WISER:
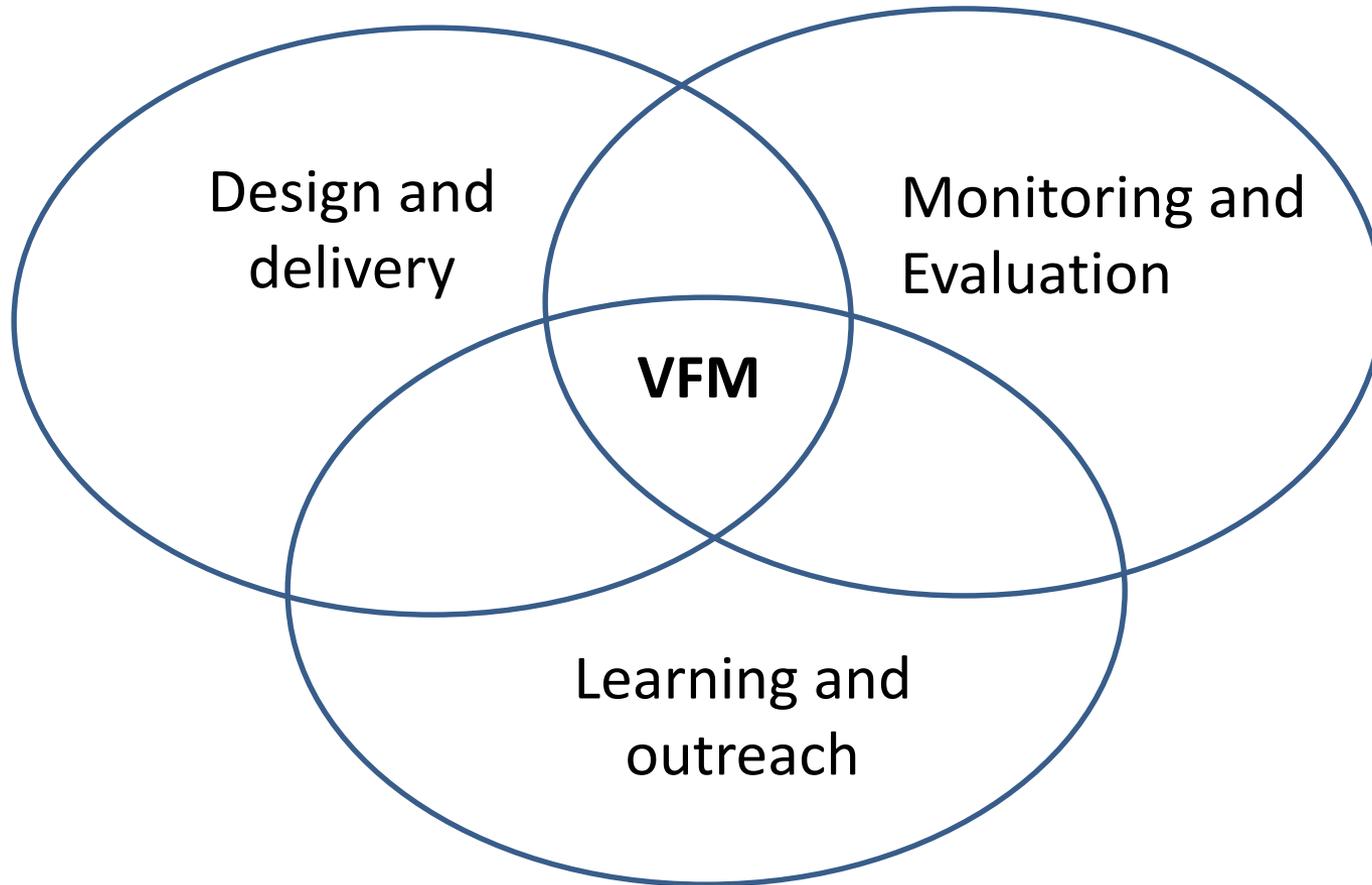# Value for Money (VfM)
And Socio-Economic Benefits (SEB)

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Role of VFM Framework

Design and delivery

Monitoring and Evaluation

VFM

Learning and outreach

Key objectives

WISER programme is seeking to harmonise analysis & reporting of:

1. Value for Money (VFM) of the programme;

2. Socio-economic benefits (SEB) of climate information for end users

3. Transformational impacts (policy, institutions finance, integration);

4. VFM Indicators (KPIs) for International Climate Fund

5. VFM knowledge products across the programme (MEL)

WISER VFM Framework
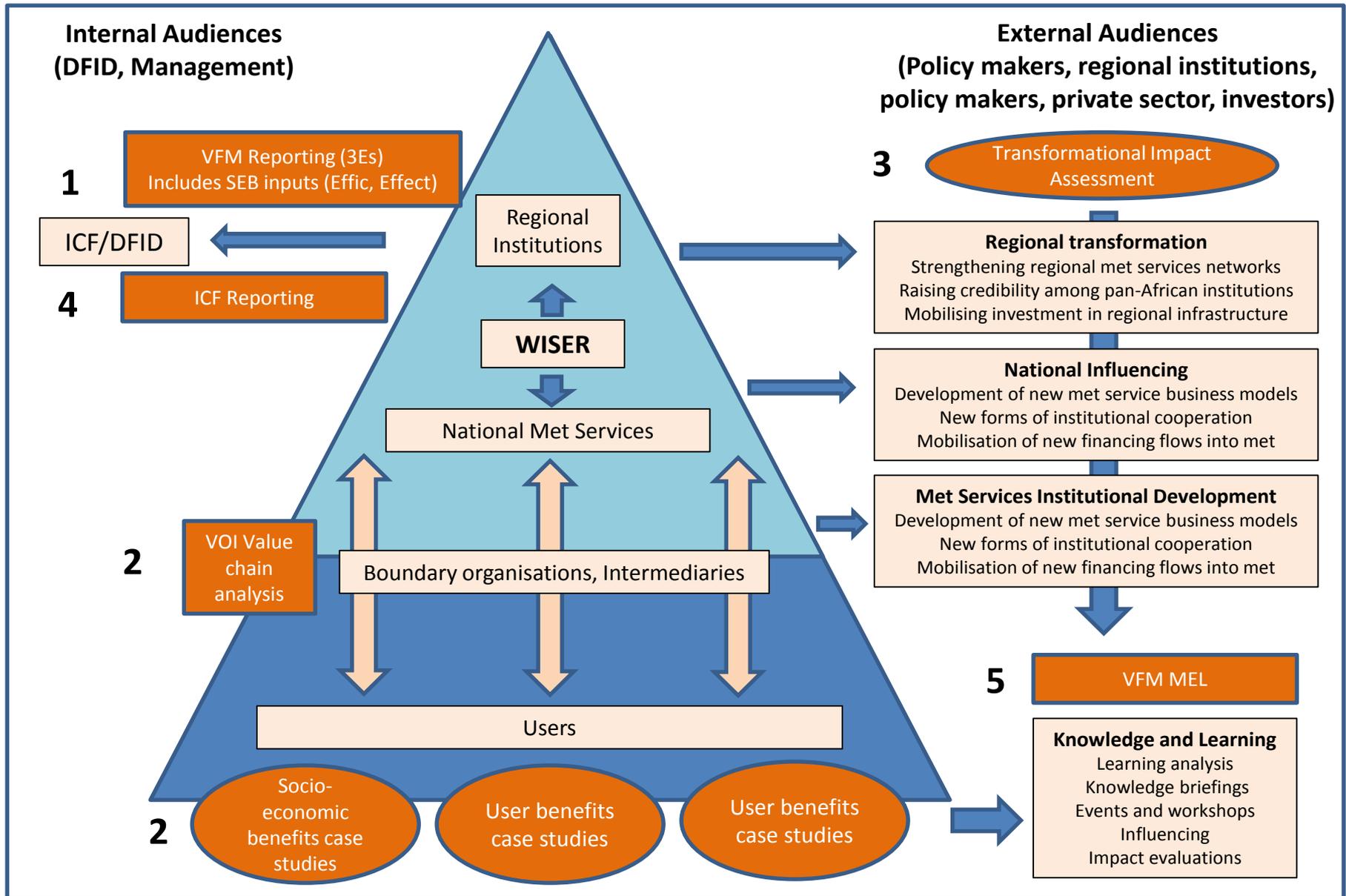
VFM Framework

- Provide guidance to fund managers (ACPC/MO) that can be cascaded down through sub-projects to ensure information is being gathered for VFM reporting;

- To provide guidance for *SEB assessment*, built around a suite of methods, to estimate the benefits of weather and climate services (value of information);

- For *Transformational Impact*, to assess benefits of CS in terms of improved policy, finance, resource allocation and planning through the use of case studies;

- To work with MEL team to identify relevant ICF indicators and build out methodologies, including an indicator for transformational impact;

- For MEL, to ensure that VFM and SEB is fully integrated into M&E processes, and lessons learned, knowledge products and outreach have a clear VFM-SEB focus.

1. VFM frameworks

Mainstream VfM in programme design

- Economy (Spending less):

  – Most cost effective inputs, Unit costs (£ per unit), management costs

- Efficiency (Spending well):

  – Managing inputs to achieve outputs, cost/resources per output (ratios)

  – Effective delivery (time, resources allocation)

- Effectiveness (Spending wisely)

  – Comparing different approaches to reach a targeted outcome and impact

Use this framework across the programme, e.g. procurement and to determine what is needed from socio-economic benefit task.

1. Value for Money Framework (VfM)

Measuring VFM

VfM measure	Indicator
Economy	Average day rate of the technical experts employed by projects
	Average costs of specific items of equipment
	Admin/overhead cost per £1 of programme spend under each project
Efficiency	Unit cost of securing one hectare of land against erosion
	Unit cost of giving a person improved access to clean energy
	Unit cost per person supported to cope with climate change
	Operational cost per proposal considered by the FMC
Effectiveness	Amount of public finance leveraged
	Amount of private finance leveraged
	% of projects successfully implemented
	Net Present Value
	Benefit Cost Ratio

1. Value for Money Framework (VfM)

Activities

- Central development of VfM guidance:
  - Principles, types of evidence and indicators that will be expected
  - Operations level and sub- projects themselves

- Review of quick start projects and emerging 2017 work programmes:
  - Identify best practices and recommendations for improvement

- Training and capacity building
  - Materials and workshop

- VFM call down project preparation and QA facility
  - Ad-hoc response for VfM queries (funded through projects)
  - Annual review of emerging work plans

- Annual report on VFM
  - Review, best practices, learning

2. Socio-Economic Benefits (End user)

- Climate projects expected to demonstrate socio-economic return

- Cost effectiveness ($/outcome) or cost benefit analysis (BCR)

- Challenging for climate information services to demonstrate value

- Leads to underinvestment in CIS/preference for technical solutions

- Nonetheless, literature indicates high levels of returns

- WISER support evidence base for returns on investment in CIS

2. Socio-Economic Benefits (End user)

The benefits of weather and climate services are through better decisions

- Centred on the value of information (quasi-option value)

- Information produces value from the actions subsequently taken

- Benefits and costs compared with the action without new information

- Difference being known as the economic value of information (VOI)

- Literature now exists – over 100 studies weather and climate services

- Provides information for efficiency and effectiveness of VfM

- Can provide justification for project externally (i.e. value of CS)

2. Socio-Economic Benefits (End user)

Economic rationale for interventions to address current climate variability and future climate change:

- These lead to impacts (damage and losses)

- Reducing these impacts = financial or economic benefits

  - Market sectors (prices)

  - Non market sector (alternative approaches) – as part of wider economic analysis

- Can compare these against the costs of interventions

- Show whether intervention justified (do benefits outweigh the costs)

- Identify most efficient options (ranking – ratio of benefits to costs)

Types of Benefits

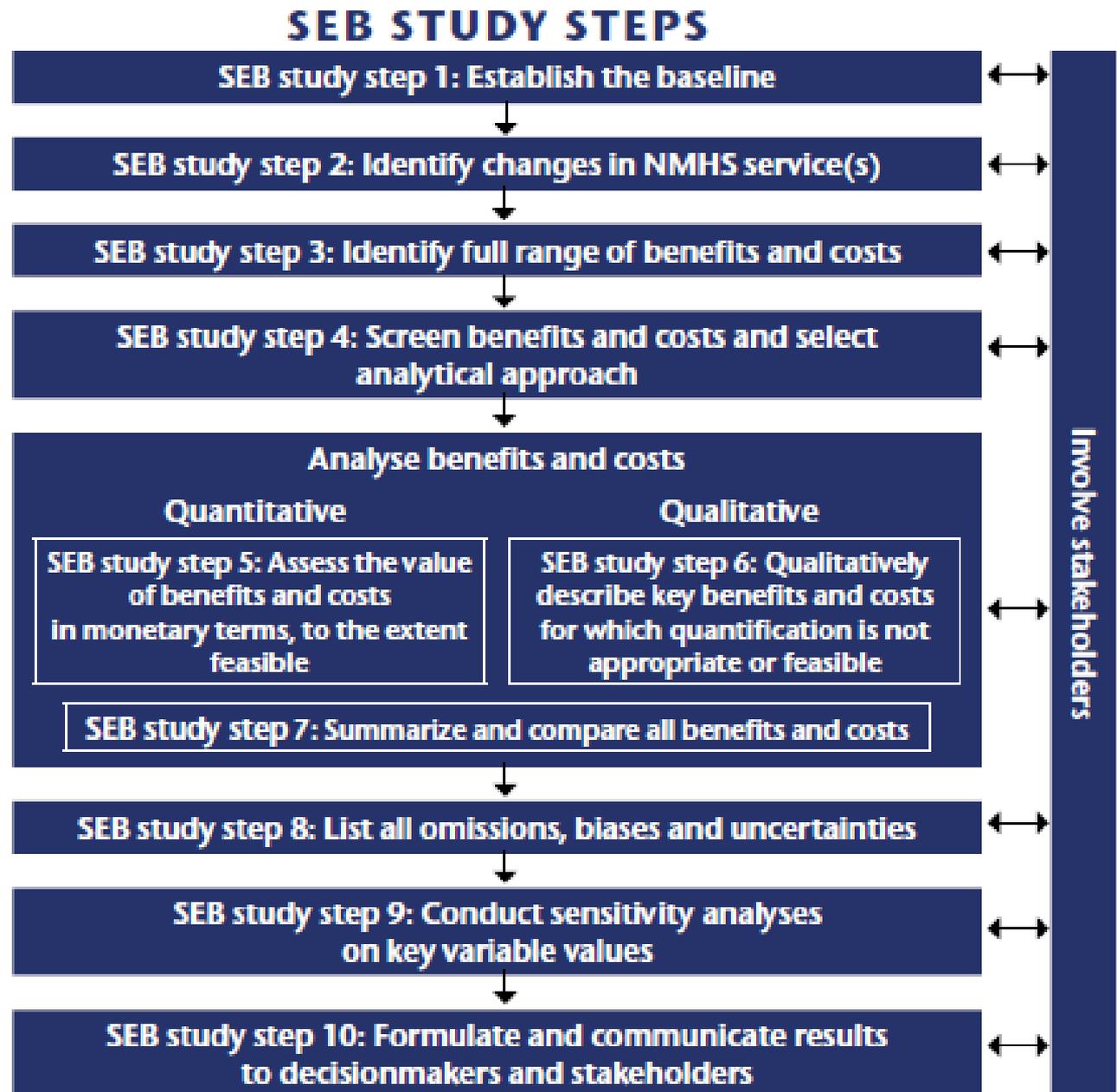| Sector/industry	Studies reviewed[a]	Examples of specific applications
Agriculture	64	• Crop management (e.g., timing of planting/harvest, selection of crops) • Irrigation decisions • Product marketing • Input use (e.g., fertilizer application) • Herd management (e.g., when and how many animals to sell) • Changes in commodity prices • Implications for global trade market
Energy	10	• Planning purchases of gas and electric power • Managing responses in emergency situations • Managing capacity and resources (e.g., grid/distribution management, electricity production/pricing) • Optimizing reservoir/hydropower operations • Commercial/residential consumption decisions
Fisheries	6	• Responding to threat of harmful algal blooms (HAB) • Harvest management
Transportation	5	• Reducing wait times on runways • Fuel purchasing • Accident reduction • Snow preparation/removal • Canal management
Water resources management	7	• Storage/release decisions by reservoir managers • Water pricing/allocation • Adoption of conservation measures
Tourism/recreation	3	• Marine forecasts/warnings • Event management
Disaster management	3	• Hurricane preparedness • Early warning systems
Cross-sector	17	• Weather impacts on national economy • Willingness to pay by consumers for weather information • Multi-sector studies including value of forecasts for transportation, water, construction, energy, fisheries, forestry, and other sectors
Other[b]	30	• Pricing of weather derivatives/other financial products • Pricing of insurance products • Forecasting extreme weather events

2. SEB: Steps

WMO analysis

Generic guidance

But many aspects complex

Need resources

SEB STUDY STEPS

SEB study step 1: Establish the baseline

SEB study step 2: Identify changes in NMHS service(s)

SEB study step 3: Identify full range of benefits and costs

SEB study step 4: Screen benefits and costs and select analytical approach

Analyse benefits and costs

Quantitative

SEB study step 5: Assess the value of benefits and costs in monetary terms, to the extent feasible

Qualitative

SEB study step 6: Qualitatively describe key benefits and costs for which quantification is not appropriate or feasible

SEB study step 7: Summarize and compare all benefits and costs

SEB study step 8: List all omissions, biases and uncertainties

SEB study step 9: Conduct sensitivity analyses on key variable values

SEB study step 10: Formulate and communicate results to decisionmakers and stakeholders

Involve stakeholders

2. SEB: Key Assumptions

Use of information and uptake along the chain

- How reliable are the forecasts

- Assumptions about the uptake of information (e.g. % farmers)

- How effective and valuable the weather information will be

- Steps in the weather chain - forecast accuracy, tailored information, access, comprehension, ability to respond, effectiveness of response, redistribution (leaks) of initial benefit

- weather service chain analysis (WSCA)

- Information decay along the chain - 'cost-loss' (CL) analysis

2. SEB Methods

Benefits involve market and non-market benefits - different ways to elicit

- Model potential benefits ex ante (e.g. using crop models) – 'ex ante'

- Assess information on losses and estimate the potential benefits 'ex post'

- Look at data and observed improvements and statistically assess (econometrically) the benefits of access to climate services

- Survey users to elicit using:

  – Revealed preferences (how people change their behaviour) with information

  – Stated preference, interviews with user communities, willingness to pay

SEB framework – Fund manager role (ACPC/MO)

- Collate Inventory of studies (but not need for more review)

- SEB Guidance (linked to VfM)

- Training and guidance (linked to VfM)

- Application to quick start, a) review b) actual analysis of SEB for quick start

- Screening / review of future work programme and new proposals

- Technical assistance roster call down for SEB studies a) guide b) undertake

- Monitoring and learning. Projects, WISER Portfolio, Learning (in the value chain)

- Dissemination and policy briefs – external outreach on programme (benefits)

3. Transformational impact

Assessment of the wider influence of the programme

- Supporting institutional strengthening and regional integration

  – Decision making, coordination, regional platforms

- Influencing policy making and national/sub-national decision making

  – CIS development, DRR, Planning (e.g. Agriculture)

  – Influencing allocation of budget funds in climate sensitive sectors

- Mobilising additional investment into national /regional met services activities

  – Budget support

  – Supporting climate finance mobilization for climate & mainstreaming projects e.g. GCF

- Encouraging downstream private sector engagement & product development

  – Insurance markets, investment decisions, private CIS information aggregators

- Informing assessments of economic value at risk and sector impact modelling

3. Transformational Impact (Fund manager role)

Activities

- Development of transformational impact assessment framework
  - Aligned with KPI 15 as part of the ICF and MEL components

- Capacity building for local teams
  - Align thinking on potential for enhancing and reporting on transformational impacts during project identification and design phase (included in 1);

- Quality Assurance
  - Ensure that relevant reporting frameworks and indicators are captured in sub-projects to capture transformational impact narratives;

- Case study development
  - Illustrate the impacts of climate information services, based on in-country stakeholder interviews

- Annual assessment of macro-level transformational impact
  - Review of projects, stakeholder consultation
  - Feed into the overall assessment undertaken for ICF KPI 15 (see below)

4. VFM KPIs

Relevant indicators (KPIs) for the UK's International Climate Fund

- Review and recommend formulation of indicators (with M&E) team

- People (relevant to the socio-economic benefits agenda)
  - KPI 1 - Numbers of people supported by ICF programmes to cope with effects of climate change
  - KPI 4 - Number of people with improved resilience as a result of ICF support.

- Influence and Leverage (relevant to the transformation agenda):
  - KPI 11 - Volume of public finance mobilised for climate change purposes
  - KPI 12 - Volume of private finance mobilised for climate change purposes
  - KPI 13 - Level of integration of climate change in national planning
  - KPI 14 - Level of institutional knowledge of climate change issues
  - KPI 15 Extent to which ICF intervention is likely to have a transformational impact

- Linked to informing transformational agenda

4. ICF additionality and reporting

Activities

- Development of a composite transformational impact indicator (KPI 15)

- Incorporate indicators into the overall logframe, and sub-projects financed.

- Ad-hoc support to MEL team on qualitative indicator reporting (e.g. KPI 13, 14)

- Annual assessment of the transformational impact indicator (KPI 15)

5. Monitoring, evaluation and learning (MEL)

Develop framework and opportunities for learning

- Managed by MEL team, but opportunities for added value

    – Learning analysis on approaches to VFM in climate services from WISER

    – Learning analysis on approach to SEB, extending to weather chain

    – Preparing knowledge products on measuring economic value (SEB) in CIS

    – Participating in external learning events, seminars and workshops

    – Engaging with other CIS programmes to promote and align approaches to VfM/SEB

    – Undertaking impact evaluations for sub-projects, (on a contract basis through call-down).

5. Monitoring, evaluation and learning (MEL)

Activities

- Creating an integrated MEL approach
  - Support to MEL team
  - Integrated VFM, logframe, indicators, ICF requirements and reporting structures.

- Support to MEL processes
  - Review of TORs, QA of outputs, reviews, evaluations

- Learning analysis:
  - Collating best practice and lessons learned
  - Engagement with wider DFID CIS activities

- Preparing VFM and SEB knowledge products:
  - Policy briefs, research summaries

- Stakeholder outreach
  - Presentations, influencing, engagement with other programmes

Application to Quick start/2017

- E.g. working with WMO on 2017 Highway project
- Early warning systems on Lake Victoria
  - Economy: Procurement and cost data for systems integration
  - SEB of end user benefits for lake users
    - Baseline, avoided damages, value of enhanced products
  - Transformation: Business case for regional EWS platform
    - Cost savings, effectiveness, political economy benefits
  - KPIs and logframe for VFM considerations

Quick start project	VfM	Socio economic benefits	Transformational Impact	Potential for pilot
Multi-hazard early warning systems in Tanzania. Focus on coastal regions and training, stakeholder engagement (capacity and product development) –SOP request	Procurement aspects (economy), e.g. rates, overheads, equipment. Assessment of delivery and performance benchmarks. Review reporting frameworks/ measures of effectiveness	Reduced losses and health effects (direct damage, indirect, non-market valuation) based on ex post disaster profiles. Can use existing DRR information from the team for Tz and derive possible benefits based on improvements	Policy maker relevance. Impact on investment and resource allocation. Macro-economic implications in terms of national budgeting and DRR response	High relevance.Would provide test case for severe weather forecasting and EWS
Decentralised Climate Information Services for Decision Making in Western Kenya. Provision and access to climate services - Downscaled information, communication to users (participatory scenario planning workshops)	Procurement aspects (economy), e.g. rates, overheads, equipment	Study in East Kenya used econometric analysis. For timescale of this study, more likely assessment of modelled or scoped benefits	Role of project in supporting sub-national policy and decision making. Linkages to resource allocation.	High relevance MO already looking at socio-economic study at end of Oct / Nov season so might be possible to test guidance on this study
Kenya Training Modernisation and East Africa Forecaster Training Course. 1 IMTR and KMD course and 2 climate module (seasonal)		Could investigate lower training cost (resource time) from Met Office providing quicker 18 weeks) versus other courses (1 – 2 years). Plus benefits of enhanced capacity (staff numbers and services)	Assessment of transmission mechanism from training to outcomes (e.g. investment in systems)	High, as would be interesting to explore benefits of training and capacity (as different part of the weather chain) and develop guidance for this area.
Strengthening Climate Information Partnerships – East Africa (SCIPEA). 3 components. 1 Use of global data for Africa to download and use. Likely case study on La Nina in autumn but not issue public statements. 2 develop 2 user partners for climate providers and users with prototypes for climate services. 3. CR4D – process of capacity training	Efficiency and Effectiveness	Could investigate modelled benefits from enhanced La Nina forecasting, or do an ex post study with the forecast versus outturn.	Assessment of engagement with policy makers and likely uptake in policy development	High. Would be useful to explore benefits of forecasts, as well as institutional strengthening and capacity. Particularly useful to do if programme gets scaled up in next round
EnACT. This will improve the availability of climate data and create new data products to allow for the characterisation of climate risks at a local scale and for low cost high impact opportunities to support applications and research.	Procurement aspects (economy), e.g. rates, overheads, equipment		Analysis of likely applications and uptake of data products in wider policy context	High. Would be useful to explore the benefits of seasonal forecasts and local scale information
South Africa Weather Service. Value of weather and climate services- baseline and incremental to address funding problem		Could pick focus areas for current services (i.e. in department where SAWS are) as well as high economic value sectors to demonstrate, then incremental case studies for extra funding		Interesting. Provides information on national met service benefits, i.e. more general justification for investment.
DFID El Nino study (suggestion from Nicola Ranger). DIFD are about to commission some work looking at how forecasts were used in the preparedness for the El Nino.Could combine with west Africa study as care doing some analysis on El Nino comms in media	Efficiency and Effectiveness	Ex post analysis of the benefits of El Nino forecasting.		Interesting, as relevant for seasonal forecasting Also important learning opportunity for WISER. I.

Deliverables

- A guidance document on VfM, SEB and Transformational impact for WISER.

- A socio-economic benefit inventory of studies.

- A VFM and SEB review of quick start projects (and first year)

  - Possible SEB studies for quick start

- Review of VfM / SEB for year 2 – 4 programme (as prepared, each year/project)

- Case studies on CS transformational impacts and best practice

- Review and recommendations on ICF indicators for WISER, including KPI 15

- A VfM and SEB MEL proposal

- A VFM and SEB MEL results document