Climate Smart Agriculture:
Mapping guidance on climate change

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Report Summary

DFID has recognised a need to provide guidance to country offices (CO) on what actions are needed to address the predicted impacts (both negative and positive) of climate change on agriculture and the potential adaptation measures. There is a need to establish what expert, evidence-based programme and policy guidance already exists, its applicability to DFID and its overall quality. This will establish whether there is a need to produce a separate and tailored Topic Guide to assist CO's in designing and managing programmes, and inform the development of specific Future Fit guidance on food and agriculture.

This report is the results of a desk based study that reviewed 14 examples of guidance on agriculture and climate adaptation and was commissioned to help inform whether a new Topic Guide would be relevant and useful for DFID. The documents are grouped according to their overall purpose:

- Raise awareness (4);
- Inform policy (5);
- Provide sector strategies (6) and sector-specific guidance (2); and
- Define technical procedures and options (1).

The guidance reviewed has been produced for a range of purposes and audiences and as such varies in its applicability to DFID. Concise documents and interactive websites summarise the facts and trends on the potential impact of climate change on agriculture and response options. The policy and sector-specific guidance ranges from the comprehensive FAO sourcebook to shorter pieces on specific adaptation measures. These provide a measure of detail on the regional impacts of climate change and possible adaptation strategies. Only USAID's 'Measuring Natural Resources Management and Climate Change Adaptability under Feed the Future' would qualify as a technical manual that provides guidance on a specific issue which may be of use during more detailed programme design.

Taken together, the material is a good point of reference for programme and project design. Just these 14 documents, with their supporting reports, constitutes nearly 1000 pages (including links through web archives).

The introductory guidance (to raise awareness and policy briefs) are accessible introductions. However, they are not sufficiently detailed to provide practical guidance to inform programme design. The more detailed sector strategies and sector guidance is quite extensive, but has limitations and is not wholly adequate for planning future investment in climate resilient agriculture.

The main limitation of the guidance is a lack of attention to the nature of the evidence base for making decisions about adaptation. Only one document includes a rating of confidence in the evidence base. Often, general statements were qualified, in particular to note the uncertainty in dealing with local conditions. However, the guidance does not attempt to directly link the local context to specific actions. For instance, the choice of on-farm technology is not linked to decision trees of the nature of current climatic hazards and trends.

Another gap is relating the guidance to specific actors in food systems. The focus tends to be smallholder famers rather than commercial agriculture and supply chains. . The focus on field-level adaptation misses an important opportunity to build broader resilience through value chains. For instance, large crop losses during storage may be experienced and this could be a more effective entry point than raising crop-yields at the field level.

The guidance rarely includes a theory of change. The documents tend to assume that more information will raise awareness and lead to better decisions. However, the nature of those decisions on adaptation is not clearly stated, and the value of information in supporting decision-making is not taken as a founding principle. Further afield, the nature of actors and the political economy of adaptation is not covered adequately. The capacity of actors to act is often taken for granted

Web based material is growing quickly, and becoming easier to use. Search strategies are smarter as well. While new portals are thrown up regularly, few replicate the great breadth of knowledge in the web and often reproduce rather dated and limited guidance.

The adaptation community has moved forward dramatically in the past five years. None of the guidelines insisted on using a particular global climate model, set of reference scenarios and climate impacts projections. The new IPCC report will have a wealth of useful information, drawing a wider perspective on adaptation and less reliance on models and formal protocols. This marks a real transition from 'predict-and-provide' to 'adaptive management'.

Most of the guidance focuses on 'good development' and 'disaster risk reduction'. These are actions that are fully justified in the current climate and development context. Looking beyond the near term, 'enhanced resilience' and 'targeted impacts' will be required in the future. Moving away from 'predict and provide' to 'adaptive management' will support consideration of a wider set of strategies and measures. Some of these are essential to initiate now.

DFID could make a forward-looking contribution, beyond good development and disaster risk reduction to the longer term challenges facing many agricultural systems. A printed guide would be one part of a communication strategy with online support. Specific lessons learned in this review highlight the following suggestions.

- There are good pieces available for many of the adaptation processes and the most urgent challenges ahead. DFID should point to the existing guidance, especially in the FAO Sourcebook and the World Bank portal.
- Gaps in the coverage of adaptation pathways are significant, especially for long-term investment decisions. Cross-sectoral areas that may be worth more focused guidance include: Biofuels and competition for food crops; Water and energy and landscape planning; Land ownership and foreign investment; Private sector business models and value chains that reach the many small-scale producers and food processors.
- Guidance on specific processes (learning platforms on risks and opportunities) would support practical decision making.
- Online knowledge management services should be integrated into guidance and decision processes. For instance, an online service could screen project proposals against agreed criteria.
- Templates for national guides would build a working library of good practice. A library of good practice examples would complement the more generic guidance. A set of templates could be created that are relatively easy to adapt to specific countries and agricultural systems.

SECTION 1

Framing Guidance on Adaptation

Terms of Reference

This rapid help desk query set out to review current expert and evidence-based programme and policy guidance on climate change and agriculture. The report is aimed at assisting DFID to assess the suitability of existing guidance for developing and managing DFID programmes at the country and headquarters levels.

Our understanding of adaptation is growing, as we learn from early initiatives. The forthcoming report from the IPCC[1] is expected to highlight many of the lessons learned, including the notion of transforming development pathways introduced in the IPCC's report on extreme events[2]. The background to the review highlights recent framing of adaptation as a social and institutional process.

Section 2 scans the major guidance document on resilience and climate-smart agriculture. Criteria used in evaluating the guidance are documented. Each guidance document is screened in the Annex, using this template of criteria. A short summary of the criteria is presented.

Section 3 draws wider lessons learned with potential options for DFID.

Background to the review criteria

Guidance has the express objective of informing a decision, or series of decisions (see the Box below for lessons learned in advising the Government of Ethiopia). A core principle is that the value of information (in this case the guidance documentation and advice) is in improving the choice of options in a decision (that is, in choosing among the many adaptation strategies and actions that are currently available). Not all decisions about adaptation are the same - different actors, policy contexts, decision spaces and environments are in play. The review in the next section begins by categorising the documents according to the kind of decision they appear to focus on, from raising awareness to operational procedures.

Guidance on adaptation to climate change (in any sector) should help the user work through a sequence of steps in linking the expected outcomes to the very wide range of choice that is available. Guidance should support decision making in conditions of uncertainty. The future of agricultural systems, and of climate change impacts at all relevant scales, cannot be adequately predicted. The notion of a continuum of action, from Good Development to

[1] Intergovernmental Panel on Climate Change

[2] IPCC, 2012: Summary for Policymakers. In: Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation [Field, C.B., V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.-K. Plattner, S.K. Allen, M. Tignor, and P.M. Midgley (eds.)]. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK, and New York, NY, USA, pp. 1-19.

future development pathways and targeted climate change impacts is shown in the figure below.

The starting point is rooted in Good Development - actions that are justified by the current benefits, regardless of changing climatic risks and resources. Most 'climate' adaptation focuses on disaster risk management and expanding resilience for vulnerable livelihoods and sectors. A longer term goal is to reduce the specific (or additional) impacts of climate change, such as a loss of coastal lowlands. Taken together, the ultimate aim is to transform agricultural development.

Figure 1 Continuum of adaptation actions

Awareness that climate change is an issue is well established and investment strategies need to be put in place. Practical guidance should go beyond creating awareness. Moving from general awareness to action requires relating guidance to realistic timelines and development pathways over the next 5 to 20 years (see Figure below for an example). Sequencing of actions is essential - not everything can be done at once. Equally, a portfolio of actions is required - no one strategy and action is 'best' for all the conditions facing agriculture.

Key attributes in choosing actions should include effectiveness (e.g., agro-ecological and livelihood systems), feasibility (institutional and stakeholder requirements) and financial sustainability (including costs and the nature of benefits). Criteria for this review capture the degree to which the guidance is targeted to regions and agricultural systems.

GCAP produced the Climate Resilience Green Growth (CRGE) strategy for agriculture for the Government of Ethiopia, with the Global Green Growth Institute (funded by DFID). The technical team worked closely with the Ministry of Agriculture to establish a common understanding of investment strategies and options. The project framed adaptation as a socio-institutional process, using four milestones in a continuum of adaptation.

Adaptation involves a hierarchy of actions:

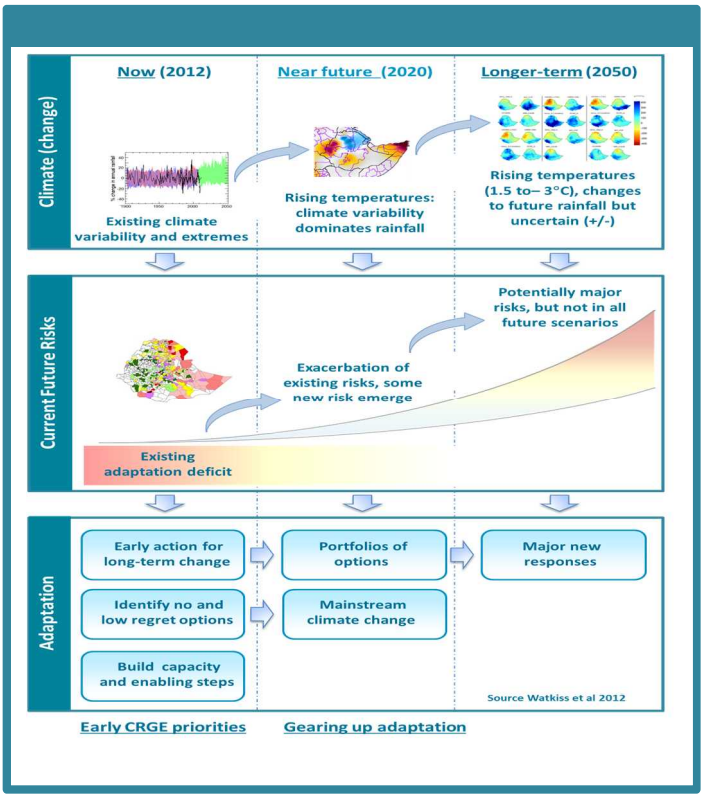
- Broad purpose corresponding to a major development goal, for example social protection of vulnerable populations
- Strategies that introduce adaptation, for example, diversifying disaster-prone household livelihoods
- Actions to implement the strategies, e.g., using humanitarian assistance to create alternative incomes
- Technologies that are choices to achieve the actions, e.g., women's groups using micro finance to support handicraft marketing

Analysis of this hierarchy involves multiple attributes that reflect the vastly different context of decision making for each strategy and action.

The hierarchy of actions is targeted using both agro-ecological conditions of agriculture at the local level and the socio-institutional characteristics of stakeholders and beneficiaries. Agro-ecological zones were aggregated to show broad adaptation planning zones. Livelihoods in each zone were described and adaptation strategies indicated for each zone.

Box 1 Planning resilience in Ethiopia

Figure 2. Timelines in planning adaptation



Source: CRGE Phase II Strategy, Environmental Protection Agency, Government of Ethiopia, 2012.

SECTION 2

Scanning Guidance on Climate Smart Agriculture

Key examples of existing literature

Although there is a vast literature on climate change and agriculture, there are relatively few documents that purport to provide protocols for planning adaptation or guidelines in the choice of specific strategies and options. The Terms of Reference for this rapid review suggested the principal documents. A few others have been added to the initial screening. The IPCC Fifth Assessment Report (AR5) will add to the literature. Several organisations are expected to follow publication of AR5 with policy briefs and syntheses for various users. Web sites such as the World Bank's portal and FAO's sourcebook are relevant, and more dynamic than printed pieces.

Table 2 includes an example of guidance based on a national strategy document. The Australian case is one of the best at this level, in a region where agriculture is highly sensitive to climate variations. Although it is for commercial agriculture, the focus on the local environment and agricultural decision makers provides a level of detail that is often missing from global advice.

This modest literature is initially screened according to its intention, whether raising awareness or providing technical support. These are qualitative categories--useful to see where the gaps lie in existing guidance:

- AR: Awareness raising, good overview
- PB: Policy brief with key definitions, identifies issues that define the purpose of a project
- SS: Sector strategy, regionally appropriate with potential project objectives
- SG: Sector guidance with notes on how to appraise options, use of scenarios, protocols
- TM: Technical manual with detailed assessment of specific options

A key question is: What level of guidance would be required by DFID country offices, their development partners and consultants developing projects for funding (under a wide range of opportunities for climate-related finance).

This review assumes that this guidance is initially for DFID advisers (and not consultants or national experts who would be preparing detailed project plans). As such, the guidance should:

- Focus on strategic choices and indicative activities that would be relevant in widely different contexts within a country, rather than detailed analysis of technical options (the lowest tier of the hierarchy presented above).
- Screen project proposals against criteria including effectiveness, practicality for implementation, justification in the context of uncertainty about climate change, additionality in going beyond good development, and Value for Money as an overarching aid mandate.
- Set priorities for investment, including potential for sector transformation and sustainable finance.

Section 3 revisits these requirements.

Source	Title	AR	PB	SS	SG	TM
(AECOM, 2013)	Supporting evidence-based adaptation decision making in New South Wales: A synthesis of climate change adaptation research			ⓘ		
(Asian Development Bank (ADB), 2012)	Guidelines for climate proofing investment in agriculture, rural development, and food security			ⓘ	ⓘ	
(CGIAR, 2013)	Training guide on gender and climate change research in agriculture	ⓘ		ⓘ		
(Climate Change Agriculture and Food Security (CCAFS), 2013)	Big Facts where agriculture and climate change meet	ⓘ				
(Climate and Development Knowledge Network (CDKN), 2012)	New guidance on climate extremes for water, agriculture, health and environmental professionals	ⓘ				
(Climate and Development Knowledge Network (CDKN), 2011)	Agriculture and climate change policy brief: Summary of agriculture and climate change: A scoping report		ⓘ			
(Food and Agriculture Organisation (FAO), 2012)	Incorporating climate change considerations into agricultural investment programmes - A guidance document			ⓘ		
(Food and Agriculture Organisation (FAO), 2013)	Climate-Smart Agriculture Sourcebook (and web site)			ⓘ	ⓘ	
(International Fund for Agricultural Development (IFAD), 2011)	Climate smart agriculture: What's different?		ⓘ	ⓘ		
(NCCARF, 2012)	Supporting decision-making for effective adaptation. Policy Guidance Brief 3		ⓘ			
(U.S. Agency for International Development, 2011)	Volume 7: Measuring Natural Resources Management and Climate Change Adaptability under Feed the Future					ⓘ
(U.S. Agency for International Development, 2013)	Feed the Future Climate Factsheet		ⓘ			
(World Bank, 2011)	Opportunities and Challenges for Climate-Smart Agriculture in Africa		ⓘ			
(World Bank, 2013))	Climate-smart Agriculture and the World Bank: The Facts	ⓘ				

Table 1 Climate adaptation guidance for agriculture

For citations see end of report.

Organisation of criteria into qualitative rating scheme

The ToR suggested the breadth of questions that this review should address for each guidance document. This has been brought together into a series of criteria. We have used a simple model of qualitative criteria that can be easily scored for each case.

Coverage and practicality

How pragmatic and practical is the guidance? To what extent can country offices pick up the guidance and use it to inform programmes?

This criteria expands on the initial screening above and places each guidance document into the hierarchy of adaptation planning:

- Awareness raising: defines the overall purpose of adaptation
- Policy brief and adaptation purpose: the sector-level purpose that would match the overall rationale for a project, intended to guide policy making
- Sector strategy: corresponding to the components of a project, the strategic area and objective
- Sector guidance for priority actions: screening of generic adaptation activities
- Technical manual for specific actions: Choosing specific technologies and guidance on implementing strategies and actions

For example:

- Purpose: Protect the lives of people vulnerable to climate-related disasters. Note there are generally three overall purposes in agriculture: protect lives, ensure livelihoods are resilient and transform sectoral development. Each entails different stakeholders and strategies, although there are actions that cut across all three as well.
- Strategy: Increase the supply and relevance of climate and weather information on extreme events and potential agricultural impacts
- Actions: Enhanced drought early warning system using mobile technology
- Technology: Use smartphones and Usahidi-style web interfaces to enable two-way communications between EWS providers and field observers (including beneficiaries across levels)

Regions and suitability

What regions/countries is the guidance applicable to? This criteria does not map the guidance for all possible applications. Rather it checks to see to what extent the suitability of the guidance is explicitly addressed in the guidance. Suitability focuses on four general contexts:

- Agroecological zone including climate, soils, terrain and other biogeophysical factors
- Livelihood system including vulnerable populations and value chains
- National economic context including readiness to implement adaptation strategies and measures
- Continent-wide context that covers a wide range of conditions, such as low and middle income countries.

For each context, a rating is provided:

1. Suitability is not addressed, e.g., guidance is general in nature of how it might be adapted to reflect national or local conditions is not covered
2. The issue of suitability is mentioned but left for the user to translate the general guidance into actions suitable for local conditions
3. Suitability is screened with some guidance, for instance 'drylands' vs. irrigation or pastoral livelihoods vs. semi-commercial smallholders
4. Sufficient screening is provided for a user to make an initial choice of appropriate actions
5. Detailed screening is provided, possibly using geographic information, field interviews and expert judgement

Range of climate vulnerability, impacts and adaptation needs

What types of climate change impacts are taken into account? Are these measures tailored to different types of climate change impact (i.e. climate variability and extremes versus long term trends in temperature, precipitation and sea level rise). To what extent does the guidance consider existing vulnerability and adaptation measures as well as future vulnerability under climate change impacts? To what extent are different climate change scenarios taken into account?

Tables in the Annex for each guidance document use a simple rating scheme based on the continuum of adaptation introduced above:

- High: issue is addressed in detail, with a robust treatment that identifies evidence base that can be used to develop sound projects. For example: poor households with insufficient land and labour are vulnerable to current climate risks and cannot take advantage of many existing development opportunities. The ability to adapt should be checked using statistical surveys and key informant interviews before developing an action plan.
- Medium: issue is stated as an assumption or criteria for applying the guidance. For example: building capacity for adaptation planning in rural communities dependent on dryland agriculture is required before a new financial instrument is likely to be successful.
- Low: assumptions are tacit in the guidance but might be misleading given particular local conditions. For example, climate change will lead to warmer and shorter growing seasons and so shorter season cultivars should be adopted. In some cases, crops are not sensitive to higher temperatures and might benefit from more radiation as long as soil moisture is adequate.
- Missing: issue is not discussed

Agricultural targets

What food and cash crops are included in the guidance? Does it address livestock development including in the drylands? How comprehensive are the adaptation (and mitigation) measures proposed?

This criteria looks at the coverage of the guidance across a food system:

- Food crops: cash, subsistence
- Non-food crops, e.g., biofuels
- Livestock
- Public or private modes of adaptation

Annotations provide further details of the scope of the guidance.

Review of the guidance

This report reviews 14 examples of guidance on agriculture and climate adaptation. The documents have different purposes:

- Raise awareness (4);
- Inform policy (5);
- Provide sector strategies (6) and sector-specific guidance (2); and
- Define technical procedures and options (1).

The Table below shows the overall map of the guidance against the phase of adaptation planning (from Good Development to longer term climate change impacts) and type of guidance (colours represent the depth from Raising Awareness to Technical Manual).

Most of the guidance focuses on Good Development, with some extensions to Disaster Risk Reduction. In particular, the high-level policy briefs and documents intended to raise

awareness primarily focus on the synergies of existing development practice with climate adaptation.

The more detailed sector strategies and guidance tends to go further to explore ways to enhance resilience and respond to longer term climate change impacts, including requirements to substantially transform agricultural systems. However, only four of the documents cover these topics. In one sense, it is the intention of Climate-Smart Agriculture to bolster investment in Good Development and take advantage of synergies in reducing poverty and enhancing economic growth. This case is urgent and important and is the necessary starting point for investment. Guidance on climate change, however, must look beyond the near-term investment window and explore when and to what extent the medium term prospects should shape current decisions.

The scorecards in the Annex reveal a lack of real context to the guidance. For the most part, the documents are global or continental in their advice (Africa, but not Sahel). Discussion of agroecological suitability and livelihoods or other socio-economic constraints does not directly relate to the choice of strategies and actions. The exception is the regional guidance from Australia. Here, the nature of the audience is defined and the guidance has a practical dimension, much more so than the CDKN repackaging of the IPCC report on extreme events for instance.

Most of the guidance focuses on food crops and local cash crops - mainly at the subsistence level. Consideration of the impacts on livestock systems is less well covered. Food systems and value chains are also rarely addressed. For instance, smallholder coffee production is mentioned but not coffee as a global commodity and regional shifts in both consumption and production. The framing of climate adaptation in agriculture remains largely one of production at the field to sub-national level. Actions for private sector actors (other than household producers) are rarely mentioned as a particular type of strategy and action.

Salient in all of the guidelines is a lack of attention to the nature of the evidence base for making decisions about adaptation. Most rely on past summaries from the IPCC (now nearly a decade out of date) or global models (which have varying levels of validation). None of the documents includes a full evaluation of the evidence base, although references to probabilistic estimates from the IPCC appear in a few places. General statements were qualified, but not placed in context. Counterfactuals would be easy to identify.

On the other hand, none of the guidelines insisted on using a particular global climate model, set of reference scenarios and climate impacts projections. That is remarkable, given the history of climate change risk assessment. It also marks a real transition from ‘predict-and-provide’ to ‘adaptive management’. There is growing confidence that sensible and well justified ways forward can be implemented.

Web based material is growing quickly, and becoming easier to use. Search strategies are smarter as well. While new portals are thrown up regularly, few replicate the great breadth of knowledge in the web and often reproduce rather dated and limited guidance. Quite a few agencies, initiatives and programmes are good at developing colourful brochures, sometimes disguised at policy briefs. These are little more than public relations material and are unlikely to be validated as useful and may not be peer reviewed to establish their authenticity. There is still a technical gap as many knowledge bases do little more than provide access to data (as in the many climate portals) and repeat the conventional wisdom of general sector guidance (how many guidelines do we need in order to know that projects must be developed with key stakeholders?).

Several documents stand out. They are not complete but they illustrate some of the ways forward.

- New South Wales regional guidance is a very good example of practical material at the scale at which stakeholders make decisions. It could be a template for national advice in developing countries.
- Asian Development Bank (2013) presents some 20 steps as a protocol, appropriate given the Bank's procedures. Protocols work only if the decision space is well-defined which may fit DFID's project cycle but not climate and agriculture as intersecting systems.

The next section reflects on this mapping of the existing guidance to draw lessons for DFID.

Short Title	Adaptation Continuum				
	Good Development	Capacity Building	Disaster Reduction	Enhanced Resilience	Targeted Impacts
New South Wales (AECOM, 2013)					
Climate proofing investment (ADB, 2012)					
Gender and climate (CGIAR, 2013)					
Big Facts (CCAFS, 2013)					
Climate extremes for agriculture (CDKN, 2012)					
Agriculture and climate change policy brief (CDKN, 2011)					
Agricultural investment programmes (FAO, 2012)					
Climate-Smart Agriculture Sourcebook (FAO, 2013)					
Climate smart agriculture (IFAD, 2011)					
Decision-making for effective adaptation (NCCARF, 2012)					
Measuring Climate Change Adaptability (USAID, 2011)					
Feed the Future Climate Factsheet (USAID, 2013)					
Opportunities and Challenges for Climate-Smart Agriculture in Africa (World Bank, 2011)					
Climate-smart Agriculture (World Bank, 2013)					

Table 2 Summary of climate adaptation guidance for agriculture.

The column headings correspond to the continuum of adaptation from the scorecard. The bars mark the kind of guidance: Awareness raising (light blue); Policy brief (medium blue); Sector strategy and Sector guidance (bright blue); and Technical manual (dark blue)

SECTION 3

Lessons Learned

Sector strategies and guidance are likely to be the most appropriate level of guidance for DFID, as they establish planning frameworks for programmes. Policy briefs and general documents to raise awareness cover important areas, but at a high level. Despite the volume of material, approaching 1000 pages, none of the guidance documents is wholly adequate for planning future investment in climate resilient agriculture.

This section presents some of the lessons learned in reviewing the existing guidance, in the context of adaptation planning projects supported by DFID (and others), primarily in Africa and Asia.

Leadership, innovation and transformation

Looking beyond disaster risk reduction to the longer-term challenges facing many agricultural systems, there appears to be a gap in thinking about leadership. Strategies and actions are presented that are widely known and can be readily implemented, often with the tacit assumption that all that is needed is more leaders and finance. Theories of change regarding innovation, social change and economic transformation are rarely mentioned and almost never deeply embedded in the guidance. For instance, under what conditions would investment in agricultural adaptation be likely to fail? A question that is only obliquely addressed under mainstreaming and working with stakeholders. Yet, the history of failed agricultural investments is well established.

There is a gap in the guidance between presenting technical solutions and fundamental analyses of real actors and institutional barriers. The FAO Sourcebook includes a box on mapping social and knowledge networks—a simple tool that looks at this issue. However, a tool is not a substitute for a profound analysis of the political economy of adaptation. Some progress has been made in this respect under a rubric of 'readiness'. This line of thinking is missing in most of the guidance, but surely is the forefront of development practitioners.

Similarly, the assumption is we need to choose from existing options. There is little emphasis on processes of innovation. Whether technical, financial or socio-institutional, the agriculture of the future will not be resilient if only dependent on existing technology.

Theory of change

The Figure below suggests four aspects of guidance on climate resilient agriculture that should be integrated into a Theory of Change (ToC).

- Adaptation as a process of socio-institutional learning and change includes creating an awareness of the problem and background information. However, action often proceeds with imperfect information, with leadership and institutions defining action spaces. Economic conditions may promote readiness or constrain investment.
- Agricultural systems always include some field-level production, set in the context of finance (including insurance), markets and infrastructure.
- Climate-resilient investment often begins with a national planning process and budgets (and recently multi-stakeholder funds). Whether action proceeds through

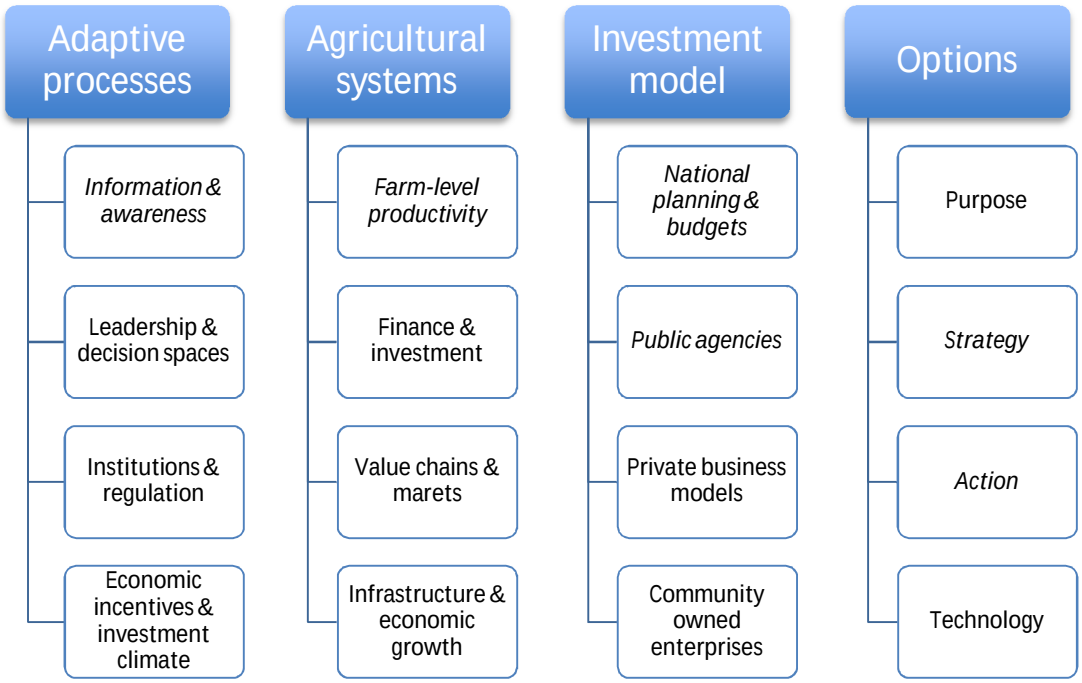
public agencies (e.g., line ministries) or the private sector, the organisation of the end-user in 'pulling' investment is a gap in most strategies.

- The choices of what to do are easier to navigate if the above processes and context is well defined. The full range of hundreds of possible actions cannot be implemented by everyone, nor at the same time.

The figure is illustrative rather than a definitive guide to change-making in agriculture. Other aspects that would be relevant include the natural resource base and in the context of this report the nature of current climates and expected climate changes.

Nevertheless, such a framework would make clear what assumptions are being made in a project that connect a planned intervention with expected results. The elements of this ToC that are common in the guidance reviewed in this report are highlighted in italics in the Figure. Clearly, the existing material does not cover the range of issues and adaptive processes that are required to transform economic growth and achieve social protection for the vulnerable in the face of future climate change.

Figure 3 Framing adaptation as a Theory of Change that connects adaptive processes to the choice of strategies and measures



Options for DFID

DFID would benefit from an approach that reviews models of good practice for climate-smart agriculture. Foremost among the users would be in-country staff including advisory staff and generalist managers. They need an accessible and understandable quick guide in planning major programmes—setting out the high-level purpose and project objectives, defining strategies in the national context and scoping the business case. More detailed guidance would support this quick-guide, as would be suitable for detailed project development.

At the start of this review, the wealth of guidance material readily available suggested that a Topic Guide for DFID would be of limited value. However, scoring the guidance on a reasonably complete set of criteria and scanning the links in a Theory of Change suggest lessons learned for DFID to consider.

There are good pieces available for many of the adaptation processes and the most urgent challenges ahead. DFID should point to the existing guidance, especially in the FAO Sourcebook and the World Bank portal. A concordance with commentary on how the guidance relates to DFID processes is one way to take advantage of the wealth of material. The general policy briefs are already widely circulated and more statements of this nature can be expected following the IPPC AR5 release.

Gaps in the coverage of adaptation pathways are significant, especially for long-term investment decisions. Innovation is the ultimate aim. Emerging ideas, experiences from other domains and support to social entrepreneurs would be helpful. However, these are all very dynamic areas and difficult to capture in formal guidance (Koh, Karamchandani, & Katz, 2012). Policy documents on innovation are available—they can be inspiring but do not always improve results. The notion of triple wins in climate-smart agriculture is important as well. Cross-sectoral areas may be worth more focused guidance, for instance:

- Biofuels and competition for food crops
- Water and energy and landscape planning
- Land ownership and foreign investment
- Private sector business models and value chains that reach the many small-scale producers and food processors

Guidance on specific processes would support practical decision making. Processes of learning about risks and opportunities, framing decisions in actor-networks and matching needs to finance, for instance, would be more practical than further inventories and technical manuals of options and products. In setting priorities for investment and project development procedures, DFID should include the potential to transform the agriculture sector as an engine of economic growth and poverty alleviation.

Online knowledge management services should be integrated into guidance and decision processes. Various groups already have good databases of agricultural strategies and options—the FAO sourcebook web site is a good starting point. The CRGE project in Ethiopia compiled over 300 options identified by experts and in previous assessments. Simple screening services, such as the scorecards in the Climate Safeguards System for the African Development Bank, would walk a user through practical guidance.[3] An online service could screen project proposals against agreed criteria including effectiveness, practicality for implementation, justification in the context of uncertainty about climate change, additionality in going beyond good development, and Value for Money as an overarching aid mandate.

Templates for national guides would build a working library of good practice. DFID advisers will appreciate examples of accepted practice relevant to the national and sub-national context that they can turn to in making investment decisions. National and programmatic guidance should focus on strategic choices and indicative activities that would be relevant in widely different contexts within a country, rather than detailed analysis of technical options (the lowest tier of the hierarchy presented above). A library of good practice examples would complement the more generic guidance. A set of templates could be created that are relatively easy to adapt to specific countries and agricultural systems.

[3] http://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/CSS%20Basics-En_def.pdf

Finally, it is worth noting again that the new IPCC report will have a wealth of useful information. The headlines are not a departure from existing confidence in climate change nor the urgent needs for action. However, there is a wider perspective on adaptation and less reliance on models and formal protocols as practice leads to innovation.

ANNEX

Review of Guidance Documents

The following pages review each guidance document using the criteria established in Section 2. This material is summarised above.

In many cases, figures are included in the review. They illustrate some of the tone and content of the guidance. Notes to the figures elaborate on specific aspects of the challenges in providing guidance on climate and agricultural adaptation.

AECOM: New South Wales

Guidance	Supporting evidence-based adaptation decision making in New South Wales: A synthesis of climate change adaptation research		
Source:	**AECOM**	**Year:**	**2013**

Coverage and practicality

Awareness raising	Policy brief and adaptation purpose	Sector strategy	Sector guidance for priority actions	Technical manual for specific actions
		X		

Example of a document for a local region in Australia. A good number of principles are established that should be reviewed by stakeholders as they plan sector adaptation strategies.

Regions and suitability

Agroecological zone	Livelihoods	National economic context	Continental context
X		X	

Case studies are located in the region as part of the evidence base. However, the majority of conclusions are more general principles that are not specific to the food systems of the region.

Climate vulnerability, impacts and adaptation needs

Good development	Capacity building	Disaster risk reduction	Expanded resilience	Targeted climate change impacts
X	X	X		

The primary focus is an institutional analysis of adaptation planning, based on research findings. Climate change is set in context through short bullets for each sector. More detailed climate information is available through other products in the NCCRF.

Agricultural targets

Non-food crops	Cash food crops	Subsistence food crops	Livestock	Public/private modes
	X			X

This is a commercial agricultural region and the role of private sector actors is emphasised, although not given much detail.

Summary

Example of a product for local stakeholders, the review covers most of the topics of interest, from climate outlooks to economics of adaptation. Key findings establish principles for planning adaptation. Sub-sector conclusions focus in more detail, although still at the level of strategic planning. At 120 pages, the document is long although easy to browse.

Table 3 Scorecard for guidance: New South Wales

ADB: Climate proofing

Guidance	Guidelines for climate proofing investment in agriculture, rural development, and food security		
Source:	**ADB**	**Year:**	**2013**

Coverage and practicality

Awareness raising	Policy brief and adaptation purpose	Sector strategy	Sector guidance for priority actions	Technical manual for specific actions
		X	X	

Presents six steps to assist project teams incorporate climate change adaptation measures into investment projects in agriculture, rural development and food security. While the focus of the publication is at the project level, improved understanding of climate impacts should be used to incorporate climate change considerations into agriculture planning and policy at the country level.

Regions and suitability

Agroecological zone	Livelihoods	National economic context	Continental context
			X

Though rural development projects include irrigation, rural infrastructure, agriculture production, and natural resource management, the report focuses mainly on irrigation infrastructure and agriculture production. Understanding local conditions is part of the protocol but the guidelines are quite general with anecdotal case studies of climate threats and adaptation options in the region.

Climate vulnerability, impacts and adaptation needs

Good development	Capacity building	Disaster risk reduction	Expanded resilience	Targeted climate change impacts
			X	X

Bullets on climate change impacts are presented with little regional detail. Types of adaptation decisions are: project-level climate proofing, anticipate future adaptation needs but delay investing, and monitor changes. They do not cover the complete range of strategies. The guidelines include 20 steps, with an emphasis on identifying climate change impacts and vulnerabilities. The overall context is risk assessment, starting by screening potential climate impacts. This downplays uncertainty and path-dependent adaptation processes. A better foundation in current vulnerability would be warranted. For instance, step 11 suggests that it is useful to construct maps of future flood hazard based on projected rainfall changes for 2020 and 2050. However, it is unlikely that climate model outputs for 2020 will be at all reliable at this scale.

Agricultural targets

Non-food crops	Cash food crops	Subsistence food crops	Livestock	Public/private modes
	X	X		

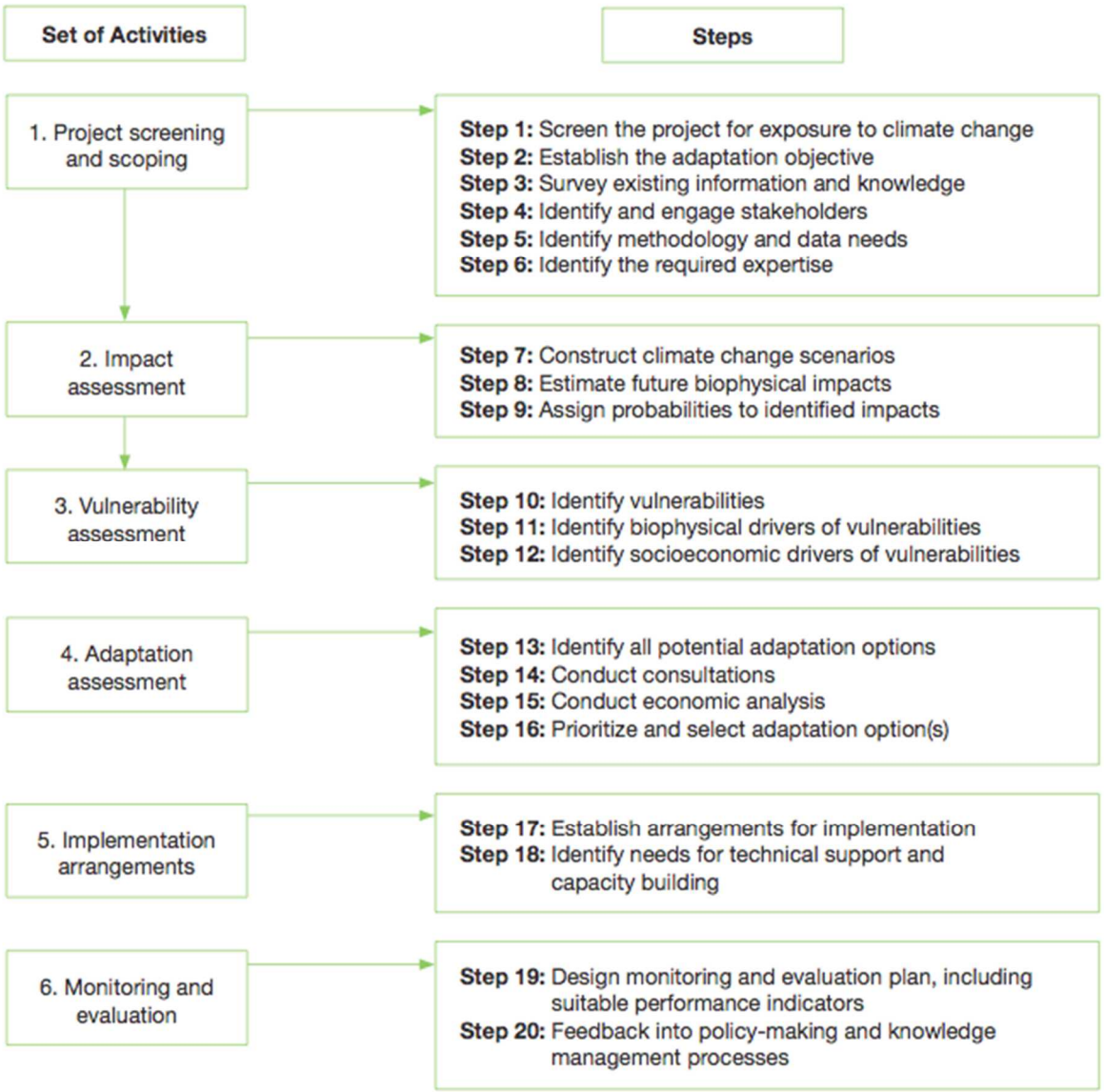
The nature of existing agricultural systems is not developed. Although examples are given, the advice is not specific to agriculture in the region. Private models for action are not discussed although there is a section on public economic analysis (including robust decision making). The project focus limits the guidance in multi-stakeholder processes where climate change may not be a driver of action.

Summary

This is a typical example of project-specific guidance. There is a great range of material covered and some useful advise in 20 steps over 85 pages. The document is long and it is not easy to decipher what are fundamental decisions for a project. Much of the guidance assumes climate adaptation drives project design, that project teams have the capacity for very detailed analysis and that models and impact assessments will provide valuable information and improve project performance.

Table 4 Scorecard for guidance: Asian Development Bank

Figure 4 Steps in planning adaptation in the Asian Development Bank



Review Note: Protocols such as this are common. They can be helpful in structuring an assessment, as long as the problem identification matches the rationale of the protocol. In this case, the steps correspond to procedures in the Bank. The result is quite a long list of steps that would have to be verified as part of a safeguard—which might be difficult to enforce. Such protocols are usually quite rigid. For instance, the analyst is not encouraged to take a short cut, perhaps if a good vulnerability assessment was done and targets for action identified (as might be expected in a National Adaptation Plan).

CGIAR: Gender

Guidance Source:	Training guide on gender and climate change research in agriculture	Year:	2013

Coverage and practicality

Awareness raising	Policy brief and adaptation purpose	Sector strategy	Sector guidance for priority actions	Technical manual for specific actions
X		X		

The purpose of the training guide is to address the lack of information on how men and women adapt to and mitigate climate change, explain tools for participatory rural research and promote gender-sensitive adaptation and mitigation activities. As such it falls between raising awareness (through training) and providing detailed sector strategies.

Regions and suitability

Agroecological zone	Livelihoods	National economic context	Continental context
	X		X

Seven modules frame the issue with more focus on how to conduct field work than specific analyses for agroecological zones or livelihoods. The CCAFS orientation is for developing countries. A livelihood analysis is one component.

Climate vulnerability, impacts and adaptation needs

Good development	Capacity building	Disaster risk reduction	Expanded resilience	Targeted climate change impacts
X			X	

Climate impacts are reduced to bullet points with no rating of confidence and little mention of uncertainty. Gendered differentiated impacts are noted in a table but are not the driving concern of the guidance. The orientation is climate-smart agriculture, although the strategies described are quite general (included productivity for instance). The focus on a continuum of action is noted. There is relatively little emphasis on disasters and gender-related impacts for example of droughts and floods.

Agricultural targets

Non-food crops	Cash food crops	Subsistence food crops	Livestock	Public/private modes
		X		

The field guide is oriented toward household production rather than commercial crops. Livestock and pastoral systems are not included, although many of the techniques are relevant.

Summary

At 150 pages this is a pretty thorough guideline especially for field workers. While the issue is very important, the guidance is narrowly focused on processes related to food security at a household level.

Table 5 Scorecard for guidance: CGIAR

Figure 5. Factors related to gender in CGIAR guidance

Review Note: In contrast to a set of steps, this is an example of a framing diagram. It sets the high-level purpose of adaptation—improving food security through improved access. The social good of food security is juxtaposed on the threat/opportunities of climate change (both adaptation and mitigation) without indicating steps, flows or priorities. It is only one framing of course, and doesn't bring into play global supply chains and the role of women as consumers for example.

CCAFS: Big facts

Guidance Source:	Big Facts where agriculture and climate change meet CCAFS	Year:

Coverage and practicality

Awareness raising	Policy brief and adaptation purpose	Sector strategy	Sector guidance for priority actions	Technical manual for specific actions
X				

This infographic web site presents a wide range of material, from food demand to climate impacts and adaptation. The material is global in nature and quite general, but very easy to see and links for going deeper.

Regions and suitability

Agroecological zone	Livelihoods	National economic context	Continental context
			X

The coverage is global with no differentiation by region.

Climate vulnerability, impacts and adaptation needs

Good development	Capacity building	Disaster risk reduction	Expanded resilience	Targeted climate change impacts
X			X	X

Climate impacts are general conclusions from global literature with no insight into uncertainty. Vulnerability is covered through a section on food security, essentially the basics of livelihoods but not a specific pathway related to climate. The adaptation section is useful, with a figure that shows the scale of effort required (similar to the continuum above).

Agricultural targets

Non-food crops	Cash food crops	Subsistence food crops	Livestock	Public/private modes
	X	X	X	

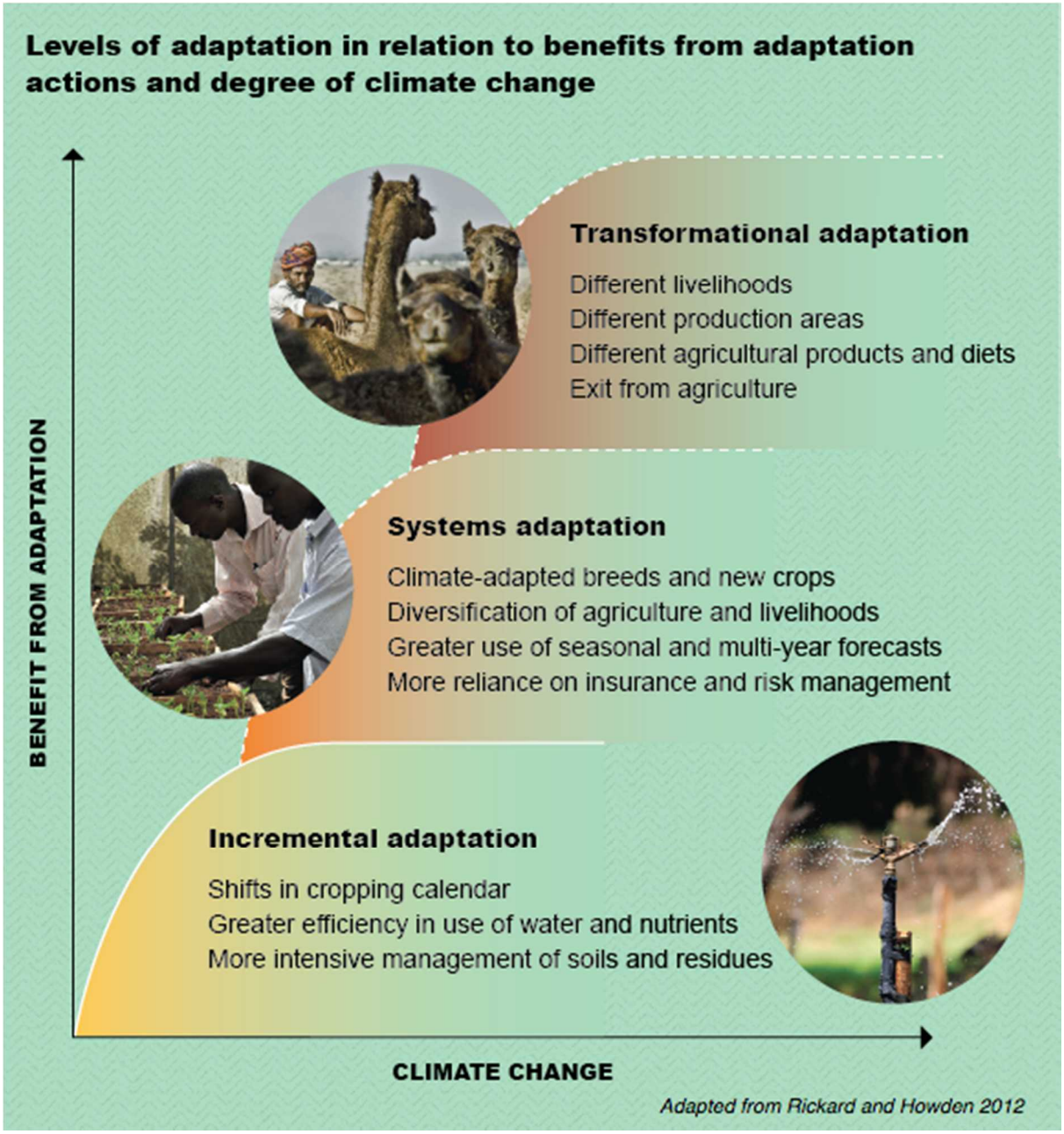
The adaptation options are quite general. No discussion of who acts.

Summary

The infographic works well as an overview of the issues. It does not provide guidance as to specific choices of strategies or actions.

Table 6 Scorecard for guidance: CCAFS

Figure 6. Scales of adaptation from the CCAFS infographic



Review Note: This is a rare example of a framing figure that sets transformation of agricultural systems as part of the climate change-food nexus. While the progression is important, the transformational options belie the kinds of disruption that might be involved, such as system collapse during a drought with multiple causes. There is also a sense that such transformations are happening now in some regions, rather than a future that might be avoided.

CDKN: SREX summary

Guidance	New guidance on climate extremes for water, agriculture, health and environmental professionals		
Source:	**CDKN**	**Year:**	**2012**

Coverage and practicality

Awareness raising	Policy brief and adaptation purpose	Sector strategy	Sector guidance for priority actions	Technical manual for specific actions
X				

This 'thematic brief' summarises the key findings of the IPCC special report on extreme events (known as SREX). SREX is a landmark, not so much in the content or guidance but in the wealth of material bringing several communities together (science, development, disasters and vulnerability/adaptation). The CDKN summary presents 10 headline messages, with a box and occasional tables on agriculture. There is little useful guidance on agriculture at this level.

Regions and suitability

Agroecological zone	Livelihoods	National economic context	Continental context
			X

The coverage is global with no differentiation by region, livelihoods or economic conditions.

Climate vulnerability, impacts and adaptation needs

Good development	Capacity building	Disaster risk reduction	Expanded resilience	Targeted climate change impacts
X	X	X		

Although climate occupies two of the framing sections, the brief has very little to offer in terms of going beyond current vulnerability. The strategies are familiar—investment, research, empowerment, actors, technology. One of the major conclusions of SREX—that adaptation requires transforming development pathways—is given little more than a few paragraphs in this summary.

Agricultural targets

Non-food crops	Cash food crops	Subsistence food crops	Livestock	Public/private modes

The adaptation strategies are quite general with little that is specific to agricultural production, food systems or private sector actors.

Summary

At nearly 40 pages this is more than a policy brief, but much less than sector strategy

Table 7 Scorecard for guidance: CDKN (SREX)

CDKN: Agriculture scoping report

Guidance	Agriculture and climate change policy brief: Summary of agriculture and climate change: A scoping report		
Source:	**CDKN**	**Year:**	**2011**

Coverage and practicality

Awareness raising	Policy brief and adaptation purpose	Sector strategy	Sector guidance for priority actions	Technical manual for specific actions
	X			

This is a summary, produced by the Meridian Institute on behalf of CDKN, of a longer report, led by CCAFS and FAO. The longer report is called a Scoping Report and the CDKN document calls itself a policy brief noting: "key points for policymakers, focusing on the unique aspects of agriculture when considered in the context of climate change" (p4).

Regions and suitability

Agroecological zone	Livelihoods	National economic context	Continental context

The coverage is global with no differentiation by region, livelihoods or economic conditions. The argument that agriculture is special is suspect as it does not compare agriculture with any other sector or complex of issues. The factors cited are justified areas for concern, with climate change only one of the drivers of potentially adverse outcomes.

Climate vulnerability, impacts and adaptation needs

Good development	Capacity building	Disaster risk reduction	Expanded resilience	Targeted climate change impacts
X				

Notes: Climate change per se is not discussed other than noting trade-offs and synergies between food production, adaptation and mitigation. However, the broad thrust of adaptation strategies and opportunities for early action are helpful.

Agricultural targets

Non-food crops	Cash food crops	Subsistence food crops	Livestock	Public/private modes

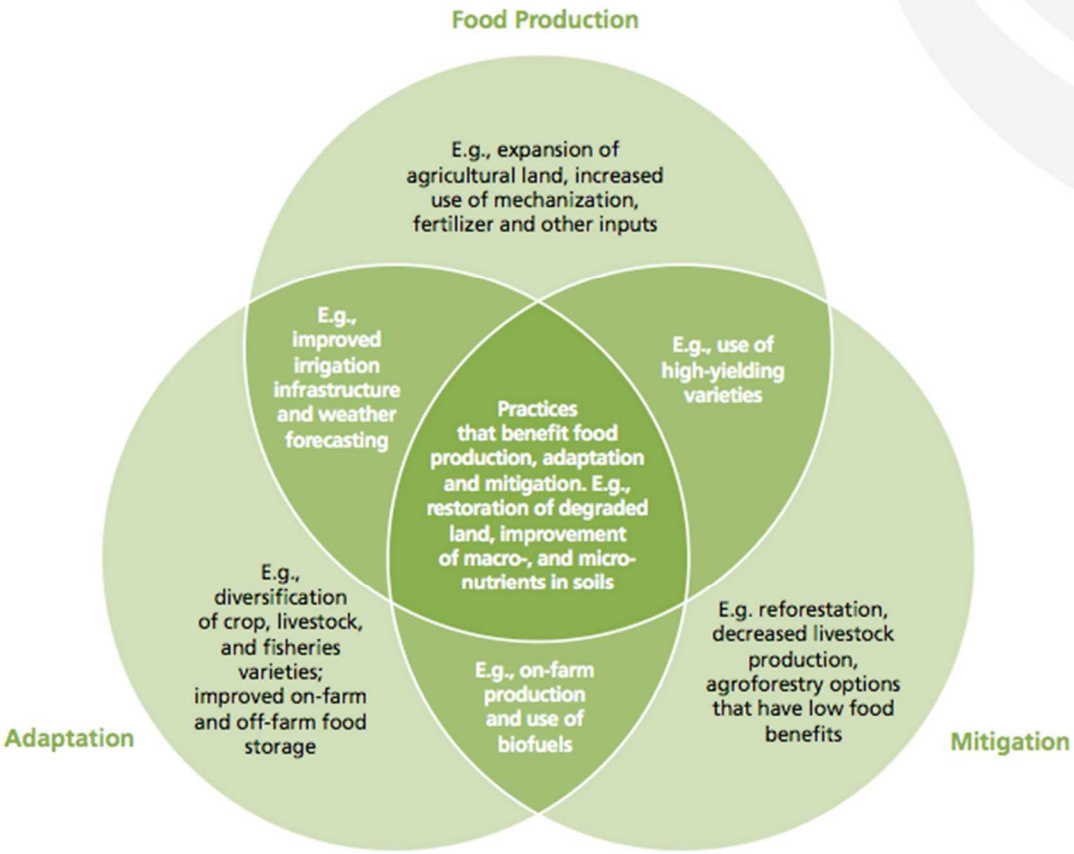
The adaptation strategies are quite general with little that is specific to agricultural production, food systems or private sector actors. A list of climate finance sources is included. However, there is no serious discussion of private sector actors and strategies. There is a section on trade that begins to take the issues beyond the local focus of most guidance.

Summary

The brief focuses mostly on UNFCCC processes. It will be useful for those facing complex international negotiations and looking for a primer (although it is now dated with the focus on the Cancun Agreements). It is not guidance for planning adaptation projects in this sector.

Table 8 Scorecard for guidance: CDKN

Figure 7. Trade-offs and synergies in agriculture



Review Note: This is an example of a framing that includes the notion of trade-offs—that climate adaptation is not a singular dimension with only synergies and win-win strategies. Venn diagrams are framing illustrations and not causal models or economic assessments. At least some of the major issues are noted here.

FAO: Agricultural investment

Guidance	Incorporating climate change considerations into agricultural investment programmes - A guidance document		
Source:	**FAO**	**Year:**	**2012**

Coverage and practicality

Awareness raising	Policy brief and adaptation purpose	Sector strategy	Sector guidance for priority actions	Technical manual for specific actions
		X		

This guidance document is from FAO's investment centre, supported by experts on climate (see the Sourcebook for a more substantive guideline). The series of FAO documents are intended to achieve best practice in investment design. The aim is to increase understanding of the basics of climate change adaptation and mitigation and help project teams to identify the relevance of climate change to investments through the use of key tools, information and methods for climate change adaptation and mitigation.

Regions and suitability

Agroecological zone	Livelihoods	National economic context	Continental context
			X

A table summarises possible impacts by region.

Climate vulnerability, impacts and adaptation needs

Good development	Capacity building	Disaster risk reduction	Expanded resilience	Targeted climate change impacts
X	X	X		

Climate change per se is not discussed other than the single table of potential impacts at a very general level. There is no discussion on uncertainty or evidence. Buried in the annex is a succinct overview of steps in a rapid assessment of climate impacts—one of the few to link current exposure and historical trends to longer term futures. Otherwise, vulnerability and development baselines are not prominent. The main focus is on making decisions about investments. Quite a few general strategies are noted (e.g., sustainable land and water management). The bulk of the guidance is the process of investment planning. Here the material is more useful, as these steps are often assumed. While still rather general, the series of key questions, use of screening tools and entry points for planning are sound.

Agricultural targets

Non-food crops	Cash food crops	Subsistence food crops	Livestock	Public/private modes

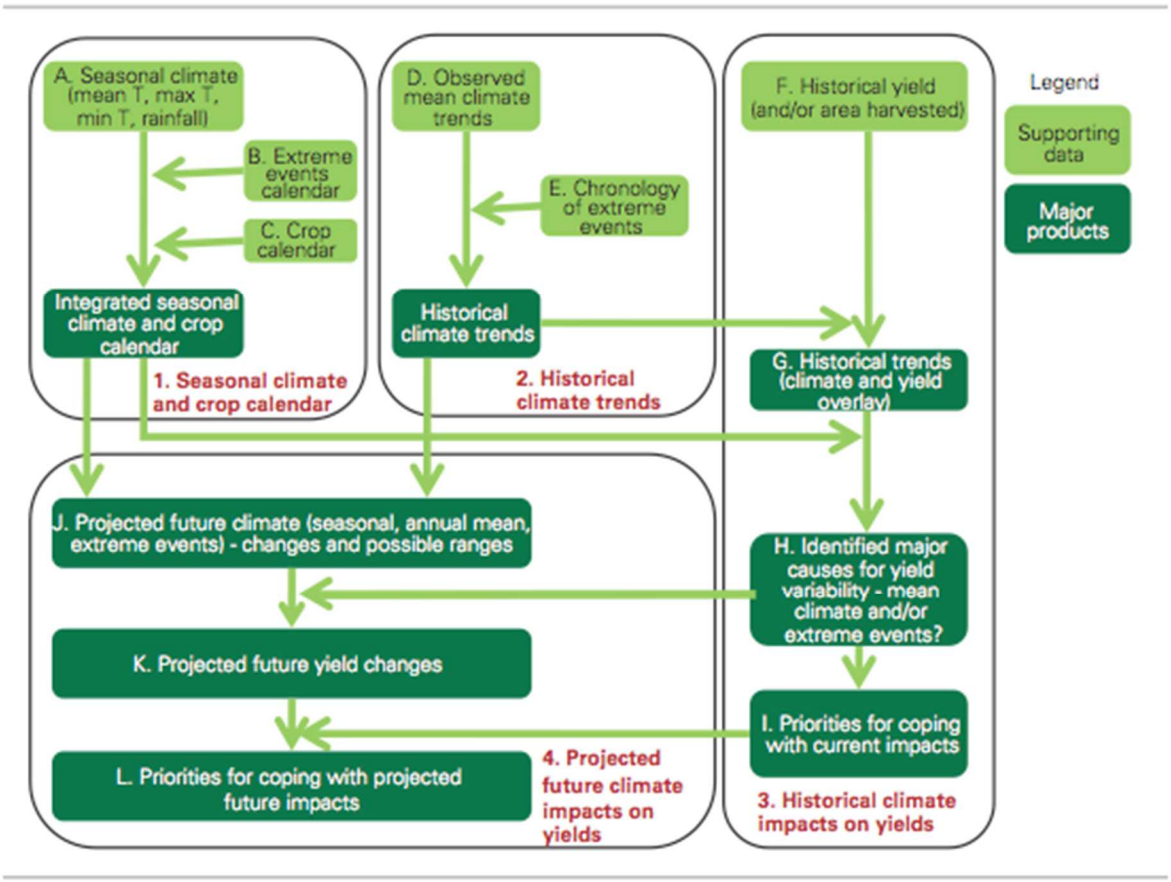
Notes: The guidance does not address specific crops or private sector investment.

Summary

FAO has established the lead in climate-smart agriculture (see the climate-smart.org web site for a wealth of useful material). This is a key piece, ideally suited to a project development team. The guidance is accessible, with over 100 pages of annexes for further details.

Table 9 Scorecard for guidance: FAO investment

Figure 8. FAO screening of climate impacts



Review Note: This is a good example of the sequence of analyses that links climate resources (sub-box 1) to history and trends (boxes 2 and 3) and resists jumping to future climate projections. While this is very helpful and not as common as might be thought, the figure also makes the assumption that climate is a major threat and doesn't integrate other environmental factors (e.g., soil erosion) and the socio-economic factors that characterize the gap between potential and actual yields.

FAO: Sourcebook

Guidance Source:	Climate-Smart Agriculture Sourcebook		
	FAO	Year:	2013

Coverage and practicality

Awareness raising	Policy brief and adaptation purpose	Sector strategy	Sector guidance for priority actions	Technical manual for specific actions
		X	X	

The sourcebook is the most extensive guidance available at present. It comprises 18 modules, from framing climate-smart agriculture and managing landscapes to detailed approaches for water, soils, energy, conservation, crops, livestock, forestry, fishers and value chains. Planning processes include local institutions, national programmes, finance, disaster risk reduction, vulnerable populations, capacity development and M&E.

Regions and suitability

Agroecological zone	Livelihoods	National economic context	Continental context
X			X

There are many examples of impacts, vulnerability and adaptation options in the sourcebook. However, an integrated analysis of agroecological zones, livelihoods and economic readiness are missing. While the FAO is well known for very good guidance on these issues, the sourcebook is less of a technical manual than an orientation to the issues and background to planning investments. A table summarises major agricultural systems (e.g., semi-arid tropics) and climate exposure, vulnerability and adaptive options. While useful, this is too general to be instructive in a particular context. For example, the adaptation strategies in the semi-arid tropics include: on-farm water storage; crop insurance; increased productivity through better crop-livestock integration; integrated water resources management (which are all good ideas in most parts of the world).

Climate vulnerability, impacts and adaptation needs

Good development	Capacity building	Disaster risk reduction	Expanded resilience	Targeted climate change impacts
X	X	X	X	

The analysis is based on principles of resilience and farming systems with considerable wisdom in placing climate within the many vulnerabilities and threats. There is relatively less attention on long run futures related to climate change (no analysis of climate scenarios) and the notion of transformation in development pathways is not central to the guidance. Most of the material is conventional impact chains with extreme events as the driver for adaptation. Curiously, the guidance presents conflicting definitions of vulnerability. The module on value chains is helpful, with a sense of adaptation across many connections and tables of possible interventions.

Agricultural targets

Non-food crops	Cash food crops	Subsistence food crops	Livestock	Public/private modes
x	X	X	X	

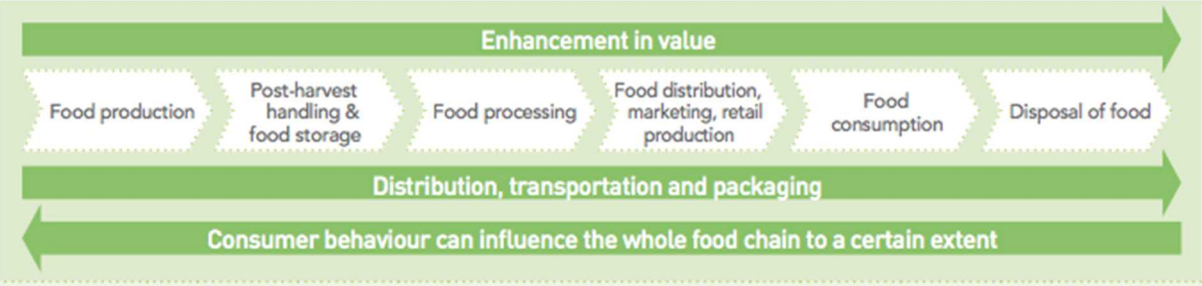
The guidance does not address specific crops or private sector investment other than through the many case studies and boxes.

Summary

The guidance document is over 500 pages—it is the definitive source for climate-smart agriculture. However, it reads more like a primer—how to get started—than guidance in how to be successful. Just about anything effective for agricultural development has an airing here.

Table 10 Scorecard for guidance: FAO investment

Figure 9. Value chains in sustainable agriculture



Review Note: This is a good example of a value chain. Although it is highly stylized, an analysis of climate risks and opportunities for adaptation at different stages in the value chain would be an ideal starting point before assuming that crop-climate yields at the field level are the problem. For instance, storage losses may be 30% of production, to some extent linked to climate. It may be easier to increase food supply by improving the value chain than by altering crops in field conditions.

IFAD: CSA

Guidance Source:	Climate smart agriculture: What's different? IFAD	Year:	2011

Coverage and practicality

Awareness raising	Policy brief and adaptation purpose	Sector strategy	Sector guidance for priority actions	Technical manual for specific actions
	X	X		

This document has a clear agenda: project and policy preparation need to reflect higher risks; interconnected risks should drive a major scaling up of successful 'multiple-benefit' approaches to sustainable agricultural intensification by smallholder farmers; and climate change and fiscal austerity are reshaping the architecture of public (and potentially private) international development finance. This call to action is supported primarily by a high-level analysis.

Regions and suitability

Agroecological zone	Livelihoods	National economic context	Continental context

This is a high level analysis with no details of the context.

Climate vulnerability, impacts and adaptation needs

Good development	Capacity building	Disaster risk reduction	Expanded resilience	Targeted climate change impacts
X	X			

The focus is multiple benefit responses, which by definition are already good development. A table presents some more detailed examples (e.g., ways to reduce yield losses through improved land management).

Agricultural targets

Non-food crops	Cash food crops	Subsistence food crops	Livestock	Public/private modes

There are not details about specific crops or real actors.

Summary

The title suggests more than the article delivers. The three high level strategies all warrant attention and have benefits for development now. While more concise than the Sourcebook (some 20 pages), the key messages could be contained in a very short factsheet.

Table 11 Scorecard for guidance: IFAD CSA

NCCARF: Decision making

Guidance Source:	Supporting decision-making for effective adaptation. Policy Guidance Brief 3 **NCCARF**	**Year:**	**2012**

Coverage and practicality

Awareness raising	Policy brief and adaptation purpose	Sector strategy	Sector guidance for priority actions	Technical manual for specific actions
	X			

This policy brief from the Australian National Climate Change Adaptation Research Facility is an example of national guidance.

Regions and suitability

Agroecological zone	Livelihoods	National economic context	Continental context
		X	

The Australian context is assumed. A graph shows national agricultural output and highlights the impacts of drought.

Climate vulnerability, impacts and adaptation needs

Good development	Capacity building	Disaster risk reduction	Expanded resilience	Targeted climate change impacts
X	X	X		

Impacts of current climate variability are placed in the context of market, economic, technological and social factors. Future climate threats are covered in half a page of general statements. Adaptation strategies are noted—building resilience, changing business practices and the role of policy and government.

Agricultural targets

Non-food crops	Cash food crops	Subsistence food crops	Livestock	Public/private modes

There are no details about specific crops or real actors.

Summary

Succinct and readable presentation of the issue (in 6 pages). Little in the way of guidance. The policy brief was developed in a multi-stakeholder workshop, so it represents a useful knowledge process beyond the document.

Table 12 Scorecard for guidance: NCCARF

USAID: Feed the Future

Guidance	Feed the Future Climate Factsheet and Measuring Natural Resources Management and Climate Change Adaptability under Feed the Future		
Source:	**USAID**	**Year:**	**2011 & 2013**

Coverage and practicality

Awareness raising	Policy brief and adaptation purpose	Sector strategy	Sector guidance for priority actions	Technical manual for specific actions
	X			X

Feed the Future is a major initiative, with a broad aim of achieving resilience. While climate change is not the primary focus, some of the material is helpful to the extent that urgent actions are based on good development and resilience livelihoods. The Factsheet is two pages, simply reinforcing the FtF strategy. The report on measuring adaptability is a technical introduction (one of a dozen) to the M&E systems required by USAID.

Regions and suitability

Agroecological zone	Livelihoods	National economic context	Continental context

No context is provided.

Climate vulnerability, impacts and adaptation needs

Good development	Capacity building	Disaster risk reduction	Expanded resilience	Targeted climate change impacts
X				

There is very little explicit on climate change in the FtF literature although the programme focus on resilience is entirely relevant. This is mainstream development.

Agricultural targets

Non-food crops	Cash food crops	Subsistence food crops	Livestock	Public/private modes
		X	X	

There are no details about specific crops or real actors in these two reports although smallholder agriculture and livestock are primary targets.

Summary

A case where much relevant thinking and practical actions are planned that have only weak connections so far to planning climate smart agriculture.

Table 13 Scorecard for guidance: USAID

World Bank: Africa

Guidance Source:	Opportunities and Challenges for Climate-Smart Agriculture in Africa World Bank	Year:	2011

Coverage and practicality

Awareness raising	Policy brief and adaptation purpose	Sector strategy	Sector guidance for priority actions	Technical manual for specific actions
	X			

Key messages recommend tackling food security, poverty and climate change as closely linked issues, citing the triple win with adaptation and mitigation delivering food security. The policy brief is supported by a longer technical report with country examples of opportunities and challenges.

Regions and suitability

Agroecological zone	Livelihoods	National economic context	Continental context

No context is provided.

Climate vulnerability, impacts and adaptation needs

Good development	Capacity building	Disaster risk reduction	Expanded resilience	Targeted climate change impacts
X				

The Policy Brief covers issues in the UNFCCC and a short section on new finance. The country report has many examples, but not an overall framework or guidance.

Agricultural targets

Non-food crops	Cash food crops	Subsistence food crops	Livestock	Public/private modes

There are no details about specific crops or food systems.

Summary

An informative, short policy brief that establishes some of the principles of climate-smart agriculture. However, it is not guidance for forward strategies or actions.

Table 14 Scorecard for guidance: World Bank, CSA opportunities in Africa

World Bank: The Facts

Guidance Source:	Climate-smart agriculture and the World Bank: The facts World Bank	Year:	2011

Coverage and practicality

Awareness raising	Policy brief and adaptation purpose	Sector strategy	Sector guidance for priority actions	Technical manual for specific actions
X				

This is a web site (climatechange.worldbank.org/content/climatesmart-agriculture-and-world-bank-facts#ag1) that outlines three messages: feeding the globe, climate-smart agriculture and putting CSA in practice.

Regions and suitability

Agroecological zone	Livelihoods	National economic context	Continental context

No context is provided.

Climate vulnerability, impacts and adaptation needs

Good development	Capacity building	Disaster risk reduction	Expanded resilience	Targeted climate change impacts
X				

CSA is presented as a triple win for agriculture, climate and food security. The main details are on reducing greenhouse gas emissions and sustainable land management.

Agricultural targets

Non-food crops	Cash food crops	Subsistence food crops	Livestock	Public/private modes

General statements only.

Summary

A landing page in the World Bank web site that reads more like a public relations exercise (a common problem with such short briefs). A longer brochure on CSA contains more detail, but with the same generalised public relations message (World Bank, 2010). The World Bank produces a great range of material, often of quite varying quality. Its climate portal is growing in competence and has a good bit of useful material at the national scale, including some indicators of vulnerability and exposure (see http://sdwebx.worldbank.org/climateportal/index.cfm?page=global_map_region&ThisMap=AF).

Table 15 Scorecard for guidance: World Bank CSA facts

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