



Number of people whose resilience has been improved as a result of ICF

KPI 4 Methodology Note
September 2019

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About Climate Change Compass

The UK government has committed to provide at least £5.8 billion of International Climate Finance between 2016 and 2020 to help developing countries respond to the challenges and opportunities of climate change.

Visit www.gov.uk/guidance/international-climate-finance to learn more about UK International Climate Finance, its results and read case studies. Visit www.climatechangecompass.org to learn more about how Climate Change Compass is supporting the UK Government to monitor, evaluate, and learn from the UK International Climate Finance portfolio.

Acronyms

AMAT	Adaptation Monitoring and Assessment Tool
BAU	Business as Usual
BRACED	Building Resilience and Adaptation to Climate Extremes and Disasters
CRVI	Climate Risk and Vulnerability Index (CRVI)
DDS	Dietary Diversity Score
DFID	Department for International Development
GDP	Gross Domestic Product
GEF	Global Environment Facility
GEM	Gender Empowerment Measure
GLOF	Glacier Lake Outburst Flood
HMG	Her Majesty's Government
ICF	International Climate Finance
IIED	International Institute for Environment & Development (IIED)
IP	Implementing partner
IPCC	Inter-Governmental Panel on Climate Change
ISSET	Institute for Social and Environmental Transition–International
KPI	Key Performance Indicator
MDB	Multi-lateral Development Bank
MN	Methodology Note
NGO	Non-Governmental Organization
OECD	Organization for Economic Cooperation & Development
PPCR	Pilot Programme for Climate Resilience
SDG	Sustainable Development Goal
SMART	Specific, measurable, achievable, relevant and time-bound
TA	Technical Assistance
TAMD	Tracking Adaptation and Measuring Development
TC	Transformational Change
ToC	Theory of Change
UK	United Kingdom
UN	United Nations
WASH	Water, Sanitation & Hygiene
3As	Adaptive Capacity, Anticipatory Capacity, Absorptive Capacity

Number of people whose resilience has been improved as a result of ICF

Rationale

Background to this indicator

Please note within the context of UK International Climate Finance, this Methodology Note addresses resilience with regard to climate change

KPI 4 measures the number of people with improved climate resilience due to UK International Climate Finance (ICF) support. Specifically:

- It measures number of people with a change in climate resilience at outcome level;
- It focuses on changes in climate resilience that have been positively influenced by the programme/project in question;
- It is not a measure of absolute resilience.

Climate resilience as a concept can apply to individuals, households, communities, infrastructure, systems and ecosystems. The contexts of individual lives are very much part of the climate resilience story we are trying to understand and measure. KPI specifically concerns changes in the climate resilience of individuals. However, it is recognised that the climate resilience of an individual also depends on the climate resilience of the household, community, infrastructure, systems and ecosystems in which they live.

Climate resilience is tricky to measure. It is multidimensional, contextual, with no standardised unit to count. KPI 4 represents a global innovation in climate resilience KPIs, sidestepping the lack of a universal metric to count climate resilience *per se*, and instead counting the number of people with improved climate resilience.

KPI 4 gathers key information about the results of resilience programmes, and as such is an important complement to KPI 1 (which captures adaptation outputs).

Summary table

Table 1: KPI 1 summary table

Units	Absolute number of people
Disaggregation summary (click for more info)	Number of people with improved climate resilience improved should be disaggregated by: <ul style="list-style-type: none"> • Sex • Age • Geography • Disability
Headline data to be reported	Number of people whose resilience has been improved as a result of ICF.
Latest revision	September 2019. The main revisions to this Methodology Note (MN) are:

	<ul style="list-style-type: none"> • Strengthened guidelines for what constitutes a climate resilience programme, and how to monitor improved climate resilience. • Included definitions of key terms and concepts aligned with international standards and UK commitments to climate resilience. • Simplified methodology, greatly reduced alternative options/steps; removed unnecessary discussions and background details (at times, readers are referred to other materials).
Timing issues	<p><i>When to report:</i> ICF programmes will be required to report ICF results once each year in March. Please bear in mind how much time is needed to collect data required to report ICF results and plan accordingly.</p> <p><i>Reporting lags:</i> The programme may have produced results estimates earlier in the year, for example during the programme’s Annual Review. It is acceptable to provide these results as long as they were produced in the 12 months preceding the March results commission. In some cases, data required for producing results estimates will be available after the results were achieved – if because of this, results estimates are only available more than a year away from when results are delivered, this should be noted in the results return.</p>
Links across the KPI portfolio	<p>KPI 1 counts people who have been supported to better adapt to the effects of climate change, whereas KPI 4 counts those with improved resilience outcomes. KPI 1 is thus an important complement to KPI 4.</p>

Technical Definition

The Intergovernmental Panel on Climate Change (IPCC) defines (climate) resilience as: “The capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganising in ways that maintain their essential function, identity and structure, while also maintaining the capacity for adaptation, learning and transformation”.¹

DFID defines (disaster) resilience as: “The ability of countries, communities and households to manage change by maintaining or transforming living standards in the face of shocks or stresses without compromising their long-term prospects.”² Because this KPI reports towards UK International Climate Finance, it is expected that reporting programmes are specifically addressing resilience in the context of climate change.

KPI 4 does not measure climate resilience directly. Instead, it measures the number of people with improved climate resilience as a proxy for that. Therefore, for the purposes of this KPI, this proxy is operationalised as: “improvements in individuals’ capacities to adapt, anticipate and/or absorb climate-related shocks and stresses.”

¹ IPCC 2014: Annex II: Glossary [Mach, K.J., S. Planton and C. von Stechow (eds.)]. In: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, pp. 117-130. Retrieved from https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_Glossary.pdf

² DFID (2016), as cited by ICAI in the performance review on building resilience to natural disasters (2018, p.11). <https://icai.independent.gov.uk/wp-content/uploads/Building-Resilience-to-natural-disasters-Final.pdf>

Summary of Methodology

1. Confirm that your programme qualifies as a climate resilience programme.
2. Consider the exclusion criteria which may inhibit your programme from reporting towards KPI 4.
3. Familiarise yourself with the 3As Resilience Model (or another established resilience model), which will be applied to the climate resilience programme.
4. Align the programme logframe (and/or theory of change) outputs with the 3As (or alternative) Resilience Model.
5. Identify quantitative outcome indicator(s) for at least two of the 3A Components (OR construct a climate resilience index which includes a balance for measurements referring to at least two components of resilience).
6. Assign performance targets or thresholds for each quantitative results indicator.
7. Construct a survey questionnaire (including Disaggregation Axes – see Data Disaggregation Section below), sample frame and collect survey data.
8. Calculate number of people with improved climate resilience.
9. Subtract the baseline (counterfactual/additionality).
10. Calculate % that can be attributed to ICF (if there is co-financing).
11. Disaggregate the data and report number of people with improved climate resilience to HMG.

Methodology

Introduction

Defining and measuring climate resilience is methodologically challenging and widely contested.³ Climate resilience is understood in very different ways by different agencies, and the term is often used imprecisely. It is contextual, and there is no 'one-size-fits all' indicator or even a set of indicators that work in all sectors, ecosystems and situations.

Climate resilience has no specific metric. After all, you cannot precisely count how much resilience you have compared to your neighbour, not in the same way can you count how much money you have compared to your neighbour. Therefore, approaches to measuring climate resilience are similar to those for measuring social sector concepts that are difficult to quantify (e.g. youth empowerment, transformation or democratisation).

This Methodology Note aims to clarify understanding of climate resilience, measure it within the context of the programme, and calculate the number of people with improved climate resilience outcomes. It does not and cannot solve challenges surrounding the actual measurement of climate resilience. Instead, it utilises a proxy: counting the number of people with improved climate resilience.

While climate resilience is defined, it is up to programmes to operationalise it within the context of location and programme. Only then can the number of people with improved climate resilience be measured. This should be done by following these steps:

1. Confirm that your programme qualifies as a climate resilience programme.

Definitions and approaches to what constitutes resilience (see Technical Definition above) vary considerably, though some common elements include a focus on stability of systems, and that resilience is

³ See, for example, Schipper, E. L. F., & Langston, L. (2015). *A comparative overview of resilience measurement frameworks*. Retrieved from <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9754.pdf>

multidimensional. In other words, individual interventions do not build resilience on their own, unless they are nested within a more comprehensive strategy.⁴

If the programme is spending ICF, it is expected that the programme actions specifically address resilience to climate change. In other words, during the programme design, you should have:

- Identified specific observed or predicted climate changes. These could include either long-term changes in weather patterns (e.g. decreasing rainfall or repeated seasonality changes in temperature), or increased frequency and severity trends of ‘natural’ weather hazards (e.g. wind storms);
- Evaluated the associated climate impacts, risks and exposure of the community, ecosystem and/or critical infrastructure;
- Identified non-climate drivers of climate vulnerability, such as poverty, food and water insecurity and resource inequality;
- Designed an integrated strategy, and identified interventions aimed at stabilizing or improving the wellbeing of the population with these climate change impacts in mind.

[See example.](#)

2. Consider the exclusion criteria which may inhibit your programme from reporting towards KPI 4.

It is optional but encouraged to report towards KPI 4. However, KPI 4 is not a good fit for all programmes. Please do not report towards KPI 4 if any of the following exclusion criteria apply to the programme:

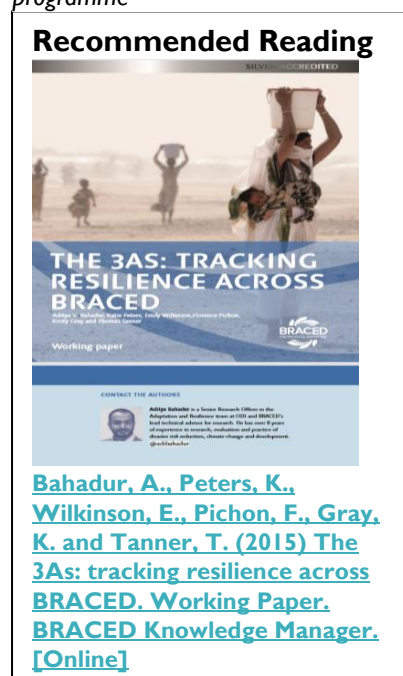
- If the programme was not affiliated with ICF during the business case approval process, and/or does not clearly address resilience to climate change (as opposed to other kinds of shocks and stresses).
- If you are not resourced or prepared to conduct household surveys of the beneficiary population as part of your routine M&E surveys (minimally baseline and endline studies). This methodology counts “number of people whose resilience is improved”. It assumes that the programme collects survey data and interacts directly with the beneficiary population, such as a traditional development programme where e.g. an NGO delivers interventions. If your programme does not do this, it may not be feasible to apply this methodology. You would also struggle to apply this methodology if the programme primarily addresses the climate resilience of infrastructure, institutions, or governments. Although there is room in this methodology for some flexibility, if you are unable to apply it please report instead on KPI 1 or another KPI that does better fit your programme.
- If the programme is so narrow in scope that it cannot be justified as having a multidimensional or comprehensive strategy. Multidimensional does not necessarily mean several sectors. For example, a Water, Sanitation & Hygiene (WASH) programme can certainly count as contributing to climate resilience. However, to qualify as climate resilience, an integrated strategy is expected (along with evidence that the WASH programme specifically addresses either observed or predicted water insecurity due in part to climate change). If the programme is simply doing quick-impact water/sanitation infrastructure projects, that is probably insufficient to qualify as climate resilience.

⁴ Bahadur and Pichon (2016)⁴’s review noted that while definitions of resilience vary globally, common emphases include: enabling systems to function and flourish in the face of shocks and stresses; limiting damage and recovering from shocks feature prominently; and managing change is a core theme. See Bahadur, A. and Pichon, F. (2016). Analysis of resilience measurement frameworks and approaches. Windward Fund, Overseas Development Institute, and Rockefeller Foundation. Retrieved from:

https://www.researchgate.net/publication/318208750_Analysis_of_Resilience_Measurement_Frameworks_and_Approaches

See example.

Figure 1: KPI 4 Recommend reading from DFID-funded BRACED programme



3. Familiarise yourself with the 3As Resilience Model (or select another established resilience model) which will be applied to the climate resilience programme.

As a multidimensional concept, climate resilience is something that different people may interpret in different ways. Because KPI 4 is a headline indicator that will be applied in many countries and contexts, it is important to achieve consistency and coherence. This step guides you through identifying and selecting an established climate resilience model to apply to the programme.

If you did not select a climate resilience model when designing the programme and its logframe/theory of change, please adopt one now. HMG recommends the 3As Model developed by Bahadur *et al.*, (2015)⁵, and piloted globally by DFID's Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) programme. This model is recommended because it is already in use across HMG, and it strikes a balance between flexibility, practicality and rigour.

This guidance is written to be consistent with the use of the 3As model. However, it is permissible for the programme to select another model. This may be preferable if:

- You adopted another climate resilience model when the programme was being designed.
- The Implementing Partner (IP) already has another model that it systematically uses. If so, it may not be helpful to require use of another, largely duplicate one.
- The programme simply prefers to use a model that is tailored to the sector or context. One example is the Institute for Social and Environmental Transition's *Climate Resilience Framework for Asian Cities*.⁶

If you do use another model, ensure that it meets the following criteria:

- It is a formal, vetted model adopted by a major international agency or applied research institution. A programme's individual theory of change is not sufficient.
- It was designed for or can be applied specifically to climate resilience. Please note that climate resilience is not fully interchangeable with general resilience, disaster resilience, food security resilience, etc. It should be expressly designed for or can be specifically applied to climate change (e.g. increased severity/frequency of extreme weather events, long-term incremental changes in weather patterns or sea level rise, unpredictable weather, trends in seasonality changes, etc.).
- Because climate resilience is a multidimensional concept, the resilience model should ideally include at least three distinct components or themes. We do not specify what they should be, because many models are specific to a particular sector or ecosystem.

⁵ Bahadur, A., Peters, K., Wilkinson, E., Pichon, F., Gray, K. and Tanner, T. (2015) The 3As: Tracking resilience across BRACED. Working Paper. BRACED Knowledge Manager. Retrieved from:

<https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9812.pdf>

⁶ The Climate Resilience Framework (CRF) is an analytical, systems-based approach to building resilience to climate change. The goal of this structured framework is to build networked resilience capable of addressing emerging, indirect, and slow-onset climate impacts and hazards. For more details, please visit <https://www.i-s-e-t.org/climate-resilience-framework>

What is the 3As Model?

While there are other good alternative models, the 3As Model introduces clarity, consistency and rigour, while retaining considerable flexibility across sectors and contexts.

The 3As⁷ Model components are:

- **Adaptive Capacity** – “the ability of social systems to adapt to multiple, long-term and future climate change risks, and also to learn and adjust after a disaster. It is the capacity to take deliberate and planned decisions to achieve a desired state even when conditions have changed or are about to change.” (Bahadur *et al*, 2015: p. 13). An example is farmers diversifying the crops they grow in order to reduce vulnerability to specific kinds of bad weather or pests. Bahadur *et al*. (2015) comment that awareness of changing conditions is key to their interpretation of adaptive capacity, so that communities can guard against weather shocks and stresses.
- **Anticipatory Capacity** – “the ability of social systems to anticipate and reduce the impact of climate variability and extremes through preparedness and planning” (Bahadur *et al*, 2015: p. 23). Bahadur *et al* (2015) explain that anticipatory capacity shows that people recognise or predict shocks, stresses, or disturbances, and take proactive steps to prevent them and/or protect themselves. An example would be to cultivate mangroves and build sea walls to protect a coastal zone from storms and sea level rise.
- **Absorptive Capacity** – “ability of social systems to absorb and cope with the impacts of climate variability and extremes... it is concerned principally with functional persistence, that is, the ability of a system to bear, and endure the impacts of climate extremes” (Bahadur *et al*, 2015: p. 30).

[See example.](#)

4. Align the programme logframe (and/or theory of change) outputs with the 3As (or alternative) Resilience Model.

Review the programme’s logframe and/or theory of change. As KPI 4 measures number of people with improved climate resilience, this step focuses on linking outputs in your logframe to the 3As Model. To do this, make a table listing each 3A Component, and tag each logframe output to the best-fitting “A”: a person’s adaptive, anticipatory, or absorptive capacities. Only choose **one** “A” per output.

After you have tagged each output, ideally you will have at least one output for at least two of the 3As (or at least two components of your alternative model). If your outputs are all clustered in only one component, consider the following:

- Reconsider whether the programme really meets definitions and standards for climate resilience, as per the definitions and criteria outlined in Step 2 above. Remember that resilience is inherently multidimensional, and so a resilience programme should rest on an integrated strategy to confront climate change.

There are a great many initiatives that make strong impact on lives and livelihoods – but are not climate resilience programmes (even if the word ‘resilience’ is used in a programme title or documents). For example, a programme which issues grants to local NGOs to conduct one-off small-scale village infrastructure upgrade projects would not really qualify as a climate resilience programme.

⁷ Please see Annex 5 for a table which further explains the differences between the 3As.

- Reconsider whether one or more outputs can justifiably be moved to another 3A component. For instance, there may be one or more outputs that straddle adaptive and absorptive capacities. Review the definitions and criteria under Step 3 again.
- Consider whether the team would prefer to use the alternative methodology (climate resilience index) in [Annex I](#).

It is likely that at least one of your outputs does not fit with any of the 3 As. It is common to have an output that is not related to climate risk management. A programme that is integrating climate change considerations into local governance may have general public administration aims, such as: “Local government financial systems are improved and streamlined.” In scenarios like this, please exclude any output that does not fit any component of your climate resilience model.

[See example.](#)

5. Identify quantitative outcome indicator(s) for at least two of the 3A Components (OR construct a climate resilience index which includes a balance for measurements referring to at least two components of resilience – see [Annex I](#)).

The instructions in Steps 5-6 work especially well if the programme:

- Is a complex, multi-faceted programme with several thematic workstreams.
- Includes ample SMART (specific, measurable, achievable, relevant and time-bound) quantitative results indicators.

If it does not, you may want to consider using a climate resilience index – either one you craft or using an existent one which fits the programme. See Annex I for an alternative to steps 5-6.

For at least two 3A components, please identify 1-5 indicators that:

- Are SMART (specific, measurable, achievable, relevant and time-bound).
- Are quantitative and are suitable for a measurement via household survey. (Avoid indicators like ‘number of policy documents which reflect programme’s advocacy priorities.’).
- Are designed with a climate change lens (sensitivity to specific climate change hazards, and the climate resilience capacities/vulnerabilities of the target populations).
- Are consistent with the scope of your ‘3A’ component.
- Are consistent with the programme’s aims and context (target population, sector, ecosystem, etc.).
- Measure the outcomes of activities (not the activities themselves).

Reminder:

- **Output-level indicators** demonstrate that you have done what you said you were going to do, such as: revise the national school science curriculum to include lessons on climate change and adaptation actions that are appropriate for children and youths.
- **Outcome-level indicators**, by contrast, demonstrate whether the activities have effectively achieved meaningful change in actual circumstances.

For example, imagine a community in the tropics that is experiencing increased malaria infections because mosquitos are more abundant than before, due to increasing rainfall. **Output-level indicators** for this might be number of mosquito nets distributed, number of village health workers trained in malaria prevention and treatment, and number of villagers educated about malaria control and prevention behaviours. **Outcome-level indicators**, by contrast, might include the malaria infection rate, mortality rate for malaria, number of local malaria cases correctly and promptly diagnosed and treated, or % of

population sleeping under treated bed nets. Outcome-level indicators show that your activities led to real change.

Consider tagging your logframe's outcome-level indicators to the 3As if they match well. You may use recognised, existent composite indicators that are already in use. Examples include the Gender Empowerment Measure (GEM)⁸, and Global Food Security Index⁹. If you use a composite indicator, first confirm that it fits your context and programme. A composite measure in global use may not be sensitive to local issues and idiosyncrasies. A general index (e.g. a climate change vulnerability index for the Caribbean) may not be sensitive to the specific set of issues that the programme is targeting on Belize's coasts.

If you wish to construct your own unique index, please follow the instructions in [Annex 1](#) (Alternative Steps 5-6). Also see worked example 2 for details of constructing a climate resilience index which includes a balance for measurements of each 3A Component ([Annex 2](#)).

[See example.](#)

6. Assign performance targets or thresholds for each quantitative results indicator.

Ideally there would be common standards for what constitutes an "improvement." However, it is not realistic to set quantitative targets that apply to varying global contexts, as climate change programming spans sectors, scales and ecosystems. Even within a single sector or intervention – for example, prevention and treatment of increasing malaria infections – what constitutes a reasonable target may vary dramatically if one is talking about a city in a middle-income country compared to a refugee camp in a remote conflict zone.

While imperfect and imprecise, it is at the discretion of each programme to set its own thresholds and targets. Use professional judgement to select thresholds or targets that are meaningful and significant for what constitutes an improvement, but within reach given the programme's resources, timeframe and context.

Set targets/thresholds for each individual indicator separately. Targets may be absolute, or a % increase/decrease. If you are using outcome indicators from the logframe, use those targets.

[See example.](#)

7. Construct a survey questionnaire (including Disaggregation Axes – see [Data Disaggregation Section](#) below), sample frame, and collect survey data.

It is time to construct a survey questionnaire, sampling frame, and survey your population. There should be a baseline survey, and then at least one follow-up to measure improvement in your indicators. It is not necessary to conduct a survey separately from the programme M&E activities. Simply include these questions within the programme's scheduled surveys.

The July 2018 DFID Inclusive Data Charter Action Plan sets out HMG's aims and priorities to disaggregate data. Please take note of the section below for precise instructions.

[See example.](#)

⁸ See page 5 in OECD. (2009). Gender Indicators: What, Why and How?. Available at: <http://www.oecd.org/development/gender-development/43041409.pdf>

⁹ Global Food Security Index's website – <https://foodsecurityindex.eiu.com/>

8. Calculate number of people with improved climate resilience.

To determine how many people are “climate resilient” within the scope of the programme, run a query of your survey database to determine how many people meet the target/threshold for improvement for at least one indicator tagged to at least two of the 3As (or minimum of two components in your alternative model), or else the number who have met the target/threshold in your climate resilience index (see Annex 1). As outlined in Step 6 above, the targets/thresholds for your indicators or index may be absolute numbers or a percentage change from baseline.

If you have household-level rather than individual-level data, then the number of households needs to be converted into the number of people. If there is reliable data on average household size for the target location or sub-population, use that. Otherwise, multiply by the national average household size. Although working out the total number of beneficiaries by using an average household size is satisfactory, it is worth noting that this approach limits the ability to disaggregate data representatively.

Whilst HMG presents annual aggregated figures on the KPIs globally, most programmes do not conduct household surveys annually. Many conduct a baseline survey and then another at the end of a project or programme. Some also collect mid-term or annual data. This Methodology Note assumes at least two surveys (baseline and endline). However, if you conduct household surveys more frequently, please count improvements since the most recent survey rather than the baseline. This way, results will not be double-counted from year to year. If you have incremental (e.g. annual) results to report, please do so. You can report on total improvement over the course of your multi-year programme elsewhere.

Remember that HMG presents annual aggregated figures on some KPIs globally. If you did not conduct a survey during the reporting year, then do not report towards KPI 4. Do not make estimates or re-report an earlier figure. Only report towards KPI 4 if you have conducted a follow-up survey during the reporting year.

[See example.](#)

9. Subtract the baseline (counterfactual/additionality).

To compare results with the counterfactual and account for additionality, the projected level of climate resilient people without the ICF intervention (i.e. the baseline) should be subtracted from the total. If you are not able to estimate the counterfactual, use an ‘adjustment factor’, which should be high (e.g. 95%) if you are confident your results are additional, and your data quality is good. A lower ‘adjustment factor’ (e.g. 50%) should be used if you have a lot of uncertainty and there are other partners in the area undertaking similar activities.

[See example.](#)

10. Calculate % that can be attributed to ICF (if there is co-financing).

Attribution

If HMG is the sole investor in a project or programme, it should assume all responsibility for any results (where the results are assessed to be additional and where HMG has a causal role).

In many instances HMG may be acting alongside one or more other development partners or multilateral bodies that also provide funding or support for projects or programmes – and where each partner has played a role towards the results. In these cases, HMG should only claim responsibility for the portion of results that can be attributed to its support.

If HMG is only funding part of a project/programme, reporters should calculate results as a pro-rata attributable share based on the value of all public co-financing towards the project.

In instances where ICF programmes leverage (public or private) finance that helps to deliver programme results, please contact your central ICF teams on how to address attribution of results delivered. See methodology notes for KPI 11 and 12 for definitions (of public, private, and leveraged finance and co-finance).

If HMG is contributing to a fund

'First best' approach: use project/programme level attribution (as above)

In this approach, reporters calculate results attributable to the UK for each project/programme implemented by the fund using the project/programme level attribution approach, and then sum results across all projects/programmes in the fund to reach total UK attributable results.

This approach allows for recognition of other co-finance contributions at the project/programme level. However, this approach may be complicated or not always possible in practice as it relies on (i) full information about project/programme level inputs, (ii) additional work to calculate results at the project/programme level.

'Second best' approach: use fund-level attribution

Reporters apply fund-level attribution (i.e. at point of UK investment) for reporting results. I.e. results should be shared across all donors that contribute to a fund. All results are attributable to the relevant fund (e.g. CIFs, CP3, GAP) regardless of whether these funds blend with other sources of finance in implementing projects at levels below the point of UK investment. This approach assumes that any further finance towards the project is counted as leveraged. Where this is known to not be the case, a more conservative approach to attribution may be appropriate, please contact your central ICF teams on further guidance.

While this is the less preferred approach as it does not recognise additional contributions at the project/programme level, it may be more practical to implement where full data on project/programme level inputs is not available.

Note: The distinction between attribution at the project/programme level and at the fund level (or at point of UK investment) is only an issue where the UK is investing in funds where there are multiple investment levels.

[See example.](#)

11. Disaggregate the data and report number of people with improved climate resilience to HMG.

From July 2018, HMG requires that all data should be disaggregated by four axes: sex, age, geography and disability. [See Data Disaggregation Section](#) below for detailed instructions. Then report total number, together with disaggregated numbers.

[See example.](#)

Worked Example

A tropical, seaside country includes an especially large delta for a major river. This river area is densely populated, and its rich delta farmland is intensely cultivated. The entire area is only a few centimetres above sea level, putting it at extreme risk to sea-level rise and increasingly severe storm surge.

It is already experiencing serious problems with saltwater intrusion. There are gradual but definite increases in groundwater salinity and coastal erosion. Moreover, during the dry season when the river is low and the tide is high, saltwater surges up the river, especially during droughts or stormy seas.

Saltwater is now pulsing farther up the river than ever before, contaminating the many irrigation channels that connect to the river. Tropical storms are also more frequent and more severe, and a typhoon caused extensive damage several years before. Although the disaster relief period has concluded, the typhoon highlighted several weaknesses of the delta dependent inhabitants and their irrigation infrastructure.

HMG is funding a climate resilience programme (fictitious example) that is addressing increasing salinity and saltwater intrusion; rehabilitating and upgrading coastal infrastructure so that it is more storm-proof; and restoring/improving typhoon-damaged mangrove forests which buffer and protect coastal areas and provide a breeding habitat for demersal fish stock and marine life.

- 1. Confirm that your programme qualifies as a climate resilience programme.** This programme fits the definition for climate resilience because it:
 - Addresses specific hazards linked to climate change, namely saltwater intrusion/sea level rise and increasing frequency/severity of typhoons.
 - Evaluates the associated climate impacts, risks and exposure of the delta-dependent farmland community.
 - Is sensitive to poverty, inequality and non-climate drivers of vulnerability – particularly around food security.
 - Is a multidimensional programme that contributes to the local inhabitants' ability to stabilise or improve their wellbeing with these climate impacts in mind.
- 2. Consider the exclusion criteria which may inhibit your programme from reporting towards KPI 4.** The exclusion criteria do not apply to this programme.
- 3. Familiarise yourself with the 3As Resilience Model (or select another established resilience model) which will be applied to your climate resilience programme.** This programme will report towards KPI 4 using the 3As Model.
- 4. Align the programme logframe (and/or theory of change) outputs with the 3As (or alternative) Resilience Model.** The programme team tags its activities to the relevant 3 As. For example:

Adaptive activities:

- In certain areas that are especially low-lying and near the coast, rice cultivation is becoming untenable due to increasingly salinity. In selected suitable locations, this programme is delivering a package of incentives and technical assistance to promote the conversion of rice paddy to prawn aquaculture, which requires brackish water and is usually more profitable than rice farming.

Anticipatory activities:

- Installation of a new system to manage saltwater surges upriver so that they do not contaminate farms. This includes gauges in the river to detect saltwater surges, installation of water gates in irrigation channels which can be shut in the event of a riverine saltwater surge, and training local government and communities to effectively maintain and use the new system.

Absorptive activities:

- Rehabilitation and upgrade of coastal sea walls support mangrove restoration¹⁰ through participatory, community-based approaches.

5. Identify quantitative outcome indicator(s) for at least two of the 3A Components.

For each of the 3 As, the team identifies quantitative outcome indicators which can be measured via household surveys. These indicators capture the effectiveness of the programme's activities. These indicators are:

Adaptive capacity:

- Number of hectares in high-risk zone converted from paddy to prawn aquaculture.
- % increase in income of households who convert to prawn aquaculture.

Anticipatory capacity:

- % of agricultural households in target area who experienced crop loss/damage within previous year due to saltwater contamination.
- Value of the household's crop loss/damage due to saltwater contamination within previous year.

Absorptive capacity:

- % of coastal households living within 300 meters of healthy mangrove forest.
- Number of coastal households whose land/property has been damaged (at least in part) by coastal erosion.

6. Assign performance targets or thresholds for each quantitative results indicator. The team selects performance targets for % improvement for each indicator that are modestly ambitious: they are well within the reach of the programme if it is implemented smoothly and the benefits meet expectations.

7. Construct a survey questionnaire (including Disaggregation Axes), sample frame and collect survey data. Prior to start-up of programme activities, the programme's survey specialist designs a sampling frame and survey questionnaire which includes questions to measure the 3A results indicators, the indicators in the programme's logframe and the Disaggregation Axes required by HMG. Baseline data is collected.

8. Calculate number of people with improved climate resilience. When the programme closes four years later, and endline survey is administered. To calculate how many people have improved resilience, the survey specialist calculates how many individuals achieved the target % improvement for at least one results indicator for each of the 3As. Data is disaggregated by sex, disability, age and geography.

¹⁰ Mangroves reduce the height and energy of swell waves and wind passing through them. They ultimately reduce erosion of sediments and limit damages to structures (e.g. sea walls). Thus mangroves enhance the ability to absorb and cope with the impacts of climate variability and extremes.

9. **Subtract the baseline (counterfactual/additionality).** The programme subtracts the programme level of climate resilient people without the ICF intervention (i.e. the baseline) from the total to compare results with the counterfactual and account for additionality. The programme could estimate the counterfactual. There was no need to use an 'adjustment factor'.
10. **Calculate % that can be attributed to ICF (if there is co-financing).** This programme has 15% co-funding from the national government. Therefore, only 85% of the improvement can be attributed to ICF. Thus, the (disaggregated) number of people with improved climate resilience is multiplied by 0.85. This is the figure that is reported to HMG as the number of people with improved climate resilience from ICF support
11. **Disaggregate the data and report number of people with improved climate resilience to HMG.** Data is disaggregated by sex, disability, age and geography.

Data Management

Data Sources

Programme/project-level data can only be obtained from the M&E for activities supported by the ICF and, when collected, should be disaggregated by the four specified axes.

Most Recent Baseline

The baseline should reflect the project status prior to ICF funding being provided.

Data Issues/Risks and Challenges

Climate resilience measurement inherently presents a bundle of methodological challenges. This KPI does not solve them, but rather presents steps to define and measure improved climate resilience within the context of diverse climate change programmes. As such, the data is more heterogenous than is ideal for a KPI that is meant to be aggregated.

Further data risks and issues include: poor fidelity or understanding of the KPI instructions; 'business-as-usual' programmes inappropriately reporting towards climate resilience; and analysts making conclusions which overstretch the limitations of the data (for example, by using KPI data to compare one programme to another).

Quality Assurance

All figures should be quality assured before they are submitted during the annual ICF results return, ideally at each stage data is received or manipulated. For example, if data is provided by partners, this data should be interrogated by the ICF programme team for accuracy, or at the very least data should be sense checked for plausibility. When converting any provided data into KPI results data, quality assurance should be undertaken by someone suitable and not directly involved in the reporting programme. Suitable persons vary by department; this could be an analyst, a results/stats/climate and environment adviser/economist.

Central ICF analysts will quality assure results that are submitted, and this may lead to follow up requests during this stage.

To avoid inherent reporting biases, it is strongly recommended that, where possible, data collection is undertaken by a third party that is not directly involved with implementing the project. Where not possible, consider using independent evaluations or alternative means to periodically check the validity of results claims.

Any concerns about data quality or other concerns should be raised with your departmental ICF analysts and recorded in documentation related to your results return.

Data Disaggregation

Guidelines for Disaggregating Population Data in ICF's Headcount Key Performance Indicators

HMG is committed to the principle that “every person counts and should be counted.” The UK government has endorsed the *United Nations Global Partnership for Development Data*, and is taking concrete steps to operationalise this commitment. At the time of writing (2018), HMG has prioritised four Disaggregation Axes that are now required for all programmes. While HMG encourages all programmes to disaggregate data by these four axes to the extent that it is feasible, this requirement is not retroactive to programmes with logframes finalised prior to publication of the July 2018 DFID Inclusive Data Charter Action Plan. Whenever possible, reported numbers should be based on actual programme data, not simply models or estimates. For example, programmes should not assume that their population is 50% female. HMG expects programmes to collect and analyse robust data on target populations.

Disaggregation guidelines apply only to KPIs that count people. Still, in some cases, programmes do not directly interact with a population. Examples include a programme that focuses on institutional strengthening, or that upgrades the electricity grid of a city. HMG recognises that it may not be feasible for such programmes to collect or have access to nuanced population data. Whenever possible, such programmes should assess the impact of their interventions through surveys which disaggregate population data in this way. When this is not feasible, these programmes are permitted to utilise available population data or opt out altogether.

The Disaggregation Axes are as follows:

1. Sex

Programmes should disaggregate by males/females. Disaggregation should be based on actual data, not models or assumptions that the population is split 50/50.

Report:

- number of males
- number of females
- Disaggregated data by sex is not feasible to collect

2. Disability

Programmes should incorporate the six Washington Group “short set” of disability questions to their population surveys¹¹. These questions and further guidance for them can be found at: <http://www.washingtongroup-disability.com/washington-group-question-sets/short-set-of-disability-questions/> Whilst all HMG programmes are expected to apply and track all six survey questions in their beneficiary surveys, at the KPI level HMG expects reporting in two categories: disabled and not disabled. Anyone who answers “a lot of difficulty” or “cannot do it all” to one or more of the six questions should be counted as disabled.

¹¹ The Washington Group was established under the United Nations Statistical Commission in 2001 to address the need for cross-nationally comparable population-based measures on disability. It is composed of representatives of National Statistical Offices around the world.

Report:

- Number of disabled
- Number not disabled
- Disaggregated data by disability is not feasible to collect
- Programme is not required to report disaggregated data because logframe was finalised prior to July 2018

3. Geography

At the KPI level, all programmes should report on whether beneficiaries are rural or urban. (Geo-coding is also required, but this is not reported on at the KPI level.)

While the concepts of “urban” and “rural” are easily understood, in an era of migration and burgeoning peri-urban populations, the distinctions may be less clear. Moreover, there are substantial differences between how various countries approach this question, and there are no internationally-agreed definitions. For statistical purposes, HMG (and the UN) allows each country to define urban and rural individually. Follow definitions set for your country by its National Statistics Office or equivalent agency.

Report:

- Number of urban beneficiaries
- Number of rural beneficiaries
- Disaggregated data by geography is not feasible to collect
- Programme is not required to report disaggregated data because logframe finalised prior to July 2018

4. Age

Whilst all programmes are expected to collect and analyse detailed data on the age of beneficiaries (see *DFID Guidance on Disaggregating Programme Data by Age*), at the KPI level ICF-affiliated programmes should report numbers consolidated into four categories: children, youth, adults and elders.

Report:

- Number of children (age 0-14)
- Number of youths (age 15-24)
- Number of adults (age 25-64)
- Number of elders (age 65+)
- Disaggregated data by age is not feasible to collect
- Programme is not required to report disaggregated data because logframe finalised prior to July 2018

5. Other

As of August 2018, HMG is prioritising these four data Disaggregation Axes. However, it is committed to ultimately disaggregating data to the full suite of eight axes (i.e. income, age, sex, race, ethnicity, migratory status, disability and geography) advocated by the UN. As such, disaggregation guidance may be expanded in the coming years, probably beginning with income.

Annex I: Alternative Methodology for Steps 5-6 - Climate Resilience Index

If Steps 5-6 of the Methodology above are not suitable or preferable for the programme, you may instead choose to use a climate resilience index. This may be the case if:

- You wish to measure the programme's results according to an existent, statistically validated climate resilience index, for example one which is tailored to your geography and/or sector.
- Your alternative model includes or is amenable to a specific, statistically validated climate resilience index.
- Your team prefers to track via an overall composite index rather than individual results indicators.

Alternative Step 5: Construct a climate resilience index which includes a balance for measurements to at least two dimensions of resilience

An index is a composite measure derived from aggregating two or more separate variables. Rather than tracking individual results indicators, they are ultimately combined into a single unit. If the programme prefers the climate resilience index approach, there are two possibilities:

- Use an existent, statistically validated index, which fits the context and scope of the programme. One example is the Climate Risk and Vulnerability Index (CRVI) that the International Institute for Environment & Development (IIED) prepared for Cambodia's National Climate Change Committee. (This index should not be used beyond Cambodia.)
- If you do use an existent index, please ensure that:
 - Your index is specifically intended for climate resilience contexts. In other words, even though the programme focuses on WASH, do not use a general sectoral WASH index. Instead, select one which is sensitive to climate resilience itself. You may, however, use a general WASH composite measure as one indicator within your climate resilience index.
 - Your index fits the scope of the programme. A general climate resilience index for Cambodia may not effectively capture the contributions of a programme which more narrowly targets only its indigenous people
- Craft your own index that is tailored to the local context and the scope of the programme. If you select this option, please ensure that:
 - The process is guided by someone with a high level of training and experience in statistics. We recommend consulting the Organization for Economic Cooperation & Development's (OECD's) *Handbook on Constructing Composite Indicators*¹² or other well-recognised statistical manual.
 - Your index is designed to measure individual-level resilience to climate shocks and stresses that are already, or predicted, to intensify from climate change. Climate resilience is considered to be a composite attribute possessed by each individual.
 - Your index should be based on the 3As Model or other recognised model or theoretical framework for climate resilience, which includes at least three distinct pillars or components.
 - Your index should have an appropriate balance of indicators across at least two of the 3As (or alternative model).
 - Your index fits the scope of the programme and its interventions, so that changes in the index can be attributed at least in part to ICF support.

¹² OECD. (2008). *Handbook on Constructing Composite Indicators: Methodology and Users Guide*. Available at: <https://www.oecd.org/sdd/42495745.pdf>

If you are crafting your own index, select a series of individual indicators/variables (possibly including composite variables) which meet these criteria.

Alternative Step 6: Assign targets or thresholds for the index.

KPI 4 measures number of people with improved climate resilience from ICF support. To this end, it is necessary to clearly differentiate between those who are classified as climate resilient – and those who are not. This is a simple yes/no binary.

If you are using an existent index, it is possible that it has targets/thresholds that have been set by technical experts. In this case, you may use those targets/thresholds to distinguish between those who are/are not classified as climate resilient. Otherwise, you should set your own. The specificities will depend greatly on context, sector, scope of the programme, etc. This is why this process should be led by someone with a high level of training and experience in statistics. In general, however, the reporting team should aim for a threshold that is moderately ambitious, but within the reach of the programme if it is implemented effectively and the underlying strategy is sound.

If you are crafting your own index, the same guidelines apply. The specificities are dependent on the context and scope of the programme. The exercise should be led by a statistical expert, and thresholds should be moderately ambitious, but within the reach of the programme (assuming effective management and sound strategy). The index should have appropriate weightings across at least two of the 3As, or a minimum of two components of an alternative climate resilience model. If the programme team is experiencing challenges, please request technical assistance from HMG.

Annex 2: Alternative worked example for KPI 4 (using alternative steps 5 and 6 presented in Annex 1)

This fictitious programme aims to improve climate-resilient livelihoods for local farming communities experiencing repeated dramatic crop losses, and unseasonal water scarcity and flash floods from extreme and unpredictable weather conditions in a Central Asian country. The programme is designed to scale-up and integrate proven climate resilient approaches to agriculture and diversify local livelihoods through public-private partnership for 500,000 poor people in a rural area. The programme's outcome is: "Small-scale farmers in target area achieve improved climate resilience through enhancements in their ability to absorb, anticipate and adapt to climate related shocks and stresses."

- 1. Confirm that your programme qualifies as a climate resilience programme.** This programme fits the definition for climate resilience. Ways it does this include:
 - Addresses specific hazards that are linked to climate change: increasingly severe and unpredictable weather is already being experienced, and both drought and flood risks are expected to increase. This is because as average temperatures rise, winter snows – and springtime snowmelts – are expected to increase, whereas summer will become characterised by more heat waves and scantier rainfall.
 - It is sensitive to poverty, inequality and non-climate drivers of vulnerability – particularly around food and water security.
 - It is a multidimensional programme, which strategically contributes to local people's ability to stabilise or improve their wellbeing with these climate impacts in mind.
- 2. Consider the exclusion criteria which may inhibit your programme from reporting towards KPI 4.** The exclusion criteria do not apply to this programme.
- 3. Familiarise yourself with the 3As Resilience Model (or select another established resilience model) which will be applied to your climate resilience programme.** This programme will report towards KPI 4 using the 3As Model.
- 4. Align the programme's logframe (and/or theory of change) outputs with the 3As (or alternative) Resilience Model.** The programme team tags its activities to the relevant 3 As. For example:

Adaptive activities: Mainstreaming climate-smart agriculture approaches within overall agriculture extension services; hardier farm animal breeds and species; more adaptive crops sown, resistant to prolonged heat waves and to soil erosion from flash floods; climate-oriented water resource management; adaptive silviculture and social forestation; and enabling non-farm livelihood and income opportunities.

Anticipatory activities: Improving quality and accessibility of hydrological climate modelling and early warning in the local language (including statistical downscaled climate-modelling for riverine floods, and climate-oriented water audit).

Absorptive activities: Strengthening flood protection infrastructure with adaptive re-design protocols, climate resilient water management and diversified irrigation methods based on hydrological climate modelling of current and future water recharge.

5. Construct a climate resilience index which includes a balance for measurements referring to at least two components of resilience

In the context of the programme, climate resilience to intensifying climate shocks and stresses is a composite attribute possessed by each individual targeted by the programme. To report towards KPI 4, improvement in climate resilience is measured through a set of interlinked capacities to: absorb, anticipate and adapt to climatic shocks and stresses (the 3 As – Adaptive Capacity, Anticipatory Capacity, and Absorptive Capacity).

The implementing partner constructed a quantitative index of climate resilience to be assessed at the individual level through: measures of poverty levels, access to hydrological climate modelling and climate-oriented early warning systems, access to sufficient water, general health and access to climate-smart agricultural services and adaptive agricultural technologies. The climate resilience index¹³ is made of 2 indicators of adaptive capacity, 2 indicators of absorptive capacity and 2 indicators of anticipatory capacity, as follows:

- **Individuals above the poverty level (based on a per capita income of US \$1.25 per day)** – Indicator of Absorptive Capacity, reflecting both food production and livelihood security through diversified income streams.
- **Dietary diversity** – Indicator of Absorptive Capacity, measured as a Dietary Diversity Score (DDS)¹⁴, as a proxy indicator for availability of and access to sufficient food to ensure a balanced diet, from any source. Dietary diversity can ultimately give an indication of general health conditions of an individual.
- **Utilisation of climate smart agricultural services and technologies** – An indicator of Adaptive Capacity, assessing both connection to markets and active use of promoted adaptation techniques, climate-adaptive seeds and/or more climate-hardy animal breeds and improved animal husbandry.
- **Use of an improved climate-resilient water source less than 30 minutes from home or fields** – An indicator of Adaptive Capacity, demonstrating likelihood that an individual has access to water protected from prolonged drought; and can engage in extended irrigation-related activities for farming and income generation, reliant on a Climate Resilient Integrated Water Resource Management Strategy.
- **Climate Impact Modelled Early Warning System** – Indicator of Anticipatory Capacity reflecting the number of people able to receive and respond beneficially to the improved climate impact modelled early warning system.
- **Flood Protection Infrastructure** – Indicator of Anticipatory Capacity reflecting the number of people living within 100 meters of climate adaptive re-designed infrastructure that has been “flood-proofed” under the auspices of the programme.

¹³ All consortium partners collaborated to determine the composition of the indicators and agreed that the index reflects a sufficiently broad array of characteristics of climate resilience, and that a higher score accurately reflects a higher level of climate resilience in the target area.

¹⁴ Dietary diversity is a qualitative measure of food consumption that reflects access to a variety of foods and is a proxy for nutrient adequacy of the diet of individuals (Kennedy, G., Ballard, T. and Dop, M. (2010). Guidelines for Measuring Household and Individual Dietary Diversity. Available at: <http://www.fao.org/3/a-i1983e.pdf>).

- 6. Assign performance targets or thresholds for each quantitative indicator, and the climate resilience index as a whole.** The team selects performance targets for each of these indicators.

Thresholds are set for each of the indicators so that they can be distilled into a binary of yes/no. “No” = 0 points and “Yes” = 1 point. Individuals with a score of 2 or more are classified as climate resilient within the context of this programme’s context and scope.

- 7. Construct a survey questionnaire (including Disaggregation Axes), sample frame and collect survey data.** Prior to start-up of programme activities, the programme’s survey specialist designs a sampling frame and survey questionnaire, which includes questions to progress towards the climate resilience index, the indicators in the programme’s logframe and the Disaggregation Axes required by HMG. Baseline data is collected.
- 8. Calculate number of people with improved climate resilience.** The survey specialist runs a query to calculate how many people have a total score of 2 or more.
- 9. Subtract the baseline (counterfactual/additionality).** The programme subtracts the programme level of climate resilient people without the ICF intervention (i.e. the number of people at baseline who had a score of 2 or more) from the total in order to compare results with the counterfactual and account for additionality. The programme could estimate the counterfactual. There was no need to use an ‘adjustment factor’.
- 10. Calculate % that can be attributed to ICF (if there is co-financing).** This programme has 15% co-funding from the national government. Therefore, only 85% of the improvement can be attributed to ICF. Thus, the (disaggregated) number of people with improved climate resilience is multiplied by .85. This is the figure that is reported to HMG as the number of people with improved climate resilience from ICF support.
- 11. Disaggregate the data and report number of people with improved climate resilience to HMG.** Data is disaggregated by sex, disability, age and geography.

Annex 3: Comparability and synergies with other external indicators

KPI 4 aligns directly to SDG 13 (“take urgent action to combat climate change and its impacts”), and particularly target 13.1 (“strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries”).

Other Existing KPI Comparators

All climate fund portfolios are struggling with how to measure adaptation/resilience globally, particularly at the outcome or impact level. Schipper and Langston (2015)¹⁵ demonstrate that “the ability and methods to measure resilience are contested” (p. 9). As has been written at length elsewhere (e.g. Bours, McGinn, & Pringle 2014)¹⁶, early portfolios were unable to make sense of the sheer diversity of adaptation programmes and found themselves unable to formulate robust conclusions across sectors and scales.

There are three overall approaches to adaptation headline indicators, and they can be combined, as follows:

- An array of sector-specific indicators. The Global Environment Facility’s Adaptation and Monitoring Tool¹⁷ (AMAT) is an example of this – it includes a large number of indicators within a drop-down menu. Programmes can select which ones are relevant to it. (“Sectors” here may include themes, strategies, or approaches, such as ‘mainstreaming climate change into public policy’);
- Constructing indexes to capture various components of adaptation. Tracking Adaptation and Measuring Development (TAMD)¹⁸ is an excellent example;
- Settling for input or output indicators for adaptation, rather than a clearly measurable outcome. For example, five core indicators of Pilot Program for Climate Resilience (PPCR) include “extent to which vulnerable households, communities’ businesses and public sector services use improved PPCR supported tools, instruments, strategies, activities to respond to Climate Variability and Climate Change” (which is essentially an output indicator). Meanwhile, the Adaptation Fund includes at the impact level: “increased resiliency at the community, national and regional levels to climate variability and change,” without a standard indicator or measure.

A handful of institutions are counting number of people with improved climate resilience. However, it is notable that they are concentrated among British institutions (IIED/TAMD, DFID, ICF, etc.) and they were designed by the same handful of people. PPCR is also reporting towards “Number of people supported by PPCR to cope with the effects of climate (core indicator).”

The more typical approach is to report towards thematic or sectoral indicators – or sidestep resilience measurement altogether. KPI 4 is clearly embracing one of the more innovative approaches. A recent World Bank review of resilience measurement approaches by multilateral and major bilateral agencies confirms that ICF’s KPI 4 is relatively ambitious: Vandergriff (2016) writes that: “among the bilateral development agencies, DFID has comprehensive measurement frameworks and indicators to measure

¹⁵ Lisa, E., Schipper, F., and Langston, L. (2015). A comparative overview of resilience measurement frameworks. London: Overseas Development Institute.

¹⁶ Bours, D., McGinn, C., and Pringle, P. (2014). Evaluation review 2: International and donor agency portfolio evaluations: Trends in monitoring and evaluation of climate change adaptation programmes. Phnom Penh, SEA Change Community of Practice and Oxford, United Kingdom Climate Impacts Programme.

¹⁷ GEF. (2014). Climate Change Adaptation Tracking Tool. Available at: <https://www.thegef.org/documents/gef-climate-change-adaptation-tracking-tool>

¹⁸ IIED. (2014). The Tracking Adaptation and Measuring Development (TAMD) framework. Available at <https://www.iied.org/tracking-adaptation-measuring-development-tamd>

resilience results of projects under the BRACED program and ICF, and is moving towards improving these” (p. 17). This desk review on climate resilience measurement confirms that KPI 4 is breaking new ground and is thus potentially of great interest to global specialists and other donor agencies.

Annex 4: Definitions of key methodological terms used across ICF KPIs

As different HMG departments may use the same terminology to refer to different concepts, this section sets out definitions for key terms used across MNs for ICF KPIs. The terms used in these notes refer to the concepts as defined below, rather than to alternative, department-specific usages of these terms.

Additionality: Impacts or results are additional if they are beyond the results that would have occurred in the absence of the ICF-supported intervention. That is, results are additional if they go beyond what would have been expected under a BAU counterfactual.

*Anticipatory capacity*¹⁹: The ability of social systems to anticipate and reduce the impact of climate variability and extremes through preparedness and planning.

*Adaptive capacity*²⁰: The ability of social systems to adapt to multiple, long-term and future climate change risks, and also to learn and adjust after a disaster.

*Absorptive capacity*²¹: The ability of social systems to absorb and cope with the impacts of climate variability and extremes, i.e. to use available skills and resources, to face and manage adverse conditions, emergencies or disasters.

Attribution: Attribution refers to allocating responsibility for impacts or results among all actors that have played a causal role in programmes that deliver additional results. Results are commonly attributed to causal actors based on their financial contributions to programmes (though there may be cases where greater nuance is needed, as with KPI 11 and KPI 12).

Causality: Causality refers to the assessment that one or more actors bear responsibility for additional results or impacts, because of funding provided through the ICF or actions taken under an ICF programme. Multiple development partners may be assessed to have played a causal role in delivering results.

Climate change^{22 23}: A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere, and which is in addition to natural *climate variability* observed over comparable time periods.

Counterfactual: The situation one might expect to have prevailed at the point in time in which a programme is providing results, under different conditions. Commonly, this is used to refer to a 'business as usual' (BAU) counterfactual case that would have been observed if the ICF-supported intervention had not taken place.

Resilience: The Intergovernmental Panel on Climate Change (IPCC) defines resilience as: "The capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity and structure, while

¹⁹ Bahadur, A., Peters, K., Wilkinson, E., Pichon, F., Gray, K. and Tanner, T. (2015) The 3As: tracking resilience across BRACED. Working Paper. BRACED Knowledge Manager. Retrieved from: <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9812.pdf>

²⁰ Ibid.

²¹ Ibid.

²² United Nations. (1992). United Nations Framework Convention on Climate Change, pp. 7.

²³ UNFCCC Glossary, Article I, Page 120 (https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_Glossary.pdf)

also maintaining the capacity for adaptation, learning and transformation²⁴. DFID, meanwhile, has defined resilience as “The ability of countries, communities and households to manage change by maintaining or transforming living standards in the face of shocks or stresses without compromising their long-term prospects.”²⁵

²⁴ IPCC 2014: Annex II: Glossary [Mach, K.J., S. Planton and C. von Stechow (eds.)]. In: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, pp. 117-130. Retrieved from https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_Glossary.pdf

²⁵ DFID (2016), as cited by ICAI in the performance review on building resilience to natural disasters (2018, p.11). <https://icai.independent.gov.uk/wp-content/uploads/Building-Resilience-to-natural-disasters-Final.pdf>

Annex 5: Summary Table – The 3As Defined.²⁶

	Adaptive capacity	Anticipatory capacity	Absorptive capacity
Definition	Ability to react to evolving/dynamic risk of disturbance to reduce the likelihood of harmful outcomes	Ability to undertake proactive actions to avoid upheaval from shocks and stresses	Ability of systems to buffer the impacts of shocks in the short term to avoid collapse
Hazards	Multiple and evolving shocks and stresses	Specific shocks and stresses	Multiple shocks
When is this activated/ exercised?	During and after disturbances	Before disturbances	After disturbances
Time horizon	Medium to long term	Short to medium term	Short term
Example actions to build this capacity	<ul style="list-style-type: none"> Changes in crops grown to better engage with changing climatic conditions Mainstreaming climate change into sectoral development policies 	<ul style="list-style-type: none"> Heeding early warnings Building houses on stilts Issuance of codes for buildings and infrastructure and necessary compliance 	<ul style="list-style-type: none"> Community access to savings and streams of finance Disaster preparedness activities Building in redundancy in the provision of basic services
Illustrative indicators	<ul style="list-style-type: none"> % of agricultural land devoted to the production of drought resistant crops % of the agricultural production irrigated. Share of the added value of national production directly exposed to a specific disaster (such as drought) 	<ul style="list-style-type: none"> % of houses on stilts in a community % of buildings and/or other assets complying to building regulation codes The number of people targeted by the emergency radio announcements 	<ul style="list-style-type: none"> % of households covered by social security/ safety net programs. Emergency accommodations (i.e. cyclone shelters) in % of the population identified as exposed to a specific risk, % of population with access to banking services Level of national emergency funds in share of the GDP or per inhabitant

²⁶ BRACED Programme. (2015). Monitoring & evaluation (M&E) guidance notes. Version 1.1. Available at: <http://www.braced.org/contentAsset/raw-data/761757df-7b3f-4cc0-9598-a684c40df788/attachmentFile>

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