, and we expect to publish these later in the summer of 2022.

We are likely to adopt an approach that will require each project to incorporate and report on a minimum number of core indicators. Beyond these core indicators, we hope to provide a longer list of standardised indicators with approved methodologies as a resource for projects to select from where appropriate.

If no appropriate indicators are available within these lists, then projects can develop their own project-specific indicators.

Annex 2: Additional sources of indicators

In the interim, we would encourage the consideration if your project could contribute to the following indicators, whilst adhering to the approach set out in Section 2.6:

International Climate Finance (ICF) Key Performance Indicators (KPIs) including:

- KPI 1: Number of people supported to better adapt to the effects of climate change as a result of ICF
- KPI 4: Number of people whose resilience has been improved as a result of ICF
- KPI 6: Net change in greenhouse gas emissions (tCO_2e) – tonnes of GHG emissions reduced or avoided as a result of ICF
- KPI 8: Number of hectares where deforestation has been avoided through ICF support
- KPI 10: Value of ecosystem services generated or protected as a result of ICF support
- KPI 15: Extent to which ICF intervention is likely to lead to Transformational Change
- KPI 17: Hectares of land that have received sustainable land management practices as a result of ICF

Any recognised and relevant indicator from **national level monitoring frameworks**, related to for example:

- National Biodiversity Strategies and Action Plans (NBSAPs)
- Nationally Determined Contributions (NDCs)
- National Adaptation Plans (NAPs)

Any recognised and relevant indicator from **multilateral environmental agreements** (Conventions, Treaties and Agreements) for example:

- Convention on Biological Diversity (CBD), please consider the indicators under draft Post-2020 Global Biodiversity Framework.
- Nagoya Protocol on Access and Benefit Sharing (ABS)
- International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)
- Convention on International Trade in Endangered Species (CITES)
- Convention on the Conservation of Migratory Species of Wild Animals (CMS)
- Ramsar Convention on Wetlands (Ramsar)
- United Nations Framework Convention on Climate Change (UNFCCC)
- Global Goals for Sustainable Development (SDGs)

Please **indicate** (at least in footnotes or references) **the source (NBSAP, CBD, ICF etc.) of any standardised indicators** in your logframe as this helps strengthen the understanding of the contribution that your project will be making to agreements, strategies, or wider objectives.

Annex 3. Example Logframe

This is a worked example of a fictitious Darwin Initiative project. The measures and indicators are meaningless but demonstrate how you might develop a logframe for your project. You may also find it helpful to refer to the logframes for existing projects: https://www.darwininitiative.org.uk/project-search/

Project summary	**Measurable Indicators** (with end of project targets)	**Means of Verification/Source**	**Important Assumptions**
Impact: Agriculture is managed sustainably at the national level with resultant increases in biodiversity and welfare of people			
Outcome: Roll-out of sustainable agriculture and micro-enterprises in 7th District resulting in increased access to food during the hungry months for 12,000 people, reduced land clearance for agriculture and increased biodiversity.	0.1 The people in 7th District (c.12,000 people) report a reduction in the average number of days they go hungry during the dry season (baseline of 15 days per month (2018), Project target 50% reduction in average days/month) 0.2 Micro-enterprises registered in 7th District record a higher average income per person per month (baseline national average of £4 per month, Project target £17 per month)) 0.3 Botanical and pollinator invertebrate diversity in project areas increases annually (baseline to be established in the first year, Project target 10% annually) 0.4 Agricultural productivity, tonnes per hectare, increases (Baseline of 3 tonnes per hectare in 2019, Project target 4 tonnes per hectare in 2023). 0.5 Land cleared for agriculture slows (baseline 200 hectares per year in 2019 to Project target of 20 hectares per year in 2023)	0.1 Household survey reports for 2019, 2021 and 2023 0.2a Local Government registrations of new enterprises in 2019, 2021 and 2023 0.2b Survey of enterprise income generation in 2019, 2021 and 2023 0.3 Quarterly botanical and invertebrate surveys carried out in fixed sample plots on field margins. 0.4 Survey of agricultural productivity in 2019, 2021 and 2023. 0.5 Satellite imagery of District 19 in 2019 and 2023.	Enterprises continue to be registered by the Local Government and records remain open to scrutiny Increases in agricultural productivity does not correlate with a decrease in price for agricultural commodities in 7th District Satellite imagery remains free to non-profit organisations Reduced pesticide use and improved field margin management lead to an increase in beneficial invertebrate populations
Outputs: **1.** Training and capacity building provided for small holders on microenterprise generation and	1.1 Small holders capable of sustainable agriculture practices following 3-day training course (Project milestones: 200 in year 1, 400 in year 2, 400 in year 3) 1.2 Agricultural extension workers capable of promoting sustainable agriculture following a week-long training (Project target 50 people trained)	1.1 Training course attendance certificates 1.2 Training course attendance certificates	Up to 90% of Agricultural extension workers are able to attend training courses Small-holders continue to apply 5-to-1 training distribution to other small-holders

Project summary	Measurable Indicators (with end of project targets)	Means of Verification/Source	Important Assumptions
sustainable agriculture	1.3 Small-holders applying sustainable agricultural practices and reduce pesticide use (baseline 22 litres of pesticide applied pa per smallholder in 2019, sample size 2,000 small holders, Project target: 5 litres per smallholder by 2023)	1.3 Local government records of pesticide distribution in 7th District in 2019, 2021 and 2023	
2. Communities are trained in the maintenance of field margins for biodiversity benefits	2.1 50 agricultural extension workers and 20 teachers (at least 50% women) attend 2-day training course on managing field margins and the benefits of pollination 2.2 50% of community members report increased awareness of benefits of pollinators and potential harm of insecticides by project end against year 1 baseline (to be established)	2.1 Training course attendance certificates; surveys before and after training demonstrating a change in perception on the value of non-productive land on agricultural margins 2.2 Community perceptions surveys	
3. Microenterprises established with seed-funding under a VSLA model	3.1 Business plans for microenterprises submitted to local government for approval (20 in year 1, 20 in year 2, 20 in year 3) with 50% female membership and an average membership of 4 people each 3.2 Microenterprises registered to trade in 7th District (20 in year 1, 20 in year 2, 20 in year 3).	3.1 Project reports on business plans submitted 3.2 Local government registration from Commerce Division in 2019, 2021 and 2023	Cost of registration of microenterprises remains at a rate of 15 dollars per registration Small holders see value of participating in VSLA scheme Commerce Division continues to report annually on the number of microenterprises registered (new and recurring)
4. Research outputs developed and shared with target audiences (local government, small holders and international development community)	4.1 Journal article on application of sustainable agriculture and its effect on yield by year 2 submitted to open access journal 4.2 Workshop hosted by Ministry of Agriculture on applying sustainable agricultural practice in 7th District 4.3 Policy brief downloaded from project website at least 200 times in year 2 4.4 Pop up survey of who is downloading document shows breakdown of practitioners, policy makers, researchers etc.	4.1 Journal confirmation email 4.2 Workshop proceedings 4.3 Google analytics for year 2. 4.4 Pop up survey results	Government remains committed to co-hosting research outputs of project

Project summary	**Measurable Indicators** (with end of project targets)	**Means of Verification/Source**	**Important Assumptions**
5. Local Government in 7th District adopts the training course developed by Darwin project as standard for all new agriculture extension workers	5.1 Training manual developed for training course is incorporated into Agriculture Extension worker manual by end of year 2 5.2 All new intake extension workers undertake sustainable agriculture training as standard	5.1 Agriculture Extension worker manual and letter of support from Ministry of Agriculture 5.2 Training records of new extension workers	New extension workers are employed within the 3-year project to test suitability of training materials Local Government deem training course to be of sufficient quality, and applicability, to roll it out more widely
Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1) 1.1 1.2 1.3 etc.			