

9.1 From access to use - enhancing agency and innovation

It is important to ensure equitable benefits from advisories (adaptation strategies) through support to implementation of different options presented in advisories, noting that the most vulnerable people are often poor and do not have the capacity for risk taking. As a focus group in Marafa in Niger put it, "everyone can adapt only as much as their means will allow" - implying that improved early warning alone, for example, does not automatically translate into adaptation or risk reduction strategies when people simply lack the means to do anything about the problem they see coming. Despite a number of pro-poor, low cost adaptation strategies introduced across different villages in the Department of Dakoro in Niger, Marafa's village leaders estimate that seven out of ten people do not have the means to adapt, and regularly have to resort to coping strategies that are more likely to erode than sustain their assets. (Otzelberger et al., 2014).

Thus, enabling users to effectively adopt and use advisories is a key concern. This can be done through building the capacity of communities to take action on advisories and capitalize on multi-stakeholder engagement to support action on advisories e.g. Department of Agriculture supplying seeds (using advisories for their planning), or community demanding certain seeds from the Department of Agriculture, taking loans to grow fodder to sell to neighbouring communities, or planning and prioritising options for the season (PICSA Participatory Integrated Climate Services for Agriculture (PICSA) approach to participatory budgeting developed by the University of Reading and supported by the Climate Change, Agriculture and Food Security programme (CCAFS)). Additionally, building the capacity of the communities to enable them to use short-term forecasts to inform operational activities e.q. activate EWS based on short term forecasts is essential to enable action on different advisories and forecast. Above all, participation at the PSP forum should be representative of all groups in the communities and their knowledge, needs and constraints should be heard, listened to and factored into the development of the advisories. Accompanying community engagement, for example to support innovation in farmer field schools, group savings and loans, or extension services and market access, helps to ensure climate information is turned into action.

Innovations within and beyond the PSP approach described in this quide are being developed. One example is from PSPs in Northern Ghana where information and discussions on crop water requirements are included as part of PSP forums and advisories. Researchers at the Savanna Agricultural Research Institute (SARI) in Tamale in Northern Ghana have been studying the crop water requirements for various seed varieties for a number of years. The crop water requirements for different crops are matched with rainfall expectations and predictions of dry spells for the season at the PSP forums, resulting in highly specific agriculture advisories. Also in Ghana, the Ministry of Food and Agriculture (MOFA) is working with Ghana Meteorological Agency (GMET) to communicate climate information and agricultural advisories to farmers, which has resulted in improvement of harvests compared to previous years in farms that directly received climate information from GMET. This has also built confidence in using forecasts from GMET and resulted in increasing demand for advisories from PSP to inform farming decisions.

However, improvements in packaging and dissemination of climate information is still needed. GMET collaborated with ALP Ghana to install rain gauges in six new communities and trained 12 new community monitors to manage the rain gauges aimed at building localised rainfall records in the district. The community monitors are also disseminating rainfall data and advisories to farmers and making it available to the Department of Agriculture for submission to GMET. Rain gauge monitors have developed pictorial graphs from rainfall data collected through links with the PICSA approach which supports farmer crop decision making. Community monitors in Nadowli-Kaleo District were trained in PICSA and efforts are being made to integrate PSP advisories into the information used in PICSA to augment historical data with seasonal forecasts.

9.2 Sustainability of PSP

Sustainability of the PSP process must be considered both when initiating PSP in a new area and when continuing to implement PSP from season to season. It is concerned with measuring whether the PSP process itself and its benefits are likely to continue beyond an initial phase. When evaluating the sustainability of the PSP process, it is useful to consider the following questions:

- Who will carry on the PSP process beyond the current project? What plans, policies, structures and funding are in place to support this? Has the project supported institutionalisation of PSP within mainstream planning systems?
- To what extent are the benefits of the PSP process likely to continue after the initial phase?
- What were the major factors influencing the achievement or non-achievement of sustainability of the PSP process?

Combined with evaluation of other key areas (relevance, effectiveness, efficiency and impact) evidence of sustainability prompts dialogue for support from other actors not already involved in the PSP process and putting in place mechanisms for the continuity of the PSP process beyond the initial phase.

Key issues to address in relation to sustainability are: local capacity and ownership of the PSP process, financing PSP, leadership and coordination of the process, and partners involved. These issues are discussed in the paragraphs that follow.

Creating capacity and ownership: The PSP process is designed to be driven by local stakeholders; therefore, it is essential to seek local partners and involve them from the start of the design process so as to create local ownership of the process. Building the capacity of partners to understand and use climate information, and the related uncertainty in decision making and planning, enables them to effectively engage in PSP, resulting in a wider audience who need to use the information and associated services. This will also build the capacity of local stakeholders to use climate information and draw benefits from it, as they continuously adapt to a variable and changing climate. In turn, large-scale improvement in capacity generates increasing demand for climate information services, emphasising the need for continued information sharing, interpretation of information to suit diverse and changing needs, collaboration and dialogue – all of which are promoted by PSP forums.

Sustainable finance for PSPs: Recognition of the importance of using climate information in planning for development encourages integration of PSP into local plans, as support for managing climate risks and opportunities. In Kenya, PSP has been integrated into Garissa County integrated development plans. Additionally, in 2017 the CIS plan in Wajir County set aside 2% of the county funds to climate information and recognises PSP as a key activity in realizing climate information access in the county (County Environmental Resilience and Social Inclusion Officers, 2017). In Northern Ghana, the approach has been included, and budgeted for, in medium-term development plans in two districts. Inclusion of PSP in development plans – and budgeting for it – is based on an appreciation of the approach as a tangible way of supporting continued adaptation at local level through refining county to community-level plans on a seasonal basis. As national meteorological services (NMS) are mandated to provide meteorological and climatologically services to different sectors, it is critical that they budget for climate communication and dialogue forums, such as PSP, which enable them to better fulfil their mandate at both national and sub-national levels. Government ministries and departments working in climatesensitive sectors – such as agriculture, livestock, water, energy, disaster management, etc. – need to allocate a budget for climate information to better support adaptation and climate resilience in the sectors. Budgeting for PSP means that local governments, ministries and state departments will be positioned to actively follow up on implementation and reporting of the process. With recognition that localised climate information from PSP can improve the efficiency and impacts of their work, other non-governmental stakeholders - such as NGOs and the private sector - can be brought on board to support the PSP process. Non-governmental stakeholders can help in supporting and tracking the accountability of localised climate information services as is enabled by the PSP approach, thus contributing to wider climate governance. This emphasises the need for all these stakeholders to continually work together in delivering effective and sustainable climate information services.

Sustaining leadership and coordination: The effective engagement of different partners requires structures for coordinating and supporting the PSP process. In Garissa County, for example, a first step was made during the first PSP when participants at the workshop decided to form a taskforce composed of community members, officials from various government ministries and departments, and local NGOs. The taskforce – now known as the Garissa Climate Change Working Group (GCCWG) – coordinates PSP workshops and communication of information from the workshops to stakeholders in Garissa County (see case study 16). The GCCWG has linked up with other local initiatives, such as becoming part of the County Steering Group, which leads to better coordination between partners and strengthens the sustainability of the PSP process.

Case Study 16

GARISSA CLIMATE CHANGE WORKING GROUP: A COUNTY STRUCTURE ENSURING SUSTAINABILITY OF PSP

The Garissa Climate Change Working Group (Garissa CCWG) – initially known as Garissa Climate Change Taskforce – was formed in 2011 following the first PSP workshop organised by ALP, for the October to December rainfall season in Garissa County, Kenya. The idea came from government and civil society representatives present at the workshop, in response to the need for better multi-sector coordination to manage climate impacts. It was also a demonstration of immediate appreciation of PSP as a valuable approach for multi-stakeholder planning, using downscaled climate information.

The working group is composed of various government departments, local civil society organisations (CSOs) and projects in Garissa County (see Figure 16).

Figure 33. Institutions and organisations that form the GCCWG



Role and functions of the GCCWG

As a taskforce, the technical team took charge of implementing PSP through facilitating the workshops and ensuring effective communication of the interpreted climate information/advisories. Over time, it became clear to county stakeholders that this was a necessary structure. It therefore changed from a taskforce – which meant it would be operational for only a short time – to a working group with longer-term roles and functions. The GCCWG is now spearheading PSP in Garissa County in terms of planning and facilitating the

entire process. The working group is also convening regular meetings to discuss progress in implementing PSP and emerging opportunities for improving the approach to enable better management of challenges in the county as a result of extreme weather and climate.

One of the greatest advantages of GCCWG is that its members are also active members of various county committees involved in planning and budgeting, which provides the working group with recognition and participation in key planning and budgeting processes and activities in Garissa County. This has put the GCCWG in a strategic position to influence the inclusion of PSP in county development and risk management plans, strategy documents and work plans, and mobilising resources to support the sustainability of PSP implementation in the county.

GCCWG championing the integration of PSP in county plans

Integration of PSP into two important county development plans ensures budgetary allocation and continued support for PSP in the county; this is critical to sustainability of the approach.

Submission to the second Medium Term Plan (MTP): Considered as a key stakeholder dealing with climate change adaptation issues in Garissa County, the GCCWG contributed to the development of the second MTP of the Vision 2030 in the county, covering the period 2013-2017. The second MTP identifies key policy actions, reforms, programmes and projects that the Kenya government will implement in 2013-2017 period, in line with its priorities, with the Kenya 2010 constitution and with the long-term objective of Vision 2030, while paying full attention to securing the country's environment and building resilience to climate change. In that regard, the GCCWG submitted a memorandum to the Garissa County MTP secretariat in the Department of Economic Planning, emphasising the need for improving stakeholder access to localised climate information, through approaches such as PSP. This was aimed at improving use of climate information to inform:

- planning for, and allocation of, resources
- implementation of PSP as an adaptation approach that supports coordination, collaboration, information and knowledge exchange
- institutional responsiveness to prepare, plan for and respond to a wide range of climate impacts.

Garissa County Integrated Development Plan (CIDP): Along with other stakeholders, the GCCWG participated in development of Garissa CIDP. CIDPs provide a framework for development and investment initiatives in a county, and quide priority projects, programmes and plans in different sectors and sub-counties. It is prepared in line with the Medium-Term Plan. During identification of priority areas for the CIDP, access to and use of climate information was recognised as critical for planning for climate resilient livelihoods. The aim of including PSP in the Garissa CIDP was, therefore, to enable stakeholders in the county to have better access to services needed to respond to climate information - for example, farm inputs and technical support - and within the required timeframe. It would also provide the county with an integrated and coordinated planning system for supporting climate resilient livelihoods and development. Essentially, integration into CIDPs ensures continued support of the county government in implementing PSP.

Continuity of GCCWG through links with county coordination structures

Sustainability of the GCCWG itself is also key to supporting the sustainability of PSP in Garissa County. Recognising the capacity and expertise of the GCCWG, the Garissa County Steering Group (CSG) appointed the working group as the CSG's technical adviser on climate change and adaptation. The CSG - convened by the National Drought Management Authority and chaired by the County Commissioner – is a county coordination structure that facilitates information exchange and county-wide development planning, including the development of agreed actions to address emerging issues in drought management and food security; it also provides links to government bodies and other actors for implementation of actions. The recognition of

GCCWG by the CSG is an important step towards formalising the working group and making it a sustainable county structure. This enables the GCCWG to better coordinate stakeholders at county level in support of the collaboration and dialogue needed for climate information services to be more effective in meeting local needs, as provided by PSP. It also provides an avenue for the downscaled climate information from PSP to play a greater role in informing development of county contingency plans, assessment of emergencies and decision making for climate resilient development.

9.3 Scaling of PSP

PSP has now been adopted by national meteorological services, government departments and practitioners in various sectors as well as communities across more than six African countries and in South East Asia with its success being attributed to its multi-stakeholder approach to climate informed decision making. Through the inclusion of stakeholders including local government, community members, meteorological services and local NGOs, PSP forum discussions include different aspects of knowledge and generate advisories applicable at that local level. Additionally, participation of the local forecasters who provide indigenous knowledge ensure the inclusion of local knowledge and increase the trust and ownership of the consensus forecast by the community.

An impact assessment study on climate information services conducted to understand the enabling factors of the approach, revealed that PSP is simple and flexible and can be adapted to operate in a complex and evolving context and this has played a role in its widespread adoption. Another particular strength is the regular interaction, which supports continuous dialogue and local innovation for cross sectoral and cross level action, by 'talking about the weather'. Lastly, entering into operational partnership with government institutions which provides established governance structures for service provision strengthens the approach and promotes sustainability.

Case Study 17

KENYAN PSP EXPERIENCE - ENABLING FACTORS FOR SCALING

In Kenya, meteorological services have been decentralised to county (sub-national) level and PSP has enhanced the role and capacity of County Directors of Meteorology to support climate resilient development. KMD nationally has adopted PSP as its core approach for downscaled seasonal forecast communication at county level and dubbed the forum 'County Climate Outlook' Forums. Counties are being supported to develop county climate services plans in which this forum is a key activity. At the same time, the Agriculture Sector Development Support Programme (ASDSP) in the Ministry of Agriculture, Livestock and Fisheries is operational in all the 47 counties in Kenya, and adopted PSP as an approach to strengthen the climate resilience of agricultural value chains. ASDSP has included PSP in its second phase 2017 to 2021. The two actors were therefore a strategic fit for collaboration in implementing PSP throughout Kenya. Through working with mainstream governance structures, PSP has contributed to transform existing services and relationships and supported the different institutions in fulfilling their mandates. Consequently, riding on mainstream governance structures has enabled the scaling of the PSP approach country wide.

Additionally, during an impact assessment on climate information services for community based adaptation to climate change it was noted that in the arid and semi-arid counties, the international and national NGOs helped deepen the PSP process. This was as a result of their long-term experience in dealing with issues of food security in areas prone to climate variability and their interaction with the communities. The success in this area can also be attributed to the NGO support in organising the workshop, technical input during the workshop, communication through their existing channels and also M&E. Additionally, the establishment of county-owned County Climate Change Working Groups e.g. the Garissa Climate Change Working Group that integrated the PSP process as part of its adaptation strategies, increases the sustainability and ownership by key stakeholders in the long-term.

Nationally, a PSP task force is planned with KMD, ASDSP, some county leaders and INGOs, to support sustainability into the future. The group aim to influence Kenya's next Medium-Term Plan to integrate PSP as a cross cutting flagship approach for counties to adopt. If this succeeds, financing of county PSPs will be better secured.

Figure 34. PSP process coverage Mali Niger Chad Sudan Benin Nigeria **Ethiopia** Ghana Cameroon Somalia Uganda Kenya PSP upscaled and integrated in development and sectoral planning. anzani PSP adopted and implemented in Malawi several sub-national areas. Mozambique **Zimbabwe** PSP implemented at pilot stage. PSP champions trained and are promoting adoption of the approach.

9.4 PSP link with climate information services

Climate information services prepare users for the weather they will actually experience. For the services to be effective in responding to diverse and changing user needs, engagement with different actors – both scientists and non-scientists – is essential. This engagement works best when it involves stakeholders from the most basic level (community or ward) to national, regional and international levels.

This chapter presents some key processes in Africa, at county to international levels, that PSP is linked to. It is in recognition that PSP is not an isolated process, but one that is already connected to on-going climate information services processes. Depending on the information that users at the local level want, PSP also presents opportunities to link to other upcoming process.

9.4.1 The Global Framework for Climate Services

One of the main outcomes of the third World Climate Conference was a decision to establish a Global Framework for Climate Services (GFCS). The main components of the Global Framework for Climate Services are:

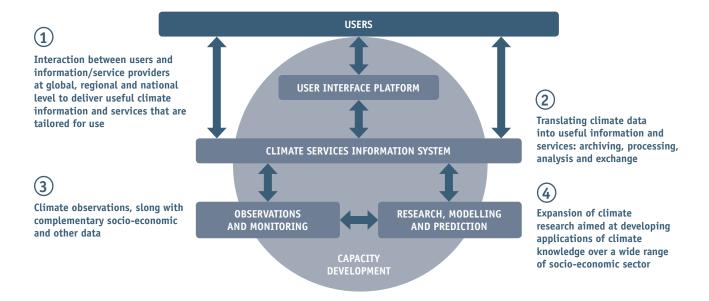
- The User Interface Platform to provide a means for users, user representatives, climate researchers and climate service providers to interact.
- The Climate Services Information System to protect and distribute climate data and information according to the procedures agreed by governments and other data providers.

- The Observations and Monitoring component to ensure that the climate observations necessary to meet the needs of climate services are generated.
- The Research, Modelling and Prediction component will assess and promote the needs of climate services within research agendas.
- The Capacity Building component to support systematic development of the necessary institutions, infrastructure and human resources needed for effective climate information services.

The establishment of GFCS was aimed at strengthening the provision and use of climate products and information worldwide through the development and incorporation of climate information and prediction into planning, policy and practice on the global, regional and national scale. To achieve this, the GFCS at regional and national levels are supporting Regional Climate Outlook Forums (RCOFs) and National Climate Outlook Forums (NCOFs) to ensure access of tailored information that meets the users' needs.

In line with this, PSP supports this goal by creating a user interface platform that cascades from the global to regional – national – sub-national level, providing a means for user representatives, climate service providers, local government representatives, and the private sector to interact at the local level.

Figure 35. Components of GFCS and their interactions. Adapted from WISER business case. Source: GFCS Implementation Plan

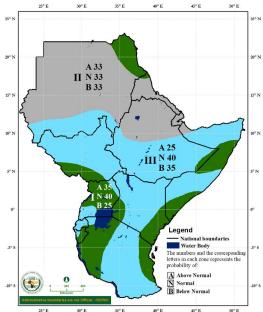


9.4.2 Climate Outlook Forums

Regional Climate Outlook Forums (RCOFs) produce consensus-based, user-relevant climate outlook products in real time in order to reduce climate-related risks and support sustainable development for the coming season in sectors of critical socio-economic significance for the region in question (WMO RCOFs brief). This forum is in line with the User Interface Platform component of the GFCS.

Climate Outlook Forums for the Greater Horn of Africa (GHA) region (GHACOF) are convened by the IGAD Climate Prediction and Applications Centre (ICPAC) three times in a year, in advance of the March to May, June to August and September to December seasons. Like PSP, the forums bring together multiple actors to discuss seasonal climate forecasts for the GHA region. As a specialized institution of the Intergovernmental Authority on Development (IGAD), ICPAC facilitates linkages between all the countries in the GHA region. This is through engaging participants from national meteorological services in the different countries in discussions to generate a consensus forecast for the region (see figure 36).

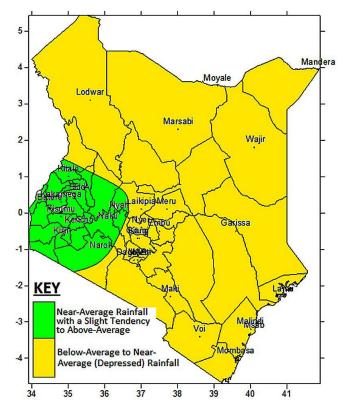
Figure 36. GHA Consensus Climate Outlook for October to December 2017 rainfall season OND 2017



Generation of a consensus forecast is done using input from national meteorological services and contributions from the World Meteorological Organisation's Global Producing Centres. The GHACOF forums are attended by climate scientists and actors from different sectors such as – health, disaster management such as The International Federation of the Red Cross Red Crescent Societies (IFRC), agriculture and food security e.g. The Famine Early Warning Systems Network (FEWSNET), water resources and media – as well as non-governmental organisations and development partners. These actors discuss the consensus seasonal forecasts for the GHA region, with a focus on:

- Providing sector specific assessment of the skill and usefulness of the previous season's regional forecast.
- Using the current season's forecast to plan for activities and initiatives in the different sectors, across the GHA region.

Figure 37. October to December 2016 seasonal rainfall



9.5 Where next for PSP?

There is great potential for further development of the PSP approach, improving its participation and reach, integrating new climate products as they emerge particularly those that support improved quality of downscaling, expanding the multi-stakeholder platform to address for example, longer term resilience and adaptation plans, or early warning systems to support early action for the coming and following season, or better linkages with short range forecasts and updates and communication channels. Some concrete opportunities include:

- Link PSP with other climate services approaches such as ENACTS (connecting seasonal forecasts with historical information) (see chapter 6 section 6.6.2) and PICSA (enabling use of advisories from PSP, based on historical and context analysis).
- Improving the PSP link with broader decision-making approaches e.g. climate risk or climate vulnerability and capacity assessments as a start to identifying differential climate hazards and risks, and CBA planning for revision of community adaptation action plans possibly on annual basis - towards demonstrating how PSP (CIS) can add value to other approaches and enhance focus on building climate resilience.
- Develop an approach for longer term scenario planning this will need relevant longer-term climate information (see work by FCFA in Table 2). And can also link to CBA planning at community and local or sector level.
- · Going forward, there is potential for organisations to continue to implement a version of PSP that is adjusted to either the approaches that they have ongoing, or their programming / sector context. This makes capacity building on the approach and especially the principles related to good practise in user based climate services quite important, while at the same time allowing organisations to adapt PSP to their contexts.

The PSP Guide will be useful in supporting quality and integrity of the approach, and therefore its dissemination (and demonstrated use) should be targeted at organisations/ institutions that have already adopted and are promoting the approach. These same organisations can use their experiences in the various countries/contexts to update the PSP Guide.



Receiving rainfall information through mobile phones in Kouggou Niger. Credit: Marie Mornimart, 2014

Abbreviations and acronyms

ACCRA Africa Climate Change Resilience Alliance

ACMAD African Centre of Meteorological Applications for Development

AGRHYMET Centre Regional de Formation et d'Application en Agrométéorologie et Hydrologie Opérationnelle

Regional Centre for Agro-hydro-meteorology in West Africa

ALP Adaptation Learning Programme

Arid and semi-arid lands **ASAL**

ASDSP Agricultural Sector Development Support Programme

CAAP Community adaptation action planning

Community-based adaptation CBA CB₀ Community-based organisation

CCAFS Climate Change, Agriculture and Food Security

CCU Climate Change Unit

CDKN Climate and Development Knowledge Network **CDMS** County Director of Meteorological Services **CIDP** County Integrated Development Plan

CIS Climate information service

CISONECC Civil Society Network on Climate Change **CORDEX** Coordinated Regional Downscaling Experiment

CR4D Climate Research for Development

CSG County Steering Group

CVCA Climate vulnerability and capacity analysis

DRR Disaster risk reduction

ENACTS Enhancing National Climate Services FEWSNET Famine Early Warning Network

Garissa Climate Change Working Group **GCCWG GFCS** Global Framework for Climate Services

Greater Horn of Africa Climate Outlook Forum **GHACOF**

GHG Greenhouse gas

IGAD Climate Prediction and Applications Centre **ICPAC**

IIED International Institute for Environment and Development

IPCC Intergovernmental Panel on Climate Change

International Research Institute for Climate and Society IRI Kenya Agricultural and Livestock Research Organisation **KALRO**

KMD Kenya Meteorological Department

Monitoring and evaluation M&E

March-April-May season (forecast) MAM

MoALF Ministry of Agriculture, Livestock and Fisheries

MTP Medium Term Plan

NDCs **Nationally Determined Contributions NDMA** National Drought Management Authority

NG₀ Non-governmental organisation

NMHS National Meteorological and Hydrological Services

NMS National meteorological services NRM National Resource Management

NRMTWG Natural Resource Management Thematic Working Group NTCCC National Technical Committee on Climate Change (Malawi)

October-November-December season (forecast) OND

PSP Participatory Scenario Planning SARCOF Southern Africa Climate Outlook Forum

SARI Savannah Agricultural Research Institute (Ghana)

SCAP/RU Système d'alerte précoce et de réponse aux urgences (early warning early action system)

SCIPEA Strengthening Climate Information Partnerships – East Africa

TOT Training of trainers

UNFCCC United Nations Framework Convention on Climate Change

WCRP World Climate Research Programme
WMO World Meteorological Organisation

WFP World Food Programme

WISER Weather and Climate Information Services for Africa

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