



TERMS OF REFERENCES (TORs) FOR PREPARING KEYNOTE, SEMINAR AND CASE STUDY PAPERS

1. SEMINAR FORMAT

The seminar format will include keynote addresses, seminar papers, case studies and panel presentations. Each of these will address a specific angle of the discussions as follows:

Keynote Addresses will set the scene and the tone of the seminar. Keynote speakers will be identified to prepare keynote papers for presentation in plenary after the official opening of the seminar.

Seminar Papers will be referenced “expert papers” prepared by selected subject matter experts on specific sub-themes within each seminar theme. The Seminar papers will be presented in plenary to provide participants with an in-depth understanding of the underlying issues and stimulate further debate for the working group sessions.

Case Studies will be selected for presentation in specific working group sessions under each theme. They will highlight on-the-ground, practical examples of integrated water management.

Panel Session - Given the high importance of increasing public investment and improving the enabling environment – the discussions under this theme will be organised in the form of a panel session – beginning with an expert paper presentation on strategic investment and policy priorities - followed by four panel presenters on specific investment areas.

All seminar papers must include a component on information, communication and knowledge support systems.

The seminar will have four main themes: water availability and access, public policy and investments, water and society and knowledge support systems. A summary of the papers and presentations is included below:

Theme	Papers and case studies to be presented
KEYNOTE PAPERS	<ul style="list-style-type: none"> • Keynote Address 1: Climate change, water and agriculture: Building resilience through better integrated water management in ACP countries • Keynote Address 2: Information and knowledge support systems: Evidence-based, decision-support tools for informing agricultural policy, strategy and planning in ACP countries
Theme 1: WATER AVAILABILITY AND	<ul style="list-style-type: none"> • Seminar Paper 1: Strategies for increasing agricultural

ACCESS	<p>water productivity in physically water-scarce regions</p> <ul style="list-style-type: none"> • Seminar Paper 2: Current responses to drivers of change • Case Study Papers 1: "Adaptation strategies for vulnerable rural communities" • Case Study Papers 2: "Water storage for climate change adaptation (recovering rainwater)"
THEME 2: PUBLIC POLICY AND INVESTMENT	<ul style="list-style-type: none"> • Seminar Paper 3: Increasing water accessibility: strategic investment and policy priorities in agricultural water management • Panel Presentation 1: Investing to revitalise irrigation • Panel Presentation 2: Investments for improving accessibility in economically water-scarce regions • Panel Presentation 3: Investments for managing water in rain-fed systems • Panel Presentation 4: Public policy framework for stimulating increased investments and improved management of agricultural water
THEME 3: WATER AND SOCIETY	<ul style="list-style-type: none"> • Seminar Paper 4: Growth linkages: The relationship between the current levels of investment in agriculture (and in agricultural water), current productivity and growth rates, and current levels of poverty and hunger reduction in the region • Case Study Papers 3: "Water governance and water sector reform" • Case Studies Papers 4: "Water, poverty and gender: equitable distribution of water rights and access"
THEME 4: KNOWLEDGE SUPPORT SYSTEMS	<ul style="list-style-type: none"> • Seminar paper 5: Information and communication management (ICM) and knowledge management (KM) • Seminar paper 6: Knowledge support systems • Seminar paper 7: Uptake pathways

A call for papers will be sent out inviting various individuals, organisations, networks and other interested parties to prepare and submit papers under the various themes and sub-themes.

4. **Action-research programmes for bridging knowledge gaps through** developing shared terms of reference for action-research to enable comparative case studies and analysis and to exchange results.

All papers, presentations and deliberations at the seminar will have to take these principles into consideration.

2.3. THEMES AND SUB-THEMES FOR SEMINAR SESSIONS

The seminar will have four main themes:

1. **Water availability and access** – focusing on the growing vulnerability of communities as they face increasing physical (where water resources have been over-allocated) and economic (where access to water is difficult because of lack of investment) water scarcity.
2. **Public policy and investment** – focusing on the critical need for increased public investment in a wide range of agricultural water management options in order to increase availability and access for agricultural production, as well as the need to have a conducive policy framework to ensure increased productivity and growth.
3. **Water and society** – focusing on water governance issues to ensure more efficient, equity and sustainable use by all users, as well as diagnosing the relationship between current levels of investment in IWM, current growth rates and current poverty and hunger levels
4. **Knowledge support systems** – as a cross-cutting theme focusing on information and knowledge support systems in IWM across all the other themes as an evidence-based decision-support tool to inform all policy and investment decisions

THEME 1: WATER AVAILABILITY AND ACCESS

The starting point for sustainable water resources management is to understand how much water is available for various uses including agriculture, the sources of this water, and its variability in terms of quantity and quality. Drivers of change such as climate, hydro-power, industry and land-use fundamentally alter water availability for agriculture. Access to water is, thus, a function of many things including: actual availability, access policies, available infrastructure and institutions. Creating and maintaining access to water is critical for improving agricultural productivity and overall economic growth in ACP countries.

Seminar Paper 1: **Strategies for increasing agricultural water productivity in physically water-scarce regions** - in order to support the growing of more food with less water in recognition of the decreasing supplies of water. This paper will discuss:

- Strategies for reallocating water and its benefits across uses as well as strategies to ensure that the poor are not hurt from this reallocation;
- Strategies for taking advantage of the multiple uses of water for domestic and agricultural purposes as an innovative approach to realise multiple gains (i.e. poverty alleviation, gender equity, and integrated water resource management);
- Strategies for more efficient water use – more production per drop.

Seminar Paper 2: **Current responses to drivers of change** – this paper will discuss:

- key drivers that will impact future water availability and use for agriculture in the ACP countries;
- examples of current responses in various countries and proposing any other adaptive water management strategies for these drivers;

- Adaptive strategies to climate variability and change that will also help in adapting to other drivers that will place increasing pressure on water systems. This will include defining policy frameworks and institutions for adaptation, in given agro-ecological contexts, that can learn and adapt to change.

Case Studies 1: **Adaptation strategies for vulnerable rural communities** – the case study papers will focus on capturing “Local know-how and local adaptation strategies and innovations by rural communities in water resource management and options for scaling these up and out .”

Case Studies 2: **Water storage for climate change adaptation (recovering rainwater)** - Water storage will play a critical role in adaptation strategies, helping farmers, herders and fishers deal with climate variability during short term dry spells. There are many different types of water storage available: soil moisture storage, groundwater storage, small ponds, and small to large reservoirs.

- These papers will focus on:
- current ways of water storage and use by smallholder farmers, benefits vis-à-vis the costs of such methods, and suggesting potential ways of improving these technologies and practices;
 - the most promising combinations of small-scale water storage technologies for specific agro-ecological zones and ways of out-scaling them.

THEME 2: PUBLIC POLICY AND INVESTMENT

Much of the debate on investments in agricultural water management revolves around the role of irrigation, and investments into large infrastructure, capacity building or technologies - but clearly there is need to assess a wider range of options available that involve groundwater, supplementing rain, better soil moisture, as well as diverting from rivers and lakes for large scale irrigation. A wider set of investment options is essential because of the excessive demand on freshwater withdrawals from rivers and groundwater. This greater competition raises key questions: Who will get the water, and how will allocations be decided? Conflict will grow between pastoralists and herders, between farms and cities, between upstream and downstream users.

Seminar Paper 3: **Increasing water accessibility: Strategic investment and policy priorities in agricultural water management”**

This paper will address the critical need for increased public investment in a wide range of agricultural water management options in order to increase availability and access for agricultural production, as well as the necessary policy framework to ensure increased productivity and growth. The paper will respond to five key policy questions:

1. In view of the competing demands for the limited resources available, in what areas of agricultural water management should ACP countries invest? What are the pay-offs and what trade-offs must be made?
2. What is the operational feasibility of these investments in the current political context? What resources are required and what role can the private sector play?
3. Is the current policy context in the region sufficient to support increased investment in the agricultural water sub-sector? What policy changes need to accompany the proposed investments?
4. What linked investments need to be made in complementary sub-sectors to realise the benefits of increased investment in agricultural water management?

5. What are the key drivers that will impact future water availability and use for agriculture? What adaptive measures and strategies should ACP countries put in place to address these drivers and what are the likely cost implications? What is the cost of taking no action?

A panel of experts on specific investment areas will be requested to prepare short papers and **panel presentations** on:

Panel Presentation 1: Investments towards revitalising irrigation – it will focus specifically on investment models, new partnerships and options for scaling-up high performance irrigation investments in ACP countries. It will include:

- Direct public investment options and costs for doubling the area under irrigation in ACP countries by 2015;
- Optimal conditions for profitable and sustainable irrigation, including strategies for improving efficiency;
- Constraints retarding and opportunities favouring scaling-up irrigation investment in the ACP countries.

Panel Presentation 2: Investments for improving accessibility in economically water scarce regions – it will focus specifically on investment options for improving access to water for agriculture - in economically water scarce regions. It will cover:

- A broad range of investments options in agricultural water management from irrigation, supplemental irrigation, rainwater harvesting to conservation agriculture;
- Complementary investments in roads, markets, and institutions that will help build resilience to change.

Panel Presentation 3: Investments in managing water in rainfed systems – this presentation will focus on:

- Investment strategies and technologies for scaling-out water management solutions on rain-fed agricultural systems in various agro-ecological zones of the ACP region;
- Examining the constraints, opportunities and strategies for large scale adoption of improved water management in rain-fed agricultural systems.

Panel Presentation 4: Public policy framework for stimulating increased investments and improved management of agricultural water – it will focus on policy and institutional frameworks that will stimulate increased public investment in agricultural water management while at the same time promoting private sector investment

THEME 3: WATER AND SOCIETY

The guiding questions under this theme will be: What is the best way of facilitating people to use agricultural water resources more effectively and efficiently? How countries and communities choose to govern their water economies depends upon the many interactions between technological choices and their socio-ecological, economic, and political context. With increasing physical water scarcity in various agro-ecological zones of the ACP and continued economic water scarcity in much of Africa, these interactions have come to occupy center-stage in the growing global discourse on water governance. Seminar papers and case studies will be presented on various sub-themes including:

Seminar Paper 4: Investment, growth and poverty linkages – a trend analysis showing the relationship between the current levels of investment in agricultural water management (committed funds), current productivity and growth rates, and current levels of poverty (and hunger) in the ACP – and a projected outlook over the next 5-10 years. This will include comparisons with trends in other regions.

Case Studies 3: Water governance and water sector reform in the face of increasing water scarcity and climate change focusing on:

- Improving water governance through integrated water resources management ;
- How water can best be governed in the context of specific basins in the ACP regions;
- Models and options for water-policy reform and governance based on sound scientific and economic evidence including: (i) tradeoffs and externality issues associated with watershed and basin governance; and (ii) governance systems related to farm and community-scale operations and irrigation management.

Case Studies 4: Water, poverty and gender: equitable distribution of water rights and access - There is a need for more equitable water management policies, and more even distribution of water resources. These **case studies** will concentrate on acquiring deeper knowledge about the unequal distribution of access to water and water rights among user groups and sectors with the aim to better understand the conflicts over water, their contents, mechanisms, structural contradictions and possible solutions, as well as local strategies to confront water injustices. This will focus on methods and tools for effective targeting of agricultural water management (AWM) solutions for poor women and men in ACP countries.

THEME 4: KNOWLEDGE SUPPORT SYSTEMS

The driving force behind knowledge management is improved competence, efficiency and competitiveness. Knowledge is central to development and likely to become more so in the current knowledge era. Knowledge must therefore be created, accumulated, and managed to be useful for innovation. Decision-makers need to promote innovation in organizations, institutions, and policies to bring about outcomes where knowledge can be taken up, adapted, and implemented to promote more efficient development.

This theme will focus on discussing information and knowledge support systems in IWM as evidence-based decision-support tools to inform policy and investment decisions, as well as to increase uptake of adaptation and management practices. The discussions under this theme will cover concepts, tools and case studies for improved information and knowledge exchange – all aimed at improving agricultural productivity and growth in ACP countries.

Seminar Paper 5: Information and communication management (ICM) and knowledge management (KM)

Seminar Paper 6: Advancing IWM through knowledge support systems – as systems designed to provide trend analysis to: (i) support review and learning processes to ensure successful achievement of set development targets; (ii) inform and guide programme design and implementation; (iii) promote evidence and outcomes-based policy and strategy planning and implementation

Seminar Paper 7: **Uptake pathways** – the paper will highlight various uptake pathways and options for improving adoption rates across the entire IWM value chain (i.e. policy makers, implementers and end-users)

The seminar will discuss recommendations for an information and knowledge support systems' "action agenda" cutting across all the technical themes and the subthemes. This will include strategies for:

- (a) **Building a community of practice** in IWM for improved agricultural productivity and growth in ACP countries;
- (b) **Disseminating information** on innovations, best practices and practical experiences;
- (c) **Addressing capacity building needs**;
- (d) **Action-Research for bridging the knowledge gaps**.