March 2013

TAMD Climate Risk

Management

Indicators

Methodological note



TAMD Climate Change Indicator- Methodological Note

Title	INDICATOR 1. CLIMATE CHANGE INTEGRATION INTO PLANNING			
	Representation of strategies that address climate change in relevant planning documents & processes			
Type or Indicator	Scorecard; outcome			
Technical definition/ Methodol- ogical summary	This indicator is designed to capture the extent to which considerations of climate change (risks, opportunities) are integrated into planning processes in national, sectoral or other institutional contexts (e.g. donor institutions or MDBs). It is relevant to interventions intended to build capacity to address climate change through the development of climate plans, strategies and mainstreaming mechanisms/ systems.			
	The indicator can be used to assess the performance of an individual capacity building programme, through evaluation of the target system (e.g. ministry, sector, institution) at the beginning, during, and at the end of the programme.			
	The indicator may also be used to assess the status of climate change integration in systems targeted by multiple programmes, or simply in systems whose progress in this area is to be monitored (e.g. for self-assessment by institutions pursuing their own climate change integration initiatives without external support).			
	Where the aim is to evaluate the effectiveness of capacity building interventions to support climate change integration in target systems/ institutions, assessments will need to be supported by evidence that any improvements are attributable to the programme(s) in question.			
	This indicator is mostly likely to represent an <u>outcome</u> indicator, where the intended outcome of an intervention/ initiative is improved integration of climate change considerations in planning and decision making.			
	The indicator takes the form of a scorecard based on five criteria relating to the treatment of climate change in planning documents, and the extent and maturity of activities and mechanisms to address climate change in planning processes. These criteria are expressed as questions that ask to what extent the criteria have been met: not at all ("NO"), partially ("PARTIAL"), or to a large extent/completely ("YES").			
	An overall score is calculated, as the number of "PARTIAL" answers plus the number of "YES" answers, with each of the former scoring 1 and each of the latter scoring 2, giving a maximum score of 10.			
	The indicator scorecard is set out in the table below.			

INI	INDICATOR 1. Climate Change Integration into Planning					
CR	ITERIA/QUESTIONS	NO	PAR- TIAL	YES		
1.	Is there a climate change plan or strategy set out in a dedicated strategy document and/or embedded in the principal planning documents at the level being assessed (e.g. national, sector, ministry)?					
2.	Is there a formal (e.g. legal) requirement for climate change (adaptation/mitigation) to be integrated or mainstreamed into development planning (cf requirement for EIA for certain activities/projects)?					
3.	Have specific measures to address climate change (adaptation/mitigation) been identified and funded?					
4.	Are climate-relevant initiatives routinely screened for climate risks (relating to adaptation/mitigation)?					
5.	Is there a formal climate safeguards system in place that integrates climate risk screening, climate risk assessment (where required), climate risk reduction measures (identification, prioritisation, implementation), evaluation and learning into planning?					
	CORE (No. of "YES" answers x 2, plus no. of "PARTIAL" swers x 1)					

- 1. The term 'integration' may be used interchangeably with 'mainstreaming'.
- 2. While this indicator has been developed in the context of climate change adaptation, it is sufficiently flexible that it also can be applied in mitigation contexts. Climate change plans/ strategies therefore may be adaptation and/or mitigation/LCD plans/strategies. Where it is applied to plans or processes that address both mitigation and adaptation it is recommended that mitigation and adaptation be addressed separately, particularly where formal mitigation requirements (e.g. environmental impact assessment or pollution abatement) are more advanced than adaptation requirements (e.g. screening activities for viability against climate scenarios), as is the case in many contexts.
- 3. Following on from note (1), "measures to address climate change" may be adaptation or mitigation measures. In this context, risks may be risks posed to an initiative by climate (change) hazards, or risks posed by the initiative to the environment (emissions or increased vulnerability), to social groups (increased vulnerability) or to society/economy at a more systemic level ("maladaptation"). For adaptation, "climate-relevant" may be translated as "climate-sensitive". For mitigation, "climate-relevant" essentially means "associated with potentially significant emissions". It is not recommended that assessment of adaptation and mitigation is combined in a single assessment, as performance may be significantly different in these two areas, and the lack of specificity would make the indicator of very limited use.
- 4. The indicator may be used as an outcome indicator to assess systems targeted by one or more programmes. Assessment of the results of a single programme should be carried out at the beginning of, during, and at the end of the programme. Assessment of the cumulative results of multiple programmes or of the evolution of integration in general in an institutional context should be carried out at regular intervals (e.g. annually). Where the intention is to evaluate the efficacy of interventions

- to support integration, improvements in scores will need to be complemented by supporting qualitative evidence in order to demonstrate attribution (e.g. narratives, testimonials, other evidence of causal relationships).
- 5. The indicator is designed to be applied in diverse contexts, e.g. at the national or sectoral level (one or multiple sectors), or to assess planning within a particular ministry or other institutional context. The questions that make up the indicator are complementary, but not strictly sequential.

Guidance on answering the questions that make up the indicator is provided in the table below.

	Conditions necessary for answer of:						
Ø	NO	PARTIAL	YES				
1	No mention of climate change in planning documents, or treatment of climate change restricted to aspirational statements with no discussion of specific risks/issues and measures to address these.	Risks/issues and measures discussed along with broad strategies to address them, but do not cover all relevant areas or sectors (e.g. some but not all climate sensitive sectors for a national plan).	Risks/issues and measures discussed along with broad strategies to address them, for all relevant (e.g. climate-sensitive) areas or sectors.				
2	No coordinating body	Coordinating body but with limited mandate and/or funding.	Authoritative body with strong mandate and financial resources/ authority (e.g. Ministry of Finance or Planning).				
3	No specific measures to address climate change identified.	Some measures to address climate change identified, but only in certain relevant areas or sectors, with limited discussion of costs, timescales & implementation mechanisms.	All relevant areas/ sectors associated with specific measures to address climate change accompanied by details of costs, timescales and implementation mechanisms.				
4	No screening.	Screening is patchy, ad hoc, or limited to only some relevant areas or sectors.	Screening is routine in all relevant sectors.				
5	No safeguards system, or no system that goes beyond screening.	Some mechanisms or guidance to ensure that screening is followed by climate risk assessment, but falls short of comprehensive safeguards system and/or only in some relevant areas or sectors.	All relevant areas or sectors incorporate safeguards system or guidance representing integration cycle from screening through climate risk assessment to identification, prioritisation and implementation of risk reduction measures, an evaluation and learning.				
The incorporation of climate change into planning and investments by countries, donors, MDBs and other development entities is a key outcome							
in Theories of Change (ToC) related to adaptation (e.g. UK DFID). It is important to assess the extent to which adaptation support contributes to this							

Rationale

outcome. This indicator may be used to assess the success of programmatic interventions that seek to contribute to this outcome, in their operational contexts. This can be achieved by assessing changes in the systems (e.g. institutions, processes) targeted specific programmes, and also by assessing progress on the incorporation of climate change into planning at the national and sectoral levels, through national or sectoral assessments that capture the cumulative impact of multiple support programmes.

The questions that make up this indicator are intended to capture the need for mechanisms to be put in place that identify climate change risks and ensure that these risks (and opportunities) are addressed at the planning level. Screening of initiatives (policies, plans, programmes, projects) is important (to identify climate change risks, opportunities and appropriate responses), but screening alone is not sufficient – there needs to be practical guidance on what to do with initiatives that are identified as (e.g.) high-risk. Experience (e.g. during DFID Strategic Programme Reviews or SPRs) illustrates the need for screening to be part of a more systematic integration process that provides guidance for what might be termed the "mainstreaming cycle".

Data source

Data will be collected through evaluations based on completion of the scorecard (above) at specified intervals. Depending on the purpose of the evaluation, the scorecard might be completed by staff in donors' country offices, by external consultants, or (for self-assessment within institutions) by staff within the institutions being evaluated.

Where assessments are carried out by external consultants, they will be based on consultations with staff in the institutions being evaluated and (where appropriate) staff within donor country offices. Where assessments are carried out by country offices, they will be based on the judgment of key country office staff with responsibility for supporting the (national) processes and sectors in question, e.g. through sector budget support. In the case of self-assessment, they will be carried out by staff familiar with the relevant processes and also with climate change integration processes.

When assigning scores, evaluators concerned with the efficacy of support programmes should also record **complementary qualitative information** relating to attribution of outcomes to interventions. This information might include notes on the chronology of changes in the target system(s) relative to key outputs from support programmes, the views of key stakeholders regarding the extent to which outcomes are direct (or indirect) consequences of programme outputs, and the identification of 'pathways of change' that link outputs and outcomes (e.g. via key mechanisms, processes, events).

Data included and data aggregation

Support to a single institution, sector, mechanism or process

Where the indicator is used to report on outcomes from support to a single system or entity (i.e. institution, sector, mechanisms or process), the data reported will be the score calculated across the 5 questions that make up the indicator (up to a maximum of 10), applied to the system targeted by the support. Where this support is from a single intervention/programme, the scorecard should be completed at the beginning of the programme, during the programme (e.g. annually in the logframe), and at the end of the programme. Where support is from multiple programmes, the scorecard should be conducted at regular intervals (e.g. annually, 6-monthly) spanning the period of support.

Support to multiple institutions, sectors, mechanisms or process

Where the indicator is used to report on outcomes from support to multiple systems or entities (e.g. from multiple support programmes across multiple sectors for a cross-sectoral national-level assessment), an overall score may be calculated by averaging the totals for each relevant system/entity. However, such aggregated scores should always be presented alongside

	disaggregated data (detailing results for individual target systems) so that areas of strength and weakness can be identified (e.g. in specific sectors, ministries, etc). Alternatively, a national system might be assessed as whole. The approach taken will depend on the purpose of the assessment (e.g. a comprehensive assessment of CRM at the national level across all relevant sectors versus an assessment of national mechanisms that sit 'above' the sectoral level). It will also depend on the national CRM 'architecture (e.g. is CRM coordinated centrally by a body that has authority over relevant sectors, or decentralised down to the sectoral level).
	Adaptation versus mitigation In principle, this indicator could represent a 'key performance indicator' (KPI) that combines assessment of mitigation/low-carbon development and adaptation. However, it is recommended that mitigation and adaptation be assessed separately, as mitigation and adaptation often involve quite different processes and actors, and one may be considerably more advanced than the other.
	Interpretation In all cases, scores should be presented alongside qualitative information related to attribution (see data included and aggregation).
	Outcomes will be assessed on the basis of changes in the score over time, over the lifetime of the programme or programmes being evaluated, or otherwise at regular intervals for (e.g. internal) evaluation of planning systems in general. Attribution of outcomes to outputs will be assessed through the use of complementary qualitative information.
Most recent baseline	The baseline will be represented by the first available set of results, i.e. the first time the scorecard is applied to a system. Subsequent assessments will be looking for an improvement/increases in score(s) relative to this first assessment.
Good performance	Good performance will be demonstrated by improvement/increases in scores over time that can be linked with support programmes. Where assessment is focused on multiple (e.g. national) systems evaluation will be looking for a consistent improvement over multiple systems (e.g. sectors, ministries), sustained over time. This will demonstrate good performance of the systems in question. Good performance of support programmes that target these systems will be demonstrated by strong evidence that the outcomes within the target systems can be attributed to this support (see data categories above, and discussion in TAMD Technical Paper).
Return format	Scores (out of 10) at different points in time (e.g. before, during, after intervention)
	Numbers of countries improving scores by different amounts (increasing over time)
	For the assessment of multiple systems (e.g. sectors, ministries, countries, etc), results might be represented graphically. For reporting directed at target systems, changes in scores over a specified time period (from -10 to +10 at the theoretical extremes) might be represented along the horizontal axis, and numbers of systems (for each integer change in score) along the vertical axis.
Data dis- aggregation	If the indicator is to be presented as a single score out of 10 as in "Return format", answers for each of the 5 questions from which the indicator is constituted should also be preserved, so that areas of strength and weakness can be identified. Similarly, where evaluation of multiple target systems has involved aggregation/averaging across systems, results should be preserved for individual systems.
Data availability	Evaluation of this indicator does not depend on the availability of independent/external data. The indicator is based on the judgment of those

	assessing systems (programme managers, country office staff, such as climate change advisers, implementing partners, external consultants). Guidance is provided on how to complete the scorecard, based on criteria for different answers for each question making up the indicator. Data are therefore based on one or more of the following: (i) the informed judgment of the evaluators, (ii) knowledge of the relevant programmes and target systems, (iii) consultations with stakeholders (who will include country office staff if the assessment is carried out externally). The availability of reliable data therefore will depend on the level of knowledge of personnel involved in the evaluation, and/or on the quality of consultations. However, there should be sufficient knowledge among evaluators to ensure that the scorecard is completed realistically.
Time period/ lag	Where this indicator is applied in the context of individual programmes, it should be assessed annually in programme logframes, based on assessment of the target system(s). The indicator can also be applied to target systems (e.g. national systems, sectors, ministries, etc) on a regular (e.g. annual or biennial) basis, for example where these systems receive budget support.
Quality assurance measures	Where this indicator is assessed internally (e.g. by country office staff), an independent assessment might be performed (e.g. during a strategic review) by external experts. The answers to the 5 questions constituting the indicator should be justified by some explanation, e.g. describing the nature of the screening or mainstreaming processes and giving examples of measures to address climate change that have been identified during the assessment.
Data issues	It is recognised that some element of subjective judgment is required, although the questions have been designed to be quite specific and transparent, with supporting guidance on how to answer them contained in this note. In some cases data may be based on implementing partners' own assessments.
Additional comments	This indicator might be complemented by quantitative output indicators that can be applied directly to support programmes whose goals include the realisation of the outcomes addressed by the indicator. Quantitative outcome indicators might also be identified depending on the precise nature of an intervention, such as 'number of initiatives subject to climate change screening', or 'number of potential adaptation measures identified across initiatives subject to screening'.

TAMD Climate Change Indicator- Methodological Note

Title	INDICATOR 2. INSTITUTIONAL COORDINATION FOR INTEGRATION
	Extent and quality of coordination of climate risk management across relevant institutions
Type or Indicator	Scorecard; outcome
Technical definition/ Methodol- ogical summary	This indicator is designed to capture the extent to which climate risk management (CRM) is coordinated across relevant institutions such as ministries, government agencies, or other bodies with a responsibility to integrate CRM into their activities. It is relevant to interventions intended to build capacity to address climate change through the development of climate plans, strategies and mainstreaming mechanisms/ systems.
	The indicator can be used to assess the performance of an individual capacity building intervention that targets multiple institutions, through evaluation of the target systems (e.g. ministries, agencies, sectors, other institutions) at the beginning, during, and at the end of the programme. Such an intervention would have a focus on improving communication, cooperation and coordination across these bodies.
	The indicator may also be used to assess the status of climate change integration in (e.g. national) systems targeted by multiple programmes, or simply in systems whose progress in this area is to be monitored (e.g. for self-assessment by governments pursuing their own climate change integration initiatives without external support).
	Where the aim is to evaluate the effectiveness of capacity building interventions to improve coordination across institutions, assessments will need to be supported by evidence that any improvements are attributable to the intervention(s) in question.
	This indicator is mostly likely to represent an <u>outcome</u> indicator, where the intended outcome of an intervention/ initiative is improved coordination of CRM and climate change integration across institutions.
	The indicator takes the form of a scorecard based on five criteria relating to the nature of coordination mechanisms and processes that seek to ensure coherent responses to climate change across relevant sectors and institutions. These criteria are expressed as questions that ask to what extent the criteria have been met: not at all ("NO"), partially ("PARTIAL"), or to a large extent/completely ("YES").
	An overall score is calculated, as the number of "PARTIAL" answers plus the number of "YES" answers, with each of the former scoring 1 and each of the latter scoring 2, giving a maximum score of 10.
	The indicator scorecard is set out in the table below.

INI	INDICATOR 2. Institutional Coordination for Integration				
CR	ITERIA/QUESTIONS	NO	PAR- TIAL	YES	
1.	Has an authoritative body been tasked with coordinating climate change planning and actions?				
2.	Does the coordinating body have high convening authority/hierarchical importance across other cross sectoral departments or ministries?				
3.	Has a dedicated institutional mechanism been defined for coordination and implementation across sectors?				
4.	Is there dedicated funding or certainty of long term funding for sustaining this institutional coordination mechanism?				
5.	Is there regular contact between the coordinating body and relevant ministries and agencies (e.g. in key climate-sensitive sectors)?				
	ORE (No. of "YES" answers x 2, plus no. of "PARTIAL" swers x 1)	l.			

- 1. While this indicator has been developed in the context of climate change adaptation, it is sufficiently flexible that it also can be applied in mitigation contexts. Where it is applied to the coordination of both mitigation and adaptation activities it might be better to address separately, particularly where mitigation activities (e.g. regulation of greenhouse gas emissions) are more advanced than adaptation activities (e.g. cross-sectoral adaptation initiatives that might integrate, for example, adaptation in the agriculture and water sectors), or vice versa.
- 2. The indicator may be used as an outcome indicator to assess systems targeted by one or more programmes. Assessment of the results of a single programme should be carried out at the beginning of, during, and at the end of the programme. Assessment of the cumulative results of multiple programmes or of the evolution of integration in general in an institutional context should be carried out at regular intervals (e.g. annually). Where the intention is to evaluate the efficacy of interventions to support integration, improvements in scores will need to be complemented by supporting qualitative evidence in order to demonstrate attribution (e.g. narratives, testimonials, other evidence of causal relationships).
- 3. The indicator is designed to be applied at the national level but may be applied or adapted for use at other scales and in other contexts. The questions that make up the indicator are complementary, but not strictly sequential.

Guidance on answering the questions that make up the indicator is provided in the table below.

	Conditions necessary for answer of:				
	ø	NO	PARTIAL	YES	
	1	No coordinating body.	Coordinating body but with limited mandate and/or funding.	Authoritative body with strong mandate and financial resources/ authority (e.g. Ministry of Finance or Planning).	
	2	Coordinating body can only make recommendations and these often will not be followed.	Coordinating body makes recommendations and is influential, but has no formal (or effective) authority over other bodies (e.g. departments, ministries).	Coordinating body can impose requirements on other bodies (e.g. departments, ministries).	
	3	No mechanisms for coordination and implementation across sectors.	Mechanism exists, but does not deliver coordinated action, or does this only partially.	Effective mechanism that delivers coordinated action.	
	4	No dedicated or assured long-term funding (i.e. beyond current financial year).	Assured funding for up to 5 years but no formal commitment to longerterm funding.	Formal commitment to funding beyond 5 years.	
	5	No regular contact between coordinating body and relevant ministries/agencies, with contact on <i>ad hoc</i> basis only.	Regular contact but no formal mechanisms for ensuring or facilitating contact – contact based on demand from relevant agencies/ ministries and or outreach from coordinating body.	Well-functioning formal mechanisms for ensuring regular contact that ensure contact occurs on multiple occasions each year.	
Rationale	thro sec nati	ough mitigation or adaptatous tors if they are to be et onal level, planning will i	e-sectoral issue, and efforts to tackle it, whether obtation activities, will need to be coordinated across effective at regional and national scales. At the ill need to be integrated across multiple sectors to one sector is not undermined by, and/or does not another sector.		
	For example, in many cases adaptation in the agricultural sector will depend on effective adaptation in the water sector to secure the required water resources in the face of climate change. Conversely, if agriculture does not incorporate adaptive measures to address climate change impacts on water resources, it may result in a level of water consumption that is unsustainable in the face of climate change. With respect to mitigation, efforts to reduce emissions will often require coordination across sectors, for example the energy and transport sectors.				
Data source	Data will be collected through evaluations based on completion of the scorecard (above) at specified intervals. Depending on the purpose of the evaluation, the scorecard might be completed by staff in donors' country offices, by external consultants, or (for national self-assessment) by government or other relevant personnel.				
	Where assessments are carried out by external consultants, they will be based on consultations with key staff in the sectors being evaluated and (where appropriate) staff within donor country offices. Where assessments are carried out by country offices, they will be based on the judgment of key country office staff with responsibility for supporting the (national) processes and sectors in question, e.g. through sector budget support. In the case of				

self-assessment, they will be carried out by staff familiar with the relevant sectors.

When assigning scores, evaluators concerned with the efficacy of support programmes should also record **complementary qualitative information** relating to attribution of outcomes to interventions. This information might include notes on the chronology of changes across the target sectors relative to key outputs from support programmes, the views of key stakeholders regarding the extent to which outcomes are direct (or indirect) consequences of programme outputs, and the identification of 'pathways of change' that link outputs and outcomes (e.g. via key mechanisms, processes, events).

Data included and data aggregation

Support to a single cross-sectoral coordination process

Where the indicator is used to report on outcomes from support to a single cross-sectoral coordination process, the data reported will be the score calculated across the 5 questions that make up the indicator (up to a maximum of 10), applied to the process targeted by the support. For example, an intervention might seek to improve adaptation/CRM coordination between the water and agricultural sectors. Where this support is from a single programme, the scorecard should be completed at the beginning of the programme, during the programme (e.g. annually in the logframe), and at the end of the programme. Where support is from multiple programmes, the scorecard should be conducted at regular intervals (e.g. annually, 6-monthly) spanning the period of support.

Support to multiple process or across multiple sectors

Where the indicator is used to report on outcomes from support to multiple coordination processes, an overall score may be calculated by averaging the totals for each process. However, such aggregated scores should always be presented alongside disaggregated data (detailing results for individual target systems) so that areas of strength and weakness can be identified (e.g. in specific sectors, ministries, etc). This approach might suit assessment at the national level, as coordination might be better between some sectors than others. An alternative approach would be to assess cross-sectoral coordination at the national level as a whole, but this might result in data that 'smooths out' differences between different sets of sectors (e.g. good coordination between water and agriculture but poor coordination between water and energy).

Adaptation versus mitigation

In principle, this indicator could represent a 'key performance indicator' (KPI) that combines assessment of mitigation/low-carbon development and adaptation. However, it is recommended that mitigation and adaptation be assessed separately, as mitigation and adaptation often involve quite different processes and actors, and one may be considerably more advanced than the other.

Interpretation

In all cases, scores should be presented alongside qualitative information related to attribution (see data included and aggregation).

Outcomes will be assessed on the basis of changes in the score over time, over the lifetime of the programme or programmes being evaluated, or otherwise at regular intervals for (e.g. internal) evaluation of planning systems in general. Attribution of outcomes to outputs will be assessed through the use of complementary qualitative information.

Most recent baseline

The baseline will be represented by the first available set of results, i.e. the first time the scorecard is applied to a system. Subsequent assessments will be looking for an improvement/increases in score(s) relative to this first assessment.

Good	Good performance will be demonstrated by improvement/increases in
performance	scores over time that can be linked with support programmes. Where assessment is focused on multiple processes evaluation will be looking for a consistent improvement across these processes, sustained over time. Good performance of support programmes that target these processes will be demonstrated by strong evidence that the outcomes can be attributed to this support (see data categories above, and discussion in TAMD Technical Paper).
Return format	Scores (out of 10) at different points in time (e.g. before, during, after intervention)
	Numbers of countries improving scores by different amounts (increasing over time)
	For the assessment of multiple systems (e.g. sectors, ministries, countries, etc), results might be represented graphically. For reporting directed at target systems, changes in scores over a specified time period (from -10 to +10 at the theoretical extremes) might be represented along the horizontal axis, and numbers of systems (for each integer change in score) along the vertical axis.
Data dis- aggregation	If the indicator is to be presented as a single score out of 10 as in "Return format", answers for each of the 5 questions from which the indicator is constituted should also be preserved, so that areas of strength and weakness can be identified. Similarly, where evaluation of multiple target systems has involved aggregation/averaging across systems, results should be preserved for individual systems.
Data availability	Evaluation of this indicator does not depend on the availability of independent/external data. The indicator is based on the judgment of those assessing the processes in question (programme managers, country office staff, such as climate change advisers, implementing partners, external consultants). Guidance is provided on how to complete the scorecard, based on criteria for different answers for each question making up the indicator. Data are therefore based on one or more of the following: (i) the informed judgment of the evaluators, (ii) knowledge of the relevant programmes and target systems, (iii) consultations with stakeholders (who will include country office staff if the assessment is carried out externally). The availability of reliable data therefore will depend on the level of knowledge of personnel involved in the evaluation, and/or on the quality of consultations. However, there should be sufficient knowledge among evaluators to ensure that the scorecard is completed realistically.
Time period/ lag	Where this indicator is applied in the context of individual programmes, it should be assessed annually in programme logframes, based on assessment of the target system(s). The indicator can also be applied to target systems (e.g. national systems, sectors, ministries, etc) on a regular (e.g. annual or biennial) basis, for example where these systems receive budget support.
Quality assurance measures	Where this indicator is assessed internally (e.g. by country office staff), an independent assessment might be performed (e.g. during a strategic review) by external experts. The answers to the 5 questions constituting the indicator should be justified by some explanation, e.g. describing the nature of the screening or mainstreaming processes and giving examples of measures to address climate change that have been identified during the assessment.
Data issues	It is recognised that some element of subjective judgment is required, although the questions have been designed to be quite specific and transparent, with supporting guidance on how to answer them contained in this note. In some cases data may be based on implementing partners' own assessments.
Additional	This indicator might be complemented by quantitative output indicators that

comments	can be applied directly to support programmes whose goals include the realisation of the outcomes addressed by the indicator. Quantitative outcome indicators might also be identified depending on the precise nature of an intervention, such as 'cross-sectoral coordination mechanisms established',
	or 'number of sectors linked through coordination mechanisms'.

TAMD Climate Change Indicator- Methodological Note

Short title	INDICATOR 3: BUDGETING AND FINANCE
	Financial support for climate change mainstreaming & related initiatives
Type or Indicator	Scorecard; outcome
Technical definition/ Methodol- ogical	This indicator is designed to capture the extent to which actions, measures and processes to address climate change are costed, budgeted for, and provided with the necessary financial support.
summary	The indicator can be used to assess the performance of an individual capacity building programme, through evaluation of the target system (e.g. ministry, sector, institution) at the beginning, during, and at the end of the programme.
	The indicator may also be used to assess the extent to which measures to address climate change are costed and financially supported in systems targeted by multiple programmes.
	Where the aim is to evaluate the effectiveness of capacity building interventions to improve coordination across institutions, assessments will need to be supported by evidence that any improvements are attributable to the intervention(s) in question.
	Where the aim is to evaluate the effectiveness of capacity building interventions to improve coordination across institutions, assessments will need to be supported by evidence that any improvements are attributable to the intervention(s) in question.
	The indicator is most likely to represent an <u>outcome</u> indicator, as it examines the outcomes at the level the target system resulting from the outputs of a programmes.
	The indicator takes the form of a scorecard based on five criteria relating to how climate change measures are costed, budgeted and funded. These criteria are expressed as questions that ask to what extent the criteria have been met: not at all ("NO"), partially ("PARTIAL"), or to a large extent/completely ("YES").
	An overall score is calculated, as the number of "PARTIAL" answers plus the number of "YES" answers, with each of the former scoring 1 and each of the latter scoring 2, giving a maximum score of 10.
	The indicator scorecard is set out in the table below.

INE	INDICATOR 3. Budgeting and Finance				
CR	ITERIA/QUESTIONS	NO	PAR- TIAL	YES	
1.	Is funding available to pilot measures that address climate change (e.g. adaptation, risk management, mitigation, low-carbon development)?				
2.	Is funding available to roll out/support mainstreaming/integration of climate change?				
3.	Do mechanisms/capacities exist for assessing the costs associated with measures to address climate change, such as those identified during climate screening/risk assessment?				
4.	Is funding available to cover the costs of the necessary climate change measures identified (and costed) during climate screening/risk assessment?				
5.	Are actions to address climate change supported by an authoritative financial entity (e.g. at national level, Ministry of Finance)?				
6.	Is funding available to pilot measures that address climate change (e.g. adaptation, risk management, mitigation, low-carbon development)?				

- 1. While this indicator has been developed in the context of climate change adaptation, it is sufficiently flexible that it also can be applied in mitigation contexts. Where it is applied to the coordination of both mitigation and adaptation activities it might be better to address separately, particularly where mitigation activities (e.g. regulation of greenhouse gas emissions) are more advanced than adaptation activities (e.g. cross-sectoral adaptation initiatives that might integrate, for example, adaptation in the agriculture and water sectors), or vice versa.
- 2. The indicator is used to assess systems targeted by one or more programmes, and is an outcome indicator, which will be assessed at the beginning, during, and at the end of a programme (where the outcomes resulting from a single programme are to be assessed), or at regular intervals (e.g. annually) where the cumulative results of multiple programmes are to be assessed. Where the indicator is applied to a targeted system, improvements in scores will need to be complemented by supporting qualitative evidence in order to demonstrate attribution (e.g. narratives, testimonials, other evidence of causal relationships).
- 3. Question 1 refers to piloting of measures to address climate change, whereas Question 4 refers to measures identified during climate risk assessment (CRA). Pilot measures are measures identified as offering potential learning opportunities, and may be identified in a climate change plan or strategy. In contrast, measures identified in a CRA are necessary measures to address climate change risks in specific (e.g. project or programme) contexts.
- 4. The indicator is designed to be applied in diverse contexts, e.g. at the national or sectoral level (one or multiple sectors), or to assess the extent to which measures have been costed and a commitment to funding made within other institutional contexts. The questions that make up the indicator are complementary, but not strictly sequential.

Guidance on answering the questions that make up the indicator is provided in the table below.

		Conditions necessary for answer of:				
	Q	NO	PARTIAL	YES		
	1	No piloting of measures to address climate change due to lack of funding.	Some piloting of measures to address climate change, but other pilot measures identified not pursued due to lack of funding.	Piloting of measures to address climate change not constrained by lack of funding.		
	2	Mainstreaming systems not implemented due to insufficient funding; where screening identifies need for climate risk assessment (CRA) this is not happening due to insufficient funds (or no screening).	Mainstreaming processes exist but are insufficiently developed due to funding constraints; CRAs are performed only for some high-risk initiatives, or are often inadequate in scope, due to funding limitations.	Funding fully supports mainstreaming processes; CRAs are performed for all highrisk initiatives, and are of adequate duration and depth.		
	3	Measures are not costed, and there is little or no awareness of methodologies for costing.	Some measures are costed but costing is patch or ad hoc, and costing methodologies are contested or not well understood.	Measures are routinely costed using standard, accepted methodologies.		
	4	Even where measures to address climate change are identified, these are not implemented due to a lack of funding.	Some measures are implemented, but funding is limited and other measures identified are not pursued for this reason.	Adequate funding exists to implement all (priority) measures identified in CRAs routinely.		
	5	No institutional financial support.	Formal commitment to provide financial support but insufficient evidence of delivery, or level of support falls short of what is needed.	Evidence that financial support is forthcoming for required measures, actions and processes; climate change is a priority for financial entity concerned.		
	1.					
Rationale	For effective action on climate change (whether in the form of adaptation or mitigation), there needs to be financial support in place for mainstreaming processes, and for the implementation of adaptation/mitigation measures. Financial support is more likely if there are robust methodologies for calculating the costs associated with adaptation and mitigation. Financial support will be most secure where there is buy-in from key institutions. At the national level, the most important such institutions will be the Ministry of Finance and/or the Ministry of Planning.					
Data source	Data will be collected through evaluations based on completion of the scorecard (above) at specified intervals. Depending on the purpose of the evaluation, the scorecard might be completed by staff in donors' country offices, by external consultants, or (for national self-assessment) by government or other relevant personnel.					
	Where assessments are carried out by external consultants, they will be based on consultations with key staff in the sectors being evaluated and (where appropriate) staff within donor country offices. Where assessments are carried out by country offices, they will be based on the judgment of key country office staff with responsibility for supporting the (national) processes					

and sectors in question, e.g. through sector budget support. In the case of self-assessment, they will be carried out by staff familiar with the relevant sectors.

When assigning scores, evaluators concerned with the efficacy of support programmes should also record **complementary qualitative information** relating to attribution of outcomes to interventions. This information might include notes on the chronology of changes across the target sectors relative to key outputs from support programmes, the views of key stakeholders regarding the extent to which outcomes are direct (or indirect) consequences of programme outputs, and the identification of 'pathways of change' that link outputs and outcomes (e.g. via key mechanisms, processes, events).

Data included and data aggregation

Support to a single institution, sector, mechanism or process

Where the indicator is used to report on outcomes from support to a single system or entity (i.e. institution, sector, mechanisms or process), the data reported will be the score calculated across the 5 questions that make up the indicator (up to a maximum of 10), applied to the system targeted by the support. Where this support is from a single intervention/programme, the scorecard should be completed at the beginning of the programme, during the programme (e.g. annually in the logframe), and at the end of the programme. Where support is from multiple programmes, the scorecard should be conducted at regular intervals (e.g. annually, 6-monthly) spanning the period of support.

Support to multiple institutions, sectors, mechanisms or process

Where the indicator is used to report on outcomes from support to multiple systems or entities (e.g. from multiple support programmes across multiple sectors for a cross-sectoral national-level assessment), an overall score may be calculated by averaging the totals for each relevant system/entity. However, such aggregated scores should always be presented alongside disaggregated data (detailing results for individual target systems) so that areas of strength and weakness can be identified (e.g. in specific sectors, ministries, etc). Alternatively, a national system might be assessed as whole. The approach taken will depend on the purpose of the assessment (e.g. a comprehensive assessment of CRM at the national level across all relevant sectors versus an assessment of national mechanisms that sit 'above' the sectoral level). It will also depend on the national CRM 'architecture (e.g. is CRM coordinated centrally by a body that has authority over relevant sectors, or decentralised down to the sectoral level).

Adaptation versus mitigation

In principle, this indicator could represent a 'key performance indicator' (KPI) that combines assessment of mitigation/low-carbon development and adaptation. However, it is recommended that mitigation and adaptation be assessed separately, as mitigation and adaptation often involve quite different processes and actors, and one may be considerably more advanced than the other.

Interpretation

In all cases, scores should be presented alongside qualitative information related to attribution (see data included and aggregation).

Outcomes will be assessed on the basis of changes in the score over time, over the lifetime of the programme or programmes being evaluated, or otherwise at regular intervals for (e.g. internal) evaluation of planning systems in general. Attribution of outcomes to outputs will be assessed through the use of complementary qualitative information.

Most recent baseline

The baseline will be represented by the first available set of results, i.e. the first time the scorecard is applied to a system. Subsequent assessments will

	be looking for an improvement/increases in score(s) relative to this first
Good performance	assessment. Good performance will be demonstrated by improvement/increases in scores over time that can be linked with support programmes. Where assessment is focused on multiple processes evaluation will be looking for a consistent improvement across these processes, sustained over time. Good performance of support programmes that target these processes will be demonstrated by strong evidence that the outcomes can be attributed to this support (see data categories above, and discussion in TAMD Technical Paper).
Return format	Scores (out of 10) at different points in time (e.g. before, during, after intervention)
	Numbers of countries improving scores by different amounts (increasing over time)
	For the assessment of multiple systems (e.g. sectors, ministries, countries, etc), results might be represented graphically. For reporting directed at target systems, changes in scores over a specified time period (from -10 to +10 at the theoretical extremes) might be represented along the horizontal axis, and numbers of systems (for each integer change in score) along the vertical axis.
Data dis- aggregation	If the indicator is to be presented as a single score out of 10 as in "Return format", answers for each of the 5 questions from which the indicator is constituted should also be preserved, so that areas of strength and weakness can be identified. Similarly, where evaluation of multiple target systems has involved aggregation/averaging across systems, results should be preserved for individual systems.
Data availability	Evaluation of this indicator does not depend on the availability of independent/external data. The indicator is based on the judgment of those assessing the processes in question (programme managers, country office staff, such as climate change advisers, implementing partners, external consultants). Guidance is provided on how to complete the scorecard, based on criteria for different answers for each question making up the indicator. Data are therefore based on one or more of the following: (i) the informed judgment of the evaluators, (ii) knowledge of the relevant programmes and target systems, (iii) consultations with stakeholders (who will include country office staff if the assessment is carried out externally). The availability of reliable data therefore will depend on the level of knowledge of personnel involved in the evaluation, and/or on the quality of consultations. However, there should be sufficient knowledge among evaluators to ensure that the scorecard is completed realistically.
Time period/ lag	Where this indicator is applied in the context of individual programmes, it should be assessed annually in programme logframes, based on assessment of the target system(s). The indicator can also be applied to target systems (e.g. national systems, sectors, ministries, etc) on a regular (e.g. annual or biennial) basis, for example where these systems receive budget support.
Quality assurance measures	Where this indicator is assessed internally (e.g. by country office staff), an independent assessment might be performed (e.g. during a strategic review) by external experts. The answers to the 5 questions constituting the indicator should be justified by some explanation, e.g. describing the nature of the screening or mainstreaming processes and giving examples of measures to address climate change that have been identified during the assessment.
Data issues	It is recognised that some element of subjective judgment is required, although the questions have been designed to be quite specific and transparent, with supporting guidance on how to answer the questions. In some cases data may be based on implementing partners' own

	assessments.
Additional comments	This indicator might be complemented by quantitative output indicators that can be applied directly to support programmes whose goals include the realisation of the outcomes addressed by the indicator. Quantitative outcome indicators might also be identified depending on the precise nature of an intervention, such as 'cross-sectoral coordination mechanisms established', or 'number of sectors linked through coordination mechanims'.

TAMD Climate Change Indicator - Methodological Note

Short title	INDICATOR 4. INSTITUTIONAL KNOWLEDGE/CAPACITY
	Level of knowledge and training of key personnel in climate change issues and mainstreaming processes
Type or Indicator	Scorecard; output or outcome depending on how applied
Technical definition/ Methodol- ogical summary	This indicator is designed to capture the extent to which development and adaptation planning is informed by knowledge of climate change in general and specific knowledge relating to methodologies for integrating or mainstreaming climate change into planning, and the extent to which planning staff are trained in relevant areas.
	The indicator can be used to assess the performance of an individual capacity building programme, through evaluation of the target system (e.g. ministry, sector, institution) at the beginning, during, and at the end of the programme.
	The indicator may also be used to assess institutional knowledge in systems targeted by multiple programmes.
	Where the aim is to evaluate the effectiveness of capacity building interventions to improve institutional knowledge and capacity to address climate change, assessments will need to be supported by evidence that any improvements are attributable to the programme(s) in question.
	The indicator is most likely to represent an <u>outcome</u> indicator, as it examines the outcomes at the level of the target system resulting from the outputs of programmes.
	The indicator could also be used as an <u>output</u> indicator, if it is adapted to measure the numbers of staff in an institution/organisation meeting the criteria described in the questions (see scorecard below).
	The indicator takes the form of a scorecard based on five criteria relating to the extent to which relevant personnel within an institution are knowledgeable about climate change and integration/mainstreaming processes. These criteria are expressed as questions that ask to what extent the criteria have been met: not at all ("NO"), partially ("PARTIAL"), or to a large extent/completely ("YES").
	An overall score is calculated, as the number of "PARTIAL" answers plus the number of "YES" answers, with each of the former scoring 1 and each of the latter scoring 2, giving a maximum score of 10.
	The indicator scorecard is set out in the table below.

INE	INDICATOR 4. Institutional Knowledge/Capacity				
CR	ITERIA/QUESTIONS	NO	PAR- TIAL	YES	
1.	Does planning involve individuals with some awareness of climate change?				
2.	Does planning involve individuals with formal training in climate change issues?				
3.	Does planning involve individuals who have attended accredited courses on climate change, development, planning and "mainstreaming" issues?	l			
4.	Is integration of climate change into planning overseen by individuals with in-depth knowledge of integration/mainstreaming processes?	l			
5.	Are numbers of people with required training involved in planning processes adequate?				
	ORE (No. of "YES" answers x 2, plus no. of "PARTIAL" swers x 1)				

- 1. While this indicator has been developed in the context of climate change adaptation, it is sufficiently flexible that it could be applied in mitigation/low-carbon development (LCD) contexts. Where this indicator, or adapted versions of it, is/are applied to the coordination of both mitigation/LCD and adaptation activities it is recommended that mitigation/LCD and adaptation are addressed separately, particularly where mitigation activities (e.g. regulation of greenhouse gas emissions) are more advanced than adaptation activities (e.g. cross-sectoral adaptation initiatives that might integrate, for example, adaptation in the agriculture and water sectors), or vice versa.
- 2. The indicator is used to assess systems targeted by one or more programmes, and is an outcome indicator, which will be assessed at the beginning, during, and at the end of a programme (where the outcomes resulting from a single programme are to be assessed), or at regular intervals (e.g. annually) where the cumulative results of multiple programmes are to be assessed. Where the indicator is applied to a targeted system, improvements in scores will need to be complemented by supporting qualitative evidence in order to demonstrate attribution (e.g. narratives, testimonials, other evidence of causal relationships).
- 3. This indicator focuses heavily on capacity/knowledge for mainstreaming climate change adaptation into development planning. Mainstreaming typically involves screening of initiatives for climate risks; commissioning external climate risk assessments (CRA) for high-risk initiatives; evaluating the viability of high-risk initiatives; identifying, prioritising and implementing risk reduction (i.e. adaptation) measures for initiatives that are viable but where risks have been identified; the development of monitoring and evaluation frameworks for tracking progress; and evaluation and learning.
- 4. Awareness of climate change [Question 1] refers to general awareness of the existence of climate change and its potential impacts at different scales.
- 5. Formal training in climate change [Question 2] includes graduate-level training or professional training that includes climate change components/content. Such training may focus on the scientific aspects of climate change without extending to the implications of climate

change for development.

- 6. Accredited courses [Question 3] are courses that have been approved by the institution in question or partner organisations (e.g. donors) engaged in mainstreaming issues, and should address the links between climate change and development, with specific attention to adaptation and the integration or mainstreaming of climate change into development planning and practice.
- 7. Integration or mainstreaming [Question 4] is an emerging field of practice and knowledge in its own right, and it is important that those responsible for ensuring that climate change is addressed in planning have sufficient knowledge of mainstreaming processes. Integration of climate change adaptation into planning will be more effective where it is overseen by individuals with a knowledge of these processes than where integration is managed by non-specialist staff who simply seek input from those trained in integration/mainstreaming. Question 4 is wider in scope than Question 3, as it addresses experience of mainstreaming that may have been gained in contexts other than through formal training as addressed in Question 3.
- 8. Climate change mainstreaming and effective risk management will require that a sufficient number of staff, at a variety of levels, understand climate change contexts, risks and mainstreaming processes, and are able to address these in the development and implementation of planning processes [Question 5]. Previous questions address general knowledge and awareness of climate change, and the capacity of key staff involved in or in charge of mainstreaming; Question 5 addresses the extent to which knowledge of mainstreaming is commonplace throughout an organisation.

Guidance on answering the questions that make up the indicator is provided in the table below.

	Conditions necessary for answer of:			
	Q	NO	PARTIAL	YES
	1	There is little or no general awareness of climate change issues among planning staff.	Some staff are aware of climate change issues but awareness is limited, in terms of both numbers of staff and depth of knowledge. Climate change is still seen by some/many as an environmental issue.	There is a high level of awareness of climate change and (i) what it means in terms of potential risks to development.
	training in climate in general climate have formal change. change issues (e.g. change train		Many and/or key staff have formal climate change training (e.g. science, policy, etc).	
	3	No staff have attended accredited courses dealing with climate change adaptation and mainstreaming.	A few staff have attended accredited courses dealing with climate change adaptation and mainstreaming, but influence is limited due to their not being in key positions.	Key staff in positions of influence have attended accredited courses dealing with climate change adaptation and mainstreaming.
	experience, knowledge or training in mainstreaming processes.		Some staff have experience, knowledge, or training in mainstreaming, but they do not have responsibility, or are not empowered, to promote mainstreaming.	Mainstreaming of climate change is overseen by staff with relevant experience, knowledge or training (see previous Qs), who are empowered to integrate climate change into planning.
	5	The number of staff with relevant and sufficient training in climate change issues is small (or zero), and these staff have very limited impact.	A proportion of staff have relevant training, but they are insufficient in number to ensure routine integration of climate change into planning.	Staff are generally familiar with climate change issues and comfortable with mainstreaming processes, with many having relevant training.
Rationale	For planning processes and mechanisms to be implemented effectively planning staff need to have a grasp not only of climate change issues a large (scientific contexts, impacts, adaptation, mitigation, etc), but also o mainstreaming/integration processes and mechanisms. This includes familiarity with screening processes and climate risk assessments (CRAs (e.g. the different ways of doing a CRA, how to prepare terms of reference for an external CRA, etc), as well as the identification, prioritisation implementation and evaluation of risk reduction/ adaptation measures. These are areas of expertise in their own right, and the emerging nature of these areas means that significant capacity building specifically targeted a mainstreaming will be required for the effective integration of climate change into planning.			
Data source	Dat sco eva	a will be collected thro recard (above) at specif luation, the scorecard n	ied intervals. Depending	on the purpose of the staff in donors' country

government or other relevant personnel.

Where assessments are carried out by external consultants, they will be based on consultations with key staff in the sectors being evaluated and (where appropriate) staff within donor country offices. Where assessments are carried out by country offices, they will be based on the judgment of key country office staff with responsibility for supporting the (national) processes and sectors in question, e.g. through sector budget support. In the case of self-assessment, they will be carried out by staff familiar with the relevant sectors.

When assigning scores, evaluators concerned with the efficacy of support programmes should also record **complementary qualitative information** relating to attribution of outcomes to interventions. This information might include notes on the chronology of changes across the target sectors relative to key outputs from support programmes, the views of key stakeholders regarding the extent to which outcomes are direct (or indirect) consequences of programme outputs, and the identification of 'pathways of change' that link outputs and outcomes (e.g. via key mechanisms, processes, events).

Data included and data aggregation

Support to a single institution, sector, mechanism or process

Where the indicator is used to report on outcomes from support to a single system or entity (i.e. institution, sector, mechanisms or process), the data reported will be the score calculated across the 5 questions that make up the indicator (up to a maximum of 10), applied to the system targeted by the support. Where this support is from a single intervention/programme, the scorecard should be completed at the beginning of the programme, during the programme. Where support is from multiple programmes, the scorecard should be conducted at regular intervals (e.g. annually, 6-monthly) spanning the period of support.

Support to multiple institutions, sectors, mechanisms or process

Where the indicator is used to report on outcomes from support to multiple systems or entities (e.g. from multiple support programmes across multiple sectors for a cross-sectoral national-level assessment), an overall score may be calculated by averaging the totals for each relevant system/entity. However, such aggregated scores should always be presented alongside disaggregated data (detailing results for individual target systems) so that areas of strength and weakness can be identified (e.g. in specific sectors, ministries, etc). Alternatively, a national system might be assessed as whole. The approach taken will depend on the purpose of the assessment (e.g. a comprehensive assessment of CRM at the national level across all relevant sectors versus an assessment of national mechanisms that sit 'above' the sectoral level). It will also depend on the national CRM 'architecture (e.g. is CRM coordinated centrally by a body that has authority over relevant sectors, or decentralised down to the sectoral level).

Interpretation

In all cases, scores should be presented alongside qualitative information related to attribution (see data included and aggregation).

Outcomes will be assessed on the basis of changes in the score over time, over the lifetime of the programme or programmes being evaluated, or otherwise at regular intervals for (e.g. internal) evaluation of planning systems in general. Attribution of outcomes to outputs will be assessed through the use of complementary qualitative information.

Most recent baseline

The baseline will be represented by the first available set of results, i.e. the first time the scorecard is applied to a system. Subsequent assessments will be looking for an improvement/increases in score(s) relative to this first

	assessment.
Good performance	Good performance will be demonstrated by improvement/increases in scores over time that can be linked with support programmes. Where assessment is focused on multiple processes evaluation will be looking for a consistent improvement across these processes, sustained over time. Good performance of support programmes that target these processes will be demonstrated by strong evidence that the outcomes can be attributed to this support (see data categories above, and discussion in TAMD Technical Paper).
Return format	 Scores (out of 10) at different points in time (e.g. before, during, after intervention) Numbers of target systems (within or across countries) improving scores
	by different amounts (increasing over time) For the assessment of multiple systems (e.g. sectors, ministries, countries, etc), results might be represented graphically. For reporting directed at target systems, changes in scores over a specified time period (from -10 to +10 at the theoretical extremes) might be represented along the horizontal axis, and numbers of systems (for each integer change in score) along the vertical axis.
Data dis- aggregation	If the indicator is to be presented as a single score out of 10 as in "Return format", answers for each of the 5 questions from which the indicator is constituted should also be preserved, so that areas of strength and weakness can be identified. Similarly, where evaluation of multiple target systems has involved aggregation/averaging across systems, results should be preserved for individual systems.
Data availability	Evaluation of this indicator does not depend on the availability of independent/external data. The indicator is based on the judgment of those assessing the processes in question (programme managers, country office staff, such as climate change advisers, implementing partners, external consultants). Guidance is provided on how to complete the scorecard, based on criteria for different answers for each question making up the indicator. Data are therefore based on one or more of the following: (i) the informed judgment of the evaluators, (ii) knowledge of the relevant programmes and target systems, (iii) consultations with stakeholders (who will include country office staff if the assessment is carried out externally). The availability of reliable data therefore will depend on the level of knowledge of personnel involved in the evaluation, and/or on the quality of consultations. However, there should be sufficient knowledge among evaluators to ensure that the scorecard is completed realistically.
Time period/ lag	Where this indicator is applied in the context of individual programmes, it should be assessed annually in programme logframes, based on assessment of the target system(s). The indicator can also be applied to target systems (e.g. national systems, sectors, ministries, etc) on a regular (e.g. annual or biennial) basis, for example where these systems receive budget support.
Quality assurance measures	Where this indicator is assessed internally (e.g. by country office staff), an independent assessment might be performed (e.g. during a strategic review) by external experts. The answers to the 5 questions constituting the indicator should be justified by some explanation, e.g. describing the nature of the screening or mainstreaming processes and giving examples of measures to address climate change that have been identified during the assessment.
Data issues	It is recognised that some element of subjective judgment is required, although the questions have been designed to be quite specific and transparent, with supporting guidance on how to answer the questions. In some cases data may be based on implementing partners' own assessments.

Additional comments

This indicator might be complemented by quantitative output indicators that can be applied directly to support programmes whose goals include the realisation of the outcomes addressed by the indicator. Quantitative outcome indicators might also be identified depending on the precise nature of an intervention, and these might be based on an adaptation of the outcome version of the indicator described here.

TAMD Climate Change Indicator - Methodological Note

Short title	INDICATOR 5. USE OF CLIMATE INFORMATION				
	Extent to which climate information is (i) used to inform responses to climate change, and (ii) generated at all levels of society				
Type or Indicator	Scorecard, output or outcome depending on how applied				
Technical definition/ Methodological summary	This indicator is designed to assess the extent to which adaptation and adaptation-relevant development interventions are informed by information about climate change (nature, magnitude, rapidity, local manifestations, associated risks), and to which they help to generate new information about climate change.				
	The indicator can be used to assess the performance of an individual capacity building programme, through evaluation of the target system (e.g. ministry, sector, institution) at the beginning, during, and at the end of the programme.			n (e.g.	
	The indicator may also be used to assess the use an information by systems targeted by multiple programm		ation of o	climate	
	Where the aim is to evaluate the effectiveness interventions to improve the use and generation of assessments will need to be supported by evidence are attributable to the programme(s) in question.	of clima	te inforn	nation,	
	The indicator is most likely to represent an <u>outcome</u> indicator, as it examines the outcomes at the level of the target system resulting from the outputs of programmes.				
	The indicator could also be used as an <u>output</u> indicator, if it is adapted to measure climate information and/or the uptake of climate information resulting from a specific programme.				
	The indicator takes the form of a scorecard based on five criteria relating to the extent to which climate information is used and generated. These criteria are expressed as questions that ask to what extent the criteria have been met: not at all ("NO"), partially ("PARTIAL"), or to a large extent/completely ("YES").				
	An overall score is calculated, as the number of "PARTIAL" answers plus the number of "YES" answers, with each of the former scoring 1 and each of the latter scoring 2, giving a maximum score of 10.				
	The indicator scorecard is set out in the table below.				
	INDICATOR 5. Use of climate information				
	CRITERIA/QUESTIONS	NO	PART IAL	YES	
	Observational data relating to climate trends and variability available/used.				
	Climate information (forecasts, projections, information on responses) readily accessible via information sharing platforms or networks.				
	3. Climate information generated by foreign and international organisations (e.g. IPCC, research bodies, academic institutions) readily accessible/				

	used.			
4.	Does the capacity to interpret and use climate information (e.g. in scenario planning, risk and vulnerability assessments and frameworks) exist?			
5.	5. Is the use of scientific information complemented by the use of local/traditional indigenous knowledge?			
	SCORE (No. of "YES" answers x 2, plus no. of "PARTIAL" answers x 1)			

- 1. This indicator addresses the use (and generation) of climate information to contextualise and inform adaptation decision-making. Climate information is used to evaluate risks associated with climate change (and variability) that are associated with (changes in) the occurrence of extreme events (e.g. heat-waves, droughts, intense rainfall events associated with flooding and landslides, etc) and longer-term changes/trends in key climatic variables (e.g. temperature, rainfall, sealevel, etc).
- 2. The indicator is used to assess systems targeted by one or more programmes, and is an outcome indicator, which will be assessed at the beginning, during, and at the end of a programme (where the outcomes resulting from a single programme are to be assessed), or at regular intervals (e.g. annually) where the cumulative results of multiple programmes are to be assessed. Where the indicator is applied to a targeted system, improvements in scores will need to be complemented by supporting qualitative evidence in order to demonstrate attribution (e.g. narratives, testimonials, other evidence of causal relationships).
- 3. The indicator might also be adapted for use as an outcome indicator, e.g. to evaluate the extent to which a programme has generated climate information that can/will be used in systems targeted by the programme, and/or the actual use/uptake of climate information in decision-making and planning processes within that system.
- 4. Observational data [Question 1] are data that are collected by meteorological observing systems and collated and disseminated by national meteorological services or other organisations with a similar role. These data allow changes in seasonality and other aspects of climate variability, and longer-term climate trends, to be identified.
- 5. A variety of different types of climate information [Question 2] may be useful to members of the public and institutional decision-makers. These include seasonal forecasts (e.g. for farmers), short-term weather forecasts or real-time information about existing conditions (e.g. for pastoralists who need to know where grazing is available), longer-term (e.g. downscaled) projections for planners (e.g. of sea-level rise, potential changes in rainfall or temperature), notifications when key climatic variables cross certain thresholds (e.g. when rainfall deficits reach a certain magnitude for weather-related insurance), information about recent/historical trends that might provide a guide for how climatic conditions are likely to evolve in the near to medium term, etc.
- 6. Climate information generated by international or foreign bodies/organisations [Question 3] is most likely to be useful to planners, strategic decision-makers and research organisations. This information includes global and regional climate projections from bodies such as the Intergovernmental Panel on Climate Change (IPCC) and international data centres, which may be used to produce downscaled projections

- useful at sub-national scales. A number of initiatives have sought to convert data from global climate models into accessible, country-level data that can be used for adaptation and development decision-making (e.g. the UNDP-Oxford University Climate Change Country Profiles).
- 7. Vulnerability assessments [Question 4] are widely used in climate change adaptation, but there is often confusion about concepts such as vulnerability and risk, and such assessments may not always yield useful or practical results or be followed up with further actions. Risk frameworks that examine the societal aspects of vulnerability in parallel with but separately to current and potential future climate hazards, and the exploration of possible adaptation strategies and options under different plausible futures through scenario planning, are less frequently employed but are often conceptually easier to deal with and more transparent. Scenarios are useful tools for examining the implications of a range of potential future changes, but there is a risk that they may be used in an inappropriately deterministic way if they are not understood properly.
- 8. Local, traditional or indigenous knowledge [Question 5] has proved to be useful in understanding historical and emerging climate risks in a number of contexts. Local people are often intimately familiar with their environment, and can identify trends and changes in climate where useful observational records based on the collection or meteorological data are lacking. In particular, local knowledge can identify changes in seasonality and the behaviour of extremes that might not be picked up by conventional meteorological data, which are often presented in terms of monthly or annual averages. Even where traditional ways of forecasting weather and climate are breaking down, this may be an indication that empirical relationships between climatic and environmental variables are changing as a result of climate change.

Guidance on answering the questions that make up the indicator is provided in the table below. This includes guidance on how to treat the criteria in the scorecard according to its application directly to a programme, or to a system targeted by a programme.

		Conditions necessary for answer of:		
	Q	NO	PARTIAL	YES
	1	Required observational data not available/used, or of poor quality due to poorly resourced meteorological or equivalent services and observing networks.	Relevant observational data available/used but significant resource and coverage gaps (e.g in locations of interest where data not available).	Required observational data available/used; data available for all major regions/ locations of interest, due to well-resourced met services and observing networks.
	2	No or very limited/poor mechanisms for disseminating met and climate data; significant administrative or cost barriers to public access. For programme: no or very limited dissemination of met and climate data.	Mechanisms exist for accessing met and climate data, but restricted to limited number of (e.g. research or commercial) organisations; public access limited or expensive. For programme: some dissemination of met and climate data but limited in scope.	Met and climate data readily and freely available through publicly accessible mechanisms (web, phone, via agricultural extension workers, other networks, organisations, etc). For programme: data used made readily available to relevant stakeholders.
	3	Data/information from international/foreign organisations not accessible due to lack of mechanisms. For programmes: such data/information not used.	Some data/information from international/ foreign organisations available, but limited in usefulness; other data that might be useful not accessible. For programme: limited use of such data and available, potentially useful data not used.	Data/information from international/foreign organisations routinely accessed and used due to existence of effective access mechanisms. For programmes: such data/ information as is appropriate accessed and used effectively.
	4	Stakeholders not familiar with risk frameworks, vulnerability assessments, scenario planning, and these not used.	Some use of risk frameworks, vulnerability assessments, scenario planning, but limited (e.g. vulnerability assessment done but informs decision-making only to limited extent, not followed up/ associated with scenario planning, or ignores available information on observed or projected changes).	Risk frameworks, vulnerability assessments and scenario planning used routinely/extensively.
	5	Local/traditional/ indigenous knowledge (LTIK) not considered relevant to adaptation decision-making.	LTIK used to informs decision-making, but this is ad hoc and informal.	High-level recognition of potential usefulness of LTIK and active engagement with LTIK to add value to scientific knowledge and inform decision-making.
Rationale	insti clim add	effective action on climatutions, key stakeholders ate change and associativess climate change the elopment. Where informons (e.g. seasonal fo	s and the public at larged ed risks, and responsive prough adaptation and/o nation on climate change	e need to be aware of to initiatives intended to or mitigation/low-carbon

adaptation options) is made available to stakeholders, this information needs to be in a form that they can understand and use. Awareness is most likely to be enhanced, and useful information produced, where key institutions are given mandates to raise awareness and generate and distribute information while engaging with stakeholders and the public at large.

Data source

Data will be collected through evaluations based on completion of the scorecard (above) at specified intervals. Depending on the purpose of the evaluation, the scorecard might be completed by staff in donors' country offices, by external consultants, or (for national self-assessment) by government or other relevant personnel.

Where assessments are carried out by external consultants, they will be based on consultations with key staff in the sectors being evaluated and (where appropriate) staff within donor country offices. Where assessments are carried out by country offices, they will be based on the judgment of key country office staff with responsibility for supporting the (national) processes and sectors in question, e.g. through sector budget support. In the case of self-assessment, they will be carried out by staff familiar with the relevant sectors.

When assigning scores, evaluators concerned with the efficacy of support programmes should also record **complementary qualitative information** relating to attribution of outcomes to interventions. This information might include notes on the chronology of changes across the target sectors relative to key outputs from support programmes, the views of key stakeholders regarding the extent to which outcomes are direct (or indirect) consequences of programme outputs, and the identification of 'pathways of change' that link outputs and outcomes (e.g. via key mechanisms, processes, events).

Data included and data aggregation

Support to a single institution, sector, mechanism or process

Where the indicator is used to report on outcomes from support to a single system or entity (i.e. institution, sector, mechanisms or process), the data reported will be the score calculated across the 5 questions that make up the indicator (up to a maximum of 10), applied to the system targeted by the support. Where this support is from a single intervention/programme, the scorecard should be completed at the beginning of the programme, during the programme (e.g. annually in the logframe), and at the end of the programme. Where support is from multiple programmes, the scorecard should be conducted at regular intervals (e.g. annually, 6-monthly) spanning the period of support.

Support to multiple institutions, sectors, mechanisms or process

Where the indicator is used to report on outcomes from support to multiple systems or entities (e.g. from multiple support programmes across multiple sectors for a cross-sectoral national-level assessment), an overall score may be calculated by averaging the totals for each relevant system/entity. However, such aggregated scores should always be presented alongside disaggregated data (detailing results for individual target systems) so that areas of strength and weakness can be identified (e.g. in specific sectors, ministries, etc). Alternatively, a national system might be assessed as whole. The approach taken will depend on the purpose of the assessment (e.g. a comprehensive assessment of CRM at the national level across all relevant sectors versus an assessment of national mechanisms that sit 'above' the sectoral level). It will also depend on the national CRM 'architecture (e.g. is CRM coordinated centrally by a body that has authority over relevant sectors, or decentralised down to the sectoral level).

Interpretation

In all cases, scores should be presented alongside qualitative information related to attribution (see data included and aggregation).

	Outcomes will be appeared on the basis of changes in the page over time
	Outcomes will be assessed on the basis of changes in the score over time, over the lifetime of the programme or programmes being evaluated, or otherwise at regular intervals for (e.g. internal) evaluation of planning systems in general. Attribution of outcomes to outputs will be assessed through the use of complementary qualitative information.
Most recent baseline	The baseline will be represented by the first available set of results, i.e. the first time the scorecard is applied to a system. Subsequent assessments will be looking for an improvement/increases in score(s) relative to this first assessment.
Good performance	Good performance will be demonstrated by improvement/increases in scores over time that can be linked with support programmes. Where assessment is focused on multiple processes evaluation will be looking for a consistent improvement across these processes, sustained over time. Good performance of support programmes that target these processes will be demonstrated by strong evidence that the outcomes can be attributed to this support (see data categories above, and discussion in TAMD Technical Paper).
Return format (options)	Scores (out of 10) at different points in time (e.g. before, during, after intervention)
	Numbers of target systems (within or across countries) improving scores by different amounts (increasing over time)
	For the assessment of multiple systems (e.g. sectors, ministries, countries, etc), results might be represented graphically. For reporting directed at target systems, changes in scores over a specified time period (from -10 to +10 at the theoretical extremes) might be represented along the horizontal axis, and numbers of systems (for each integer change in score) along the vertical axis.
Data dis- aggregation	If the indicator is to be presented as a single score out of 10 as in "Return format", answers for each of the 5 questions from which the indicator is constituted should also be preserved, so that areas of strength and weakness can be identified. Similarly, where evaluation of multiple target systems has involved aggregation/averaging across systems, results should be preserved for individual systems.
Data availability	Evaluation of this indicator does not depend on the availability of independent/external data. The indicator is based on the judgment of those assessing the processes in question (programme managers, country office staff, such as climate change advisers, implementing partners, external consultants). Guidance is provided on how to complete the scorecard, based on criteria for different answers for each question making up the indicator. Data are therefore based on one or more of the following: (i) the informed judgment of the evaluators, (ii) knowledge of the relevant programmes and target systems, (iii) consultations with stakeholders (who will include country office staff if the assessment is carried out externally). The availability of reliable data therefore will depend on the level of knowledge of personnel involved in the evaluation, and/or on the quality of consultations. However, there should be sufficient knowledge among evaluators to ensure that the scorecard is completed realistically.
Time period/ lag	Where this indicator is applied in the context of individual programmes, it should be assessed annually in programme logframes, based on assessment of the target system(s). The indicator can also be applied to target systems (e.g. national systems, sectors, ministries, etc) on a regular (e.g. annual or biennial) basis, for example where these systems receive budget support.
Quality assurance measures	Where this indicator is assessed internally (e.g. by country office staff), an independent assessment might be performed (e.g. during a strategic review) by external experts. The answers to the 5 questions constituting the indicator should be justified by some explanation, e.g. describing the nature of the screening or mainstreaming processes and giving examples of measures to

	address climate change that have been identified during the assessment.
Data issues	It is recognised that some element of subjective judgment is required, although the questions have been designed to be quite specific and transparent, with supporting guidance on how to answer the questions. In some cases data may be based on implementing partners' own assessments.
Additional comments	This indicator might be complemented by quantitative output indicators that can be applied directly to support programmes whose goals include the realisation of the outcomes addressed by the indicator. Quantitative outcome indicators might also be identified depending on the precise nature of an intervention, and these might be based on an adaptation of the outcome version of the indicator described here.

TAMD Climate change indicator - methodological note

Short title	INDICATOR 6. PLANNING UNDER UNCERTAINTY						
	Institutional capacity for decision-making under climatic uncertainty						
Type or Indicator	Scorecard (output or outcome depending on how applied)						
Technical definition/ Methodological	This indicator is designed to assess the extent to which climate change planning explicitly addresses uncertainty related to future changes in climate.						
summary	The indicator can be used to assess the performance of an individual capacity building programme, through evaluation of the target system (e.g. ministry, sector, institution) at the beginning, during, and at the end of the programme.						
	The indicator may also be used to assess the treatment of uncertainty in development planning in systems targeted by multiple programmes, based on regular completion of the scorecard to track changes over time.						
	Where the aim is to evaluate the effectiveness of capacity building interventions to improve institutional knowledge and capacity to address climate change, assessments will need to be supported by evidence that any improvements are attributable to the programme(s) in question.						
	The indicator is most likely to represent an <u>outcome</u> indicator, as it examines the outcomes at the level of the target system resulting from the outputs of programmes.						
	The indicator could also be used as <u>output</u> indicator, if it is adapted to capture the integration of measures to address uncertainty where these are represented explicitly by programme components (e.g. screening activities for risks under different sets of future climate conditions).						
	The indicator takes the form of a scorecard based on the extent to which methodologies for addressing unce development planning, and for ensuring that planning new information. These criteria are expressed as que extent the criteria have been met: not at all ("NO"), part a large extent/completely ("YES").	dologies for addressing uncertainty are employed in ad for ensuring that planning can be updated with riteria are expressed as questions that ask to what en met: not at all ("NO"), partially ("PARTIAL"), or to					
	An overall score is calculated, as the number of "PARTIAL" answers planumber of "YES" answers, with each of the former scoring 1 and each latter scoring 2, giving a maximum score of 10. The indicator scorecard is set out in the table below.						
	INDICATOR 6. Planning under uncertainty CRITERIA/QUESTIONS	NO	PART	YES			
	CRITERIA/QUESTIONS	NO	IAL	IES			
	Does planning (and wider climate change dialogue) incorporate the use of "envelopes of uncertainty" defined in terms of plausible ranges of key climatic parameters over relevant timescales, informed by climate projections where feasible?						
	Does planning make use of scenario planning exercises, preferably based on "envelopes of uncertainty"?						
	Does planning explicitly address risks associated						

	with "maladaptation"?		
4.	Is planning, design and decision-making guided by well-developed frameworks and methodologies that address uncertainty?		
5.	Do mechanisms exist for ensuring that planning guidance is updated with new information on climate change as it becomes available?		
	ORE (No. of "YES" answers x 2, plus no. of "PARTIAL" swers x 1)		

- 1. The indicator is used to assess systems targeted by one or more programmes, and is an outcome indicator, which will be assessed at the beginning, during, and at the end of a programme (where the outcomes resulting from a single programme are to be assessed), or at regular intervals (e.g. annually) where the cumulative results of multiple programmes are to be assessed. Where the indicator is applied to a targeted system, improvements in scores will need to be complemented by supporting qualitative evidence in order to demonstrate attribution (e.g. narratives, testimonials, other evidence of causal relationships).
- 2. "Envelopes of uncertainty" [Question 1] are ranges of potential future conditions defined for relevant climate variables, e.g. in terms of maximum and minimum extremes in projected rainfall, temperature, sealevel rise, water availability, etc. Such envelopes may be defined based on climate model projections/outputs at the relevant spatial scales, or based on plausible ranges inferred from global or regional projections in combination with expert judgment.
- 3. Scenario planning [Question 2] will involve the use of envelopes of uncertainty, but represents a much broader set of activities, including the identification of thresholds (within these envelopes) beyond which the viability of existing systems or practices is in doubt, and the identification of sets of potential adaptation strategies and measures, e.g. in collaboration with key stakeholders.
- 4. Maladaptation [Question 3] occurs when development activities inadvertently increase vulnerability to climate change, in' of patterns of development that untruinech climatic conditions, increasing the risk of economic and wider societal disruption. Typically, maladaptation occurs when longer term climatic and environmental change and variability aimenored in development planning. This may result in development strategies being designed and implemented under implicit or explicit assumptions of climatic stationarity (e.g. assuming current climatic conditions will continue indefinitely), or that current levels of key resources such as water the future when climate change resources. The OECD (2009: 49) defines maladaptation as "business-asusual development which, by overlooking climate change impacts, inadvertently increases exposure and/or vulnerability to climate change. Maladaptation could also include actions undertaken to adapt to climate impacts that do not succeed in reducing vulnerability but increase it instead".

Guidance on answering the questions that make up the indicator is provided in the table below.

	Conditions necessary for answer of:				
Q	NO	PARTIAL	YES		
1	Planning essentially assumes future climatic conditions will resemble those of today.	Some consideration of ranges of uncertainty for longer planning horizons, but either not routine based on limited data and no formal guidance.	Routine use of envelopes of uncertainty, based on range of data sources represent relevant variables, to define ranges of plausible future climatic conditions where relevant to planning horizons (medium to long-term)		
2	No use of scenario planning in wider planning activities.	Some use of scenario planning, but not routine or widespread.	Scenario planning routinely used to explore implications of different sets of plausible future conditions, in order to identify most appropriate development/adaptation trajectories.		
3	Risks of maladaptation not acknowledged – business-as-usual development even where climate change poses potential systemic risks to development.	Risks of maladaptation acknowledged and some measures made to address these risks, but no significant reevaluation of development strategies (business-as-usual with adaptation as "add-on").	Maladaptation risks considered carefully and at early stage in planning, so that development strategies may be redesigned or rethought where risks are significant.		
4	No guidance frameworks exist.	Some guidance available that addresses uncertainty, but that falls short of formal guidance on defining envelopes of uncertainty & addressing maladaptation.	Well-developed guidance available on how to address uncertainty, including defining envelopes of uncertainty, & identifying & avoiding maladaptation risks.		
5	Planning is rigid with little or no scope for changes to development trajectories in the light of new information on climate change risks.	Appreciation of need to maintain flexibility in development trajectories to respond to new information on climate change risks is evident, with some measures to achieve this, but these are patchy, ad hoc, and not informed by any well-developed guidance.	Well-developed mechanisms exist to ensure that planning and development in general is sufficiently flexible to accommodate new information (e.g. based on guidance on "lowregrets" options, and built-in redundancy).		

Rationale

While we can be confident about some manifestations of climate change (e.g. rising sea-levels; reduced water availability in many areas; higher minimum, average and maximum temperatures; greater climate variability; more frequent and severe droughts and floods, and increase precipitation intensity in some areas), many uncertainties remain regarding precisely how climate change will impact particular geographic areas and systems over specific timescales. In some instances the uncertainty is related to the magnitude of future changes (e.g. sea-level rise), while in others uncertainty is associated with the sign of future changes (e.g. uncertainty as to whether rainfall will increase or decrease in some locations such as the Sahel).

For these reasons, we cannot plan for precisely known future conditions. Development needs to be robust in the face of this uncertainty (e.g. "win-win" options that will be viable whatever climatic conditions pertain in the future), to be sufficiently flexible that it can be adapted in the light of new information or unexpected changes, and to avoid maladaptation, e.g. through "lock-in" to patterns of development that depend on future conditions that might not exist.

It is therefore vitally important that planning – particularly for long timescales – addresses and accommodates uncertainty.

Data source

Where assessments using planning indicators are carried out by external consultants, they will be based on consultations with CO staff and DFID development partners and national governments. Where assessments are carried out by COs themselves, they will be based on the judgment of key CO staff with responsibility for supporting the national processes and sectors in question, e.g. through sector budget support.

Data included and data aggregation

Data will be collected through evaluations based on completion of the scorecard (above) at specified intervals. Depending on the purpose of the evaluation, the scorecard might be completed by staff in donors' country offices, by external consultants, or (for national self-assessment) by government or other relevant personnel.

Where assessments are carried out by external consultants, they will be based on consultations with key staff in the sectors being evaluated and (where appropriate) staff within donor country offices. Where assessments are carried out by country offices, they will be based on the judgment of key country office staff with responsibility for supporting the (national) processes and sectors in question, e.g. through sector budget support. In the case of self-assessment, they will be carried out by staff familiar with the relevant sectors.

When assigning scores, evaluators concerned with the efficacy of support programmes should also record **complementary qualitative information** relating to attribution of outcomes to interventions. This information might include notes on the chronology of changes across the target sectors relative to key outputs from support programmes, the views of key stakeholders regarding the extent to which outcomes are direct (or indirect) consequences of programme outputs, and the identification of 'pathways of change' that link outputs and outcomes (e.g. via key mechanisms, processes, events).

Most recent baseline

Support to a single institution, sector, mechanism or process

Where the indicator is used to report on outcomes from support to a single system or entity (i.e. institution, sector, mechanisms or process), the data reported will be the score calculated across the 5 questions that make up the indicator (up to a maximum of 10), applied to the system targeted by the support. Where this support is from a single intervention/programme, the scorecard should be completed at the beginning of the programme, during the programme (e.g. annually in the logframe), and at the end of the programme. Where support is from multiple programmes, the scorecard should be conducted at regular intervals (e.g. annually, 6-monthly) spanning the period of support.

Support to multiple institutions, sectors, mechanisms or process

Where the indicator is used to report on outcomes from support to multiple systems or entities (e.g. from multiple support programmes across multiple sectors for a cross-sectoral national-level assessment), an overall score may be calculated by averaging the totals for each relevant system/entity. However, such aggregated scores should always be presented alongside disaggregated data (detailing results for individual target systems) so that areas of strength and weakness can be identified (e.g. in specific sectors, ministries, etc). Alternatively, a national system might be assessed as whole.

	The approach taken will depend on the purpose of the assessment (e.g. a
	comprehensive assessment of CRM at the national level across all relevant sectors versus an assessment of national mechanisms that sit 'above' the sectoral level). It will also depend on the national CRM 'architecture (e.g. is CRM coordinated centrally by a body that has authority over relevant sectors, or decentralised down to the sectoral level).
	Interpretation In all cases, scores should be presented alongside qualitative information related to attribution (see data included and aggregation).
	Outcomes will be assessed on the basis of changes in the score over time, over the lifetime of the programme or programmes being evaluated, or otherwise at regular intervals for (e.g. internal) evaluation of planning systems in general. Attribution of outcomes to outputs will be assessed through the use of complementary qualitative information.
Good performance	The baseline will be represented by the first available set of results, i.e. the first time the scorecard is applied to a system. Subsequent assessments will be looking for an improvement/increases in score(s) relative to this first assessment.
Return format (options)	1. Scores (out of 10) at different points in time (e.g. before, during, after intervention)
	2. Numbers of target systems (within or across countries) improving scores by different amounts (increasing over time)
	For the assessment of multiple systems (e.g. sectors, ministries, countries, etc), results might be represented graphically. For reporting directed at target systems, changes in scores over a specified time period (from -10 to +10 at the theoretical extremes) might be represented along the horizontal axis, and numbers of systems (for each integer change in score) along the vertical axis.
Data dis- aggregation	If the indicator is to be presented as a single score out of 10 as in "Return format", answers for each of the 5 questions from which the indicator is constituted should also be preserved, so that areas of strength and weakness can be identified. Similarly, where evaluation of multiple target systems has involved aggregation/averaging across systems, results should be preserved for individual systems.
Data availability	Evaluation of this indicator does not depend on the availability of independent/external data. The indicator is based on the judgment of those assessing the processes in question (programme managers, country office staff, such as climate change advisers, implementing partners, external consultants). Guidance is provided on how to complete the scorecard, based on criteria for different answers for each question making up the indicator. Data are therefore based on one or more of the following: (i) the informed judgment of the evaluators, (ii) knowledge of the relevant programmes and target systems, (iii) consultations with stakeholders (who will include country office staff if the assessment is carried out externally). The availability of reliable data therefore will depend on the level of knowledge of personnel involved in the evaluation, and/or on the quality of consultations. However, there should be sufficient knowledge among evaluators to ensure that the scorecard is completed realistically.
Time period/ lag	Where this indicator is applied in the context of individual programmes, it should be assessed annually in programme logframes, based on assessment of the target system(s). The indicator can also be applied to target systems (e.g. national systems, sectors, ministries, etc) on a regular (e.g. annual or biennial) basis, for example where these systems receive budget support.
Quality assurance measures	Where this indicator is assessed internally (e.g. by country office staff), an independent assessment might be performed (e.g. during a strategic review) by external experts. The answers to the 5 questions constituting the indicator

	should be justified by some explanation, e.g. describing the nature of the screening or mainstreaming processes and giving examples of measures to address climate change that have been identified during the assessment.
Data issues	It is recognised that some element of subjective judgment is required, although the questions have been designed to be quite specific and transparent, with supporting guidance on how to answer the questions. In some cases data may be based on implementing partners' own assessments.
Additional comments	This indicator might be complemented by quantitative or categorical output indicators that can be applied directly to support programmes whose goals include the realisation of the outcomes addressed by the indicator.

TAMD Climate Change Indicator - Methodological Note

Short title	INDICATOR 7. PARTICIPATION
	Quality of stakeholder engagement in decision-making to address climate change
Type or Indicator	Scorecard, output or outcome depending on how applied
Technical definition/ Methodol- ogical summary	This indicator is designed to assess the extent to which climate change planning involves all relevant stakeholders, in terms of both "vertical" representation (i.e. across different levels of governance from national to community level) and "horizontal" representation (i.e. across a diversity of relevant stakeholders at any particular level but particularly the community level).
	The indicator can be used to assess the performance of an individual capacity building programme, through (i) evaluation of the quality of participation in initiatives managed by a target system (e.g. ministry, sector, institution) at the beginning, during, and at the end of the programme, or (ii) evaluation of participation within the context of the programme itself, where the nature of the programme makes such an approach relevant (i.e. where there is significant stakeholder engagement at multiple levels and scales, such as in an intervention to build capacity at the local level).
	The indicator may also be used to assess the quality of participation in initiatives managed by systems targeted by multiple programmes.
	The indicator may represent an <u>outcome</u> indicator, examining the outcomes at the level of the target system resulting from the outputs of a programme or programmes.
	The indicator may also represent an <u>output</u> indicator when it is used to evaluate the quality of participation in a specific programme that targets stakeholders at multiple levels.
	The indicator takes the form of a scorecard based on five criteria relating to vertical and horizontal representation, with specific attention to those stakeholders most likely to be affected by climate change or to benefit from measures to address climate change. These criteria are expressed as questions that ask to what extent the criteria have been met: not at all ("NO"), partially ("PARTIAL"), or to a large extent/completely ("YES").
	An overall score is calculated, as the number of "PARTIAL" answers plus the number of "YES" answers, with each of the former scoring 1 and each of the latter scoring 2, giving a maximum score of 10.
	The indicator scorecard is set out in the table below.

INE	INDICATOR 7. Participation				
CR	ITERIA/QUESTIONS	NO	PAR- TIAL	YES	
1.	Are all relevant levels of governance (national, provincial/district, local/community) represented?				
2.	Are those who might be adversely impacted by climate change initiatives represented?				
3.	Are those most in need of / likely to benefit from measures to address climate change represented?				
4.	Are the poorest and most marginalized members of society represented?				
5.	Is the participation of all the above groups sustained throughout planning and implementation (i.e. at the start, end and throughout an initiative)?				
	CORE (No. of "YES" answers x 2, plus no. of "PARTIAL" swers x 1)				

Methodological points to note

- 1. While this indicator has been developed in the context of climate change adaptation, it is sufficiently flexible that it also can be applied in mitigation/low-carbon development (LCD) contexts. Where it is applied to the coordination of both mitigation/LCD and adaptation activities it is recommended that these adaptation and mitigation are addressed separately, particularly where mitigation activities (e.g. regulation of greenhouse gas emissions) are more advanced than adaptation activities, or vice versa.
- 2. The indicator is used to assess systems targeted by one or more programmes, and is an outcome indicator, which will be assessed at the beginning, during, and at the end of a programme (where the outcomes resulting from a single programme are to be assessed), or at regular intervals (e.g. annually) where the cumulative results of multiple programmes are to be assessed. Where the indicator is applied to a targeted system, improvements in scores will need to be complemented by supporting qualitative evidence in order to demonstrate attribution (e.g. narratives, testimonials, other evidence of causal relationships).
- 3. Modified versions of this indicator might also be used to report on the outputs of a specific programme or project, in which case the questions should be related to the how participation is addressed within the programme itself: i.e. has the programme engaged the appropriate stakeholders and has engagement been sustained through programme design and implementation. The scorecard might also be modified to constitute a (set of) quantitative indicator(s), addressing how many people from different interest/stakeholder groups have participated in the design and implementation of a programme or project.
- 4. Question 1 addresses the various 'vertical' levels of governance represented by stakeholders with an interest in an intervention or set of interventions (depending on precisely what the indicator is evaluating). These include stakeholders at all levels who are likely to be affected by the intervention(s) in question, whether directly or indirectly, with the types of effects ranging from impacts on policy regimes at the level of national government, to impacts on livelihoods and access to resources at the local level.
- 5. Question 2 focuses on the potential adverse impacts of initiatives (i.e. adverse impacts of a programme/project on certain groups, the environment, or society at large), which may involve (i) increases in

poverty or marginalisation (e.g. due to displacement or restriction of access to land or other resources); (ii) increases in vulnerability to climate change (e.g. restriction of pastoralists' access to grazing lands used in times of drought - these might be developed for irrigated agriculture in the name of climate resilience as droughts become more frequent); (iii) wider maladaptation (e.g. where initiatives risk increasing dependence on resources that are potentially threatened by climate change, with the possible result of a systemic increase in societal or economic vulnerability).

- 6. In Question 3, those most in need of and likely to benefit from measures to address climate change are (i) for adaptation initiatives, those who are most vulnerable to / risk from the impacts of climate change, (ii) for LCD initiatives, those most in need of access to (clean) energy sources or of assistance to manage resources that deliver mitigation benefits (e.g. forests).
- 7. Question 4 addresses the poorest and most marginalised members of society/community, regardless of climate change. While these people are likely to be among the most vulnerable to climate change due to poverty, poor access to resources, low adaptive capacity, etc, poverty does not map precisely onto vulnerability. For example, vulnerability might be related to reliance on or ownership of climate-sensitive assets or livelihoods. Vulnerability metrics related to such assets will exclude those with no assets, who may still benefit from climate change initiatives with a poverty-reduction element.

Guidance on answering the questions that make up the indicator is provided in the table below.

-	^	Conditions necessary for answer of:		
i	Q	NO	PARTIAL	YES
	1	Planning is top-down, with little or no participation or buy-in from local/community (and/or, in the case of nationally-driven initiatives, district/provincial) level.	Some integration across different levels but extent to which planning informed from all levels (particularly from lower to higher levels) is limited.	Good integration across different levels of governance, with good balance between "topdown" drivers and "bottom-up" informing of planning process.
	2	Those who might be adversely affected by initiatives have little or no voice.	Consultation with those who may be adversely affected by initiatives; some impact on planning processes & outcomes, but limited.	Those potentially adversely affected by initiatives have strong voice and can influence planning processes & outcomes; mechanisms such as compensation in place and widely accepted; maladaptation issues addressed by inclusion of stakeholders who might be affected indirectly.
3	3	Poor matching of climate change initiatives & measures to those most in need / likely to benefit from them; these groups not included in planning processes.	Those most in need and likely to benefit from climate change initiatives & measures play role in planning processes and are targeted to some extent, but further action needed to improve their representation & efficient targeting of measures.	Effective targeting of climate change initiatives & measures to those most in need and most likely to benefit from them; these groups play key role in planning processes & identification, prioritisation & implementation of measures.
	4	Poorest & most marginalised excluded from planning processes.	Some representation of poorest and most marginalised, but impact on representation on planning and poverty/ marginalisation outcomes is limited.	Poorest & most marginalised brought into, and influence, planning process, resulting in poverty reduction and improved integration into society/ community.
	5	Participation is not sustained beyond an initial consultation phase.	Some stakeholders remain involved in planning and implementation process throughout lifetime of initiatives, but others fall out of participatory process.	All or majority of stakeholders remain engaged throughout planning and implementation phases, affecting how initiatives evolve.
t t t iii c c c r	Climate change initiatives are most likely to be accepted by the public and those within the relevant institutions, and to deliver sustained benefits, where there is widespread participation and "buy-in" throughout the design and implementation processes. Where initiatives are intended to deliver community benefits (either in the form of LCD or adaptation), measures to deliver these benefits will be most appropriately tailored to local contexts and needs where they are informed or driven by community participation. While the need for participation is not limited to climate change initiatives, it is important that such initiatives address climate-specific vulnerabilities and			

needs. This is reflected in Questions 2 and 3.

Data source

Data will be collected through evaluations based on completion of the scorecard (above) at specified intervals. Depending on the purpose of the evaluation, the scorecard might be completed by staff in donors' country offices, by external consultants, or (for national self-assessment) by government or other relevant personnel.

Where assessments are carried out by external consultants, they will be based on consultations with key staff in the sectors being evaluated and (where appropriate) staff within donor country offices. Where assessments are carried out by country offices, they will be based on the judgment of key country office staff with responsibility for supporting the (national) processes and sectors in question, e.g. through sector budget support. In the case of self-assessment, they will be carried out by staff familiar with the relevant sectors.

When assigning scores, evaluators concerned with the efficacy of support programmes should also record **complementary qualitative information** relating to attribution of outcomes to interventions. This information might include notes on the chronology of changes across the target sectors relative to key outputs from support programmes, the views of key stakeholders regarding the extent to which outcomes are direct (or indirect) consequences of programme outputs, and the identification of 'pathways of change' that link outputs and outcomes (e.g. via key mechanisms, processes, events).

Data included and data aggregation

Support to a single institution, sector, mechanism or process

Where the indicator is used to report on outcomes from support to a single system or entity (i.e. institution, sector, mechanisms or process), the data reported will be the score calculated across the 5 questions that make up the indicator (up to a maximum of 10), applied to the system targeted by the support. Where this support is from a single intervention/programme, the scorecard should be completed at the beginning of the programme, during the programme (e.g. annually in the logframe), and at the end of the programme. Where support is from multiple programmes, the scorecard should be conducted at regular intervals (e.g. annually, 6-monthly) spanning the period of support.

Support to multiple institutions, sectors, mechanisms or process

Where the indicator is used to report on outcomes from support to multiple systems or entities (e.g. from multiple support programmes across multiple sectors for a cross-sectoral national-level assessment), an overall score may be calculated by averaging the totals for each relevant system/entity. However, such aggregated scores should always be presented alongside disaggregated data (detailing results for individual target systems) so that areas of strength and weakness can be identified (e.g. in specific sectors, ministries, etc). Alternatively, a national system might be assessed as whole. The approach taken will depend on the purpose of the assessment (e.g. a comprehensive assessment of CRM at the national level across all relevant sectors versus an assessment of national mechanisms that sit 'above' the sectoral level). It will also depend on the national CRM 'architecture (e.g. is CRM coordinated centrally by a body that has authority over relevant sectors, or decentralised down to the sectoral level).

Interpretation

In all cases, scores should be presented alongside qualitative information related to attribution (see data included and aggregation).

Outcomes will be assessed on the basis of changes in the score over time, over the lifetime of the programme or programmes being evaluated, or otherwise at regular intervals for (e.g. internal) evaluation of planning

	systems in general. Attribution of outcomes to outputs will be assessed
Most recent baseline	through the use of complementary qualitative information. The baseline will be represented by the first available set of results, i.e. the first time the scorecard is applied to a system. Subsequent assessments will be looking for an improvement/increases in score(s) relative to this first assessment.
Good performance	Good performance will be demonstrated by improvement/increases in scores over time that can be linked with support programmes. Where assessment is focused on multiple processes evaluation will be looking for a consistent improvement across these processes, sustained over time. Good performance of support programmes that target these processes will be demonstrated by strong evidence that the outcomes can be attributed to this support (see data categories above, and discussion in TAMD Technical Paper).
Return format	Scores (out of 10) at different points in time (e.g. before, during, after intervention)
	Numbers of target systems (within or across countries) improving scores by different amounts (increasing over time)
	For the assessment of multiple systems (e.g. sectors, ministries, countries, etc), results might be represented graphically. For reporting directed at target systems, changes in scores over a specified time period (from -10 to +10 at the theoretical extremes) might be represented along the horizontal axis, and numbers of systems (for each integer change in score) along the vertical axis.
Data dis- aggregation	If the indicator is to be presented as a single score out of 10 as in "Return format", answers for each of the 5 questions from which the indicator is constituted should also be preserved, so that areas of strength and weakness can be identified. Similarly, where evaluation of multiple target systems has involved aggregation/averaging across systems, results should be preserved for individual systems.
Data availability	Evaluation of this indicator does not depend on the availability of independent/external data. The indicator is based on the judgment of those assessing the processes in question (programme managers, country office staff, such as climate change advisers, implementing partners, external consultants). Guidance is provided on how to complete the scorecard, based on criteria for different answers for each question making up the indicator. Data are therefore based on one or more of the following: (i) the informed judgment of the evaluators, (ii) knowledge of the relevant programmes and target systems, (iii) consultations with stakeholders (who will include country office staff if the assessment is carried out externally). The availability of reliable data therefore will depend on the level of knowledge of personnel involved in the evaluation, and/or on the quality of consultations. However, there should be sufficient knowledge among evaluators to ensure that the scorecard is completed realistically.
Time period/ lag	Where this indicator is applied in the context of individual programmes, it should be assessed annually in programme logframes, based on assessment of the target system(s). The indicator can also be applied to target systems (e.g. national systems, sectors, ministries, etc) on a regular (e.g. annual or biennial) basis, for example where these systems receive budget support.
Quality assurance measures	Where this indicator is assessed internally (e.g. by country office staff), an independent assessment might be performed (e.g. during a strategic review) by external experts. The answers to the 5 questions constituting the indicator should be justified by some explanation, e.g. describing the nature of the screening or mainstreaming processes and giving examples of measures to address climate change that have been identified during the assessment.

Data issues	It is recognised that some element of subjective judgment is required, although the questions have been designed to be quite specific and transparent, with supporting guidance on how to answer the questions. In some cases data may be based on implementing partners' own assessments.
Additional comments	This indicator might be complemented by quantitative output indicators that can be applied directly to support programmes whose goals include the realisation of the outcomes addressed by the indicator. Quantitative outcome indicators might also be identified depending on the precise nature of an intervention, and these might be based on an adaptation of the outcome version of the indicator described here.

TAMD - Climate Change Indicator - Methodological Note

Short title	INDICATOR 8. AWARENESS AMONG STAKEHOLDERS				
	Awareness of climate change issues, risks and responses				
Type or Indicator	Scorecard, output or outcome depending on how applied				
Technical definition/ Methodological summary	This indicator is designed to evaluate awareness of climate change issue risks and potential response options, and actions to promote sur awareness, in different contexts.				
ouy	The indicator can be used to evaluate the performance of an individual capacity building programme, through evaluation of the target system (ministry, sector, institution, general population, community, etc) at beginning, during, and at the end of the programme.				
	The indicator may also be used to evaluate the evo climate change in systems targeted by multiple program		awarer	ness of	
	Where the aim is to evaluate the effectiveness interventions intended to improve institutional knowl address climate change, assessments will need to be that any improvements are attributable to the programm	ledge a	nd capa ed by ev	city to	
	In its current form, the indicator represents an <u>outcom</u> the outcomes at the level of the target system resulting programme or programmes.				
	The indicator may be modified so that it represents an <u>output</u> indicator for the evaluation of specific programmes or projects that address awareness-raising, for example through the use of quantitative and/or categorical data relating to the numbers of people reached by awareness raising activities, mechanisms established, etc.				
	The indicator takes the form of a scorecard based on five criteria relating to the extent to which methodologies for addressing uncertainty are employed in planning, and for ensuring that planning can be updated with new information. These criteria are expressed as questions that ask to what extent the criteria have been met: not at all ("NO"), partially ("PARTIAL"), or to a large extent/completely ("YES").			oyed in n new extent	
	An overall score is calculated, as the number of "PARTIAL" answers plus the number of "YES" answers, with each of the former scoring 1 and each of the latter scoring 2, giving a maximum score of 10.				
	The indicator scorecard is set out in the table below.				
	INDICATOR 8. Awareness among stakeholders				
	CRITERIA/QUESTIONS	NO	PART IAL	YES	
	Stakeholders aware of climate change and its potential implications for society.			l	
	Stakeholders aware of potential, available, or ongoing climate change response options.				
	Relevant information reaching key stakeholders in climate-sensitive sectors.				
	4. Institutional mandates to raise awareness of and				

	disseminate information about climate change (risks, impacts, responses, etc).		
5.	Adequate funding available for awareness raising.		
SC ans			

Methodological points to note

- 1. While this indicator has been developed in the context of climate change adaptation, it is sufficiently flexible that it also can be applied in mitigation/low-carbon development (LCD) contexts. Where it is applied to the coordination of both mitigation/LCD and adaptation activities it is recommended that these adaptation and mitigation are addressed separately, particularly where mitigation activities (e.g. regulation of greenhouse gas emissions) are more advanced than adaptation activities, or vice versa.
- 2. The indicator is used to assess systems targeted by one or more programmes, and is an outcome indicator, which will be assessed at the beginning, during, and at the end of a programme (where the outcomes resulting from a single programme are to be assessed), or at regular intervals (e.g. annually) where the cumulative results of multiple programmes are to be assessed. Where the indicator is applied to a targeted system, improvements in scores will need to be complemented by supporting qualitative evidence in order to demonstrate attribution (e.g. narratives, testimonials, other evidence of causal relationships).
- 3. Modified versions of this indicator might also be used to report on the outputs of a specific programme or project that has components that explicitly address awareness of climate change. The existing questions could be modified to measure how many stakeholders have been reached by programme-related awareness raising initiatives to sensitise people to climate change risks [Question 1] and to raise awareness of potential response (e.g. adaptation or mitigation) options [Question 2]; how many stakeholders have been reached by the initiatives to disseminate climate information [Question 3]; whether or not institutional mechanisms for awareness raising and information distribution have been established [Question 4]; how much has been spent on awareness raising and information dissemination.
- 4. Levels of awareness [Questions 1 and 2] may be assessed subjectively and qualitatively (based on judgment of programme staff), or through surveys or questionnaires targeted at stakeholders, that may be completed at different stages of a programmes lifetime, or at regular intervals where the indicator is targeting a "system".
- 5. "Relevant information' [Question 3] might include scenarios of future conditions over appropriate timescales; seasonal forecast data; information about adaptation measures, resources and initiatives in which stakeholders can participate; etc. Whereas Questions 1 and 2 are intended to address levels of awareness at a given point in time, Question 3 is intended to capture the existence of channels through which information reaches stakeholders so as to give them access to new and updated information.

Guidance on answering the questions that make up the indicator is provided in the table below.

	Conditions necessary for answer of:			
	Q	NO	PARTIAL	YES
	1	Stakeholders not aware of / exhibit no increase in awareness of climate change issues & risks.	Some awareness / increase in awareness of climate change issues & risks.	Widespread awareness / significant increase in awareness of climate change issues & risks.
	2	Stakeholders not aware of / exhibit no increase in awareness of potential options for responding to climate change.	Some awareness / increase in awareness of potential options for responding to climate change.	Widespread awareness / significant increase in awareness of potential options for responding to climate change.
	3	Stakeholders in climate- sensitive sector, areas, activities do not have / show improved access to climate change information.	Some access to climate information, but of limited coverage and/or use (e.g. due to way information is presented/packaged, and lack of engagement with stakeholders to tailor information to their needs).	Widespread access to climate information in form that is useful to stakeholders, as result of engagement that enables information to be tailored to needs of stakeholders.
	4	No institutions given formal mandate for raising awareness of climate change issues, risks & response options.	Institution(s) tasked with raising climate change awareness, but this is additional responsibility not matched by additional support.	Institution(s) given formal mandate for climate change awareness raising, with significant support (financial, technical, etc) to achieve this.
	5	No funding for climate change awareness raising.	Funded activities raise awareness of climate change, but this is not main or explicit purpose of these activities.	Dedicated funding targeted specifically at climate change awareness raising.
Rationale	insti clim add deve optic ada to be give whil	For effective action on climate change, government personnel, staff in key institutions, key stakeholders and the public at large need to be aware of climate change and associated risks, and responsive to initiatives intended to address climate change through adaptation and/or mitigation/low-carbon development. Where information on climate change risks and response options (e.g. seasonal forecasts, climate projections, information on adaptation options) is made available to stakeholders, this information needs to be in a form that they can understand and use. Awareness is most likely to be enhanced, and useful information produced, where key institutions are given mandates to raise awareness and generate and distribute information while engaging with stakeholders and the public at large.		
Data source	Data will be collected through evaluations based on completion of the scorecard (above) at specified intervals. Depending on the purpose of the evaluation, the scorecard might be completed by staff in donors' country offices, by external consultants, or (for national self-assessment) by government or other relevant personnel.			
	base (whe are coul and	here assessments are carried out by external consultants, they will be sed on consultations with key staff in the sectors being evaluated and here appropriate) staff within donor country offices. Where assessments a carried out by country offices, they will be based on the judgment of key untry office staff with responsibility for supporting the (national) processes disectors in question, e.g. through sector budget support. In the case of f-assessment, they will be carried out by staff familiar with the relevant		

sectors.

When assigning scores, evaluators concerned with the efficacy of support programmes should also record **complementary qualitative information** relating to attribution of outcomes to interventions. This information might include notes on the chronology of changes across the target sectors relative to key outputs from support programmes, the views of key stakeholders regarding the extent to which outcomes are direct (or indirect) consequences of programme outputs, and the identification of 'pathways of change' that link outputs and outcomes (e.g. via key mechanisms, processes, events).

Data included and data aggregation

Support to a single institution, sector, mechanism or process

Where the indicator is used to report on outcomes from support to a single system or entity (i.e. institution, sector, mechanisms or process), the data reported will be the score calculated across the 5 questions that make up the indicator (up to a maximum of 10), applied to the system targeted by the support. Where this support is from a single intervention/programme, the scorecard should be completed at the beginning of the programme, during the programme (e.g. annually in the logframe), and at the end of the programme. Where support is from multiple programmes, the scorecard should be conducted at regular intervals (e.g. annually, 6-monthly) spanning the period of support.

Support to multiple institutions, sectors, mechanisms or process

Where the indicator is used to report on outcomes from support to multiple systems or entities (e.g. from multiple support programmes across multiple sectors for a cross-sectoral national-level assessment), an overall score may be calculated by averaging the totals for each relevant system/entity. However, such aggregated scores should always be presented alongside disaggregated data (detailing results for individual target systems) so that areas of strength and weakness can be identified (e.g. in specific sectors, ministries, etc). Alternatively, a national system might be assessed as whole. The approach taken will depend on the purpose of the assessment (e.g. a comprehensive assessment of CRM at the national level across all relevant sectors versus an assessment of national mechanisms that sit 'above' the sectoral level). It will also depend on the national CRM 'architecture (e.g. is CRM coordinated centrally by a body that has authority over relevant sectors, or decentralised down to the sectoral level).

Interpretation

In all cases, scores should be presented alongside qualitative information related to attribution (see data included and aggregation).

Outcomes will be assessed on the basis of changes in the score over time, over the lifetime of the programme or programmes being evaluated, or otherwise at regular intervals for (e.g. internal) evaluation of planning systems in general. Attribution of outcomes to outputs will be assessed through the use of complementary qualitative information.

Most recent baseline

The baseline will be represented by the first available set of results, i.e. the first time the scorecard is applied to a system. Subsequent assessments will be looking for an improvement/increases in score(s) relative to this first assessment.

Good performance

Good performance will be demonstrated by improvement/increases in scores over time that can be linked with support programmes. Where assessment is focused on multiple processes evaluation will be looking for a consistent improvement across these processes, sustained over time. Good performance of support programmes that target these processes will be demonstrated by strong evidence that the outcomes can be attributed to this support (see data categories above, and discussion in TAMD Technical Paper).

Return format (options)	Scores (out of 10) at different points in time (e.g. before, during, after intervention)
	Numbers of target systems (within or across countries) improving scores by different amounts (increasing over time)
	For the assessment of multiple systems (e.g. sectors, ministries, countries, etc), results might be represented graphically. For reporting directed at target systems, changes in scores over a specified time period (from -10 to +10 at the theoretical extremes) might be represented along the horizontal axis, and numbers of systems (for each integer change in score) along the vertical axis.
Data dis- aggregation	If the indicator is to be presented as a single score out of 10 as in "Return format", answers for each of the 5 questions from which the indicator is constituted should also be preserved, so that areas of strength and weakness can be identified. Similarly, where evaluation of multiple target systems has involved aggregation/averaging across systems, results should be preserved for individual systems.
Data availability	Evaluation of this indicator does not depend on the availability of independent/external data. The indicator is based on the judgment of those assessing the processes in question (programme managers, country office staff, such as climate change advisers, implementing partners, external consultants). Guidance is provided on how to complete the scorecard, based on criteria for different answers for each question making up the indicator. Data are therefore based on one or more of the following: (i) the informed judgment of the evaluators, (ii) knowledge of the relevant programmes and target systems, (iii) consultations with stakeholders (who will include country office staff if the assessment is carried out externally). The availability of reliable data therefore will depend on the level of knowledge of personnel involved in the evaluation, and/or on the quality of consultations. However, there should be sufficient knowledge among evaluators to ensure that the scorecard is completed realistically.
Time period/ lag	Where this indicator is applied in the context of individual programmes, it should be assessed annually in programme logframes, based on assessment of the target system(s). The indicator can also be applied to target systems (e.g. national systems, sectors, ministries, etc) on a regular (e.g. annual or biennial) basis, for example where these systems receive budget support.
Quality assurance measures	Where this indicator is assessed internally (e.g. by country office staff), an independent assessment might be performed (e.g. during a strategic review) by external experts. The answers to the 5 questions constituting the indicator should be justified by some explanation, e.g. describing the nature of the screening or mainstreaming processes and giving examples of measures to address climate change that have been identified during the assessment.
Data issues	It is recognised that some element of subjective judgment is required, although the questions have been designed to be quite specific and transparent, with supporting guidance on how to answer the questions. In some cases data may be based on implementing partners' own assessments.
Additional comments	This indicator might be complemented by quantitative output indicators that can be applied directly to support programmes whose goals include the realisation of the outcomes addressed by the indicator. Quantitative outcome indicators might also be identified depending on the precise nature of an intervention, and these might be based on an adaptation of the outcome version of the indicator described here.

TAMD Climate Change Indicator- methodological note

Short title	INDICATOR 9. VULNERABILITY / RESILIENCE	
	Numbers of people better able to cope with climate change and variability	
Type or Indicator	Quantitative/numeric (cumulative), Impact	
Technical definition/ Methodologi cal summary	A key impact of adaptation assistance will be to increase people's ability to cope with and recover from the effects of hazards associated with climate variability and change, i.e. to reduce their vulnerability / increase their resilience in the face of climatic changes and variations. Adaptation interventions should make people less susceptible to harm when they are exposed to such climate hazards. Here we use the concept of vulnerability, due to its widespread adoption within the body of climate change adaptation literature and practice. Broadly speaking, resilience is viewed as inversely related to vulnerability. The approach outlined below may also be applied to the assessment of (changes in) adaptive capacity.	
	This indicator aims to capture reductions in climate vulnerability, while addressing the highly contextual factors that influence vulnerability. It achieves this through the following steps:	
	 Identification of a number of variables that capture the key elements of vulnerability within a specific programme/project context. 	
	Division of each variable into quintiles (difference between highest value and lowest value, divided by 5).	
	3. For each variable, individuals or households within a target population (or other appropriate units of analysis) are assigned a score of 1-5 based on their quintile ranking in that variable (e.g. a representative sample of the population). A score of 1 indicates lowest vulnerability, and 5 highest vulnerability (this scoring convention may be reversed if desirable).	
	 During, and the end of, and/or after the project, the population is sampled again, and the quintile rankings recalculated. 	
	For each sampling period, the numbers of individuals or households in each quintile division are calculated.	
	The numbers of individuals or households moving up or down one or more quintile division are calculated.	
	 Changes in resilience are expressed in terms of "N sampled individuals/households reduced their vulnerability (by 1 or more point) across one or more variables." 	

8. The indicator is the percentage of people or households sampled experiencing a reduction in vulnerability across one or more variable.

Methodological points to note:

- Not all interventions will lend themselves to measurement of vulnerability at the individual or household level, so this indicator will apply only to interventions that seek to reduce vulnerability, or increase resilience or adaptive capacity, at the community level by targeting (directly or indirectly) individuals and households. Generally speaking, it is unlikely to apply to projects aimed at institutional capacity building.
- The number of variables used to represent key elements of vulnerability (or resilience or adaptive capacity) should be large enough to capture complexity (i.e. by representing multiple dimensions of vulnerability), but small enough to be manageable, and will vary depending on the context of the intervention.
- 3. The nature of the variables used to represent vulnerability (or resilience or adaptive capacity) will vary across projects, and these variables will need to be selected on a project-by-project basis, based on a sound understanding of the factors that make people vulnerability/resilient or allow them to respond and adapt to evolving climate risks, and on the mechanisms through which the project seeks to reduce vulnerability, increase resilience or enhance adaptive capacity. Variable selection should be grounded in local knowledge and experience, and the perceptions of those targeted by project interventions should be taken into account through significant stakeholder participation.
- 4. Development of this indicator will require some investment in gathering baseline data representative of individual or household-level vulnerability/resilience/adaptive capacity at the start of an intervention, and in the collection of comparable data throughout, at the end of, or after the completion of the intervention, depending on the timescales over which impacts are to be measured.
- 5. Sample sizes should be large enough to be representative of the target population as a whole, and should capture results across different groups (e.g. men and women, male and female headed households, different income groups, ethnic groups, livelihood groups, urban and rural, etc).
- 6. If reductions in vulnerability for an individual or household as measured by one or more variables are offset by decreases in resilience in an equal or greater number of variables, the individual or household should not be classed

as experiencing increased resilience.

Rationale

Demonstrating the impacts of adaptation and adaptation-related development interventions on people's ability to cope with and adapt to climate change is key to demonstrating adaptation success, but remains problematic for a number of reasons. First, the timescales associated with the evolution of climate change and of adaptation are longer than those typically associated with programme/project timescales, meaning that it is difficult to assess adaptation in any meaningful way by comparing "before and after" situations using conventional development data. Second, the evolving nature of climate risks means that such development outcome data would somehow need to be "normalised" with respect to changing risk baselines. For example, development outcomes (e.g. measured in terms of poverty or food security) may appear to have remained unchanged or even deteriorated following a development intervention, suggesting that the intervention has unsuccessful. However, if risks are intensifying, it is possible that such an intervention may have prevented an even greater deterioration in development outcomes. While such a result would mean that the intervention was insufficient to deliver the desired outcomes in the face of climate change, it would be a mistake to conclude that the intervention was of no benefit.

While development/adaptation outcomes may be examined using regular development indicators normalised with respect to changing risk baselines, this is a very challenging task. One way of circumventing the problems of shifting risk baselines and the need to wait beyond a project lifetime to assess actual impacts on development, is to identify proxies for vulnerability, resilience and capacity to adapt to climate hazards and risks. These proxy variables can be used to infer the impacts of development/adaptation interventions on people's capacity to cope with, respond to, recover from, and adapt to climate change, even in the absence of useful data on project impacts in the form of (normalised) standard development indices. Indicators of vulnerability, resilience and/or adaptive capacity therefore represent an intermediate step between measuring programme/project outputs and outcomes on the one hand, and ultimate programme/project impacts in the form or standard development outcomes on the other. Vulnerability/resilience indicators essentially allow us to measure the impact of development interventions on the state of a population, with respect to its readiness for, or ability to cope with and adapt to, climate hazards and risks.

The vulnerability indicator as outlined here represents a way of measuring impact as defined in some Theories of Change, which are concerned with the extent to which vulnerable people in poor countries are prepared and equipped to anticipate and

	respond to risks associated with climate change, including
Data source	(changes in) climate variability. The indicator will be based on data collected at the local level during project implementation, and prior to project implementation where relevant data already exist or are collected as part of a pilot study or campaign to generate baseline data.
Data included	The data will include the a the proportion of the DFID component of ICF spending on adaptation that directly or indirectly targets the community level (e.g. as opposed to institutions or government). Aggregation across programmes in individual countries will be undertaken by CED.
Data calculation	The indicator are expressed in percentage terms, but may also be converted into absolute numbers by scaling up from sampled to target populations, provided sampling is adequate. Overall percentages may be calculated by taking averages across percentages for individual projects. Overall absolute numbers may be calculated by summing scaled up totals based on the ratio of sample to target population size. These aggregations may be performed at the country level, and across countries.
Most recent baseline	Baseline will have to be constructed in mid 2012.
Good performance	The public should be looking for an increase in resilience (i.e. the ability to cope with climate variability and change) among those receiving support.
Return format	Percentage (of people targeted, inferred from percentage of people sampled). Percentage might be converted into absolute numbers, based on size of target population, but this must be underpinned by confidence in the representativeness of the sample.
L	'
Data dis- aggregation	Data will be gathered at the individual or household level, and will be disaggregated at collection based on gender and other criteria (e.g. livelihood type, rural/urban, etc). While the variables used to represent resilience/vulnerability will be different across project contexts, some universal categories (women, men, rural, urban, etc.) will be defined for the classification of individuals or households. These classifications should be preserved throughout the aggregation process, so that the final indicator may be expressed in terms of these categories, as well as in terms of a single number (numbers with increased resilience).

	regular basis, which is unlikely to be the case in most instances.
Time period/ lag	As a minimum requirement, data should be collected at the start and end of the project, and preferably on an on-going basis, in conjunction with the establishment of systems for monitoring adaptation.
Quality assurance measures	We will identify mechanisms for data QA with multilateral partners (possibly using the OECD as an independent arbiter) by June 2013. In DFID, we anticipate that there will be 3 layers of QA: country offices, CED and FCPD. This is unchanged from the "numbers of people supported" methodological note – we might add something about ensuring good vulnerability frameworks in local contexts by involving specialists in this area.
Data issues	This indicator will require significant resources to be invested in data acquisition, and in developing empirically-grounded resilience/vulnerability frameworks in local context. However, this is unavoidable if meaningful, evidence-based statements on the impacts of adaptation initiatives on people's ability to respond to climate change are to be made, and value for money demonstrated.
	Data gathering will most likely consist of sampling based on questionnaires and household surveys, and may necessitate the hiring of specialists in such survey methods and vulnerability assessment, at least initially while methodologies and questionnaires are being developed for specific contexts.
Additional comments	This indicator will be piloted under the <i>Tracking Adaptation and Measuring Development</i> (TAMD) framework between 2012 and 2015.
Lead	

Tracking Adaptation and Measuring Development (TAMD) is a conceptual framework to monitor and evaluate climate change adaptation. TAMD identifies four categories of indicator for adaptation M&E: (1) climate risk management indicators; (2) resilience and related indicators; (3) indicators of human wellbeing; and (4) climate indices. This paper contains the methodological notes for the climate risk management indicators.





International Institute for Environment and Development 80-86 Gray's Inn Road, London WC1X 8NH, UK

Tel: +44 (0)20 3463 7399 Fax: +44 (0)20 3514 9055 email: info@iied.org

www.iied.org