SPOTLIGHT SERIES:
LEARNING AGENDA ON CLIMATE SERVICES
in Sub-Saharan Africa

Cell tower in Kigali, Rwanda, Winrock International

PRIVATE SECTOR SOLUTIONS FOR CLIMATE SERVICES

The Private Sector is already a key player in providing a wide range of services in Africa that contribute to the flow of climate and weather information. With supportive governments and an enabling market environment, public-private partnerships can build on this success and fill critical gaps in the provision of climate services.

CONTEXT

The global market for weather and climate services, estimated at $56 billion in 2015, is quite substantial. However, the market in Sub-Saharan Africa is still quite small, just $1.4 billion, or less than 3% of the total. This may be partly owing to the fact that it has the least developed weather and climate observation network of all populated continents. With insufficient funding and limited human capital, National Meteorological and Hydrological Services (NMHSs) are unable to produce the timely and accurate information decision-makers need. Unfortunately, this poor performance discourages governments from investing in NMHSs, causing products and services to deteriorate further.

The private sector can help fill the investment gap in the provision of climate services. There is an opportunity to foster productive and complementary relationships between national governments (often represented by the NMHSs) and the private sector. However, if governments do not recognize the complementary role the private sector can play, they may fail to support or enable market involvement, and could even restrict private sector activity.

THE GLOBAL MARKET FOR WEATHER AND CLIMATE SERVICES IS ESTIMATED AT $56 BILLION, YET RESEARCH INDICATES THAT THE MARKET IN SUB-SAHARAN AFRICA, INCLUDING PUBLIC AND PRIVATE EXPENDITURES, IS ONLY $1.4 BILLION.

-- CLIMATE INFORMATION SERVICES MARKET ASSESSMENT AND BUSINESS MODEL REVIEW,

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LEARNING HIGHLIGHTS

The private sector is already providing a wide range of services in Africa that contribute to the flow of climate and weather information. At least 15 companies already provide services in Africa including: 1) automated weather stations (as part of weather observation systems) or observational data from private stations; 2) GIS data visualization systems; 3) "last-mile" end-user access systems; 4) extrapolated observation data; 5) weather content for advertisers; 6) daily and weekly forecasts; and 7) agricultural decision-support information tied to weather. While only a few businesses engage directly with customers, seven companies provided climate services to over 2.3 million users in Africa in 2018. Unfortunately, very few companies appear to take gender into consideration in their design of climate and weather services, decision-making, or service offerings. This has the potential to reinforce entrenched inequities and power structures that disadvantage women.

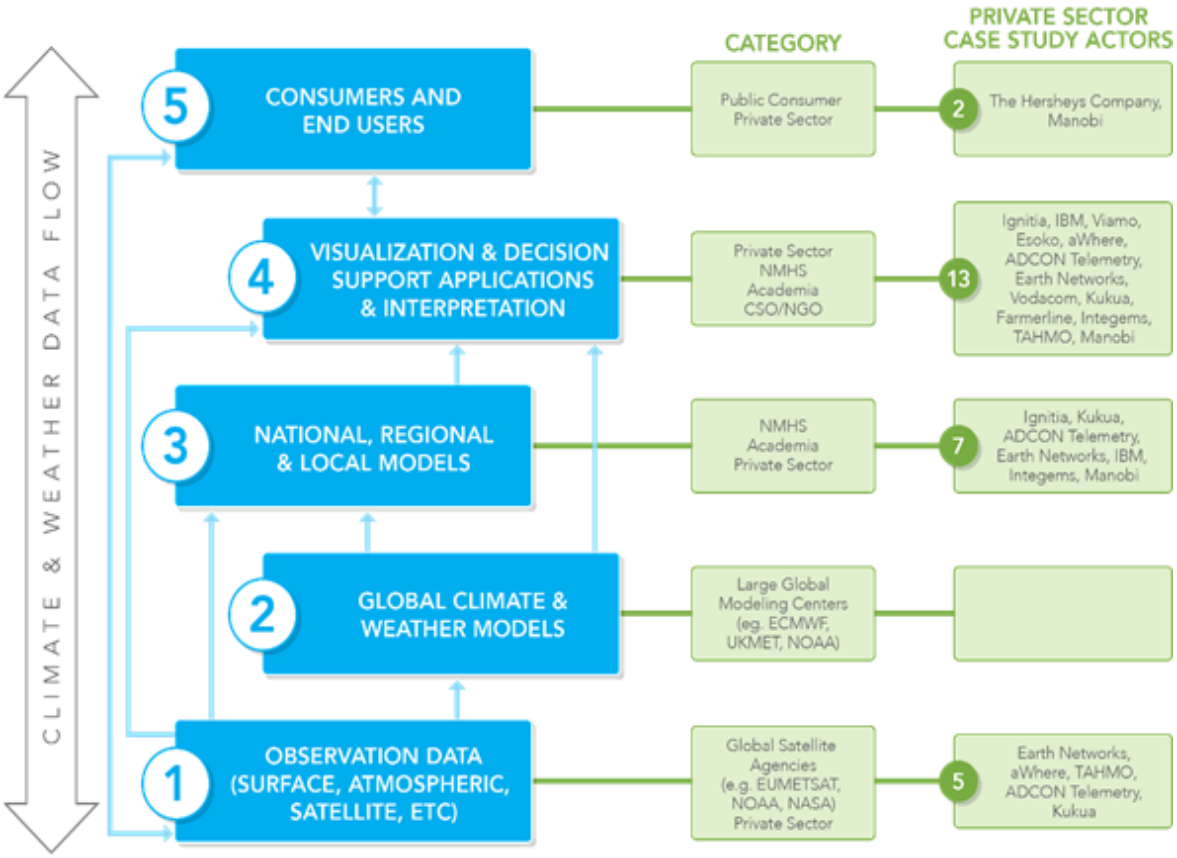

***Image 1**. Private sector participation in CS data generation and dissemination*

Partnerships between the private sector and NMHSs can help climate services improve, increase the range of services available, and generate new revenue for NMHSs through the sale of specialized services. Strengthening NMHSs and public-private collaboration can benefit the private sector. For example, when NMHSs are strengthened through public-private partnerships (e.g., via private observation networks that complement NMHS networks), they can provide better information to everyone (e.g., through improved observational networks). In turn, private climate service providers can use this improved information to generate and sell tailored services for clients. Beyond partnering with NMHSs, private companies are also adapting climate and weather technology from more developed economies to fit local contexts in Africa. This can build local capacity, both in the public and private sectors provided there are strong partnerships.

While NMHSs and private companies both seek to provide climate and weather products and services, partnerships can face challenges. For example, NMHSs can rely on government funding to cover core operating and maintenance costs and provide services for free to the public. In comparison, private companies – which can also rely on some government support – charge for products and services through arrangements with other private sector companies (e.g. energy or telecommunication companies). This can create a culture of competition between NMHS and the private sector that can lead to conflicts and restrictive policies that curtail private engagement in climate services.

CHALLENGES AND SOLUTIONS TO PUBLIC-PRIVATE COLLABORATION

A 2018 NMHS AND PRIVATE SECTOR DIALOGUE IN DAKAR, SENEGAL IDENTIFIED THE FOLLOWING CHALLENGES:

- Lack of strategic plans, business management expertise, negotiation skills, and autonomy within NMHSs, and thus a challenge to engage effectively with the private sector;
- Disconnect between products and services offered by the private sector to NMHSs, and the needs of NMHSs, stemming from a misunderstanding of data gaps, data priorities, technological needs, and capacity to maintain new technology; and
- Reluctance to freely share data. The private sector may view their data as proprietary, and NMHSs may want to sell data at prices seen as too high by the private sector.

MANY OBSTACLES COULD BE ADDRESSED THROUGH STRONG NATIONAL GOVERNMENT STRATEGIC PLANS THAT:

- Support NMHS autonomy, establish NMHS and private sector roles and data sharing policies, and support opportunities for NMHSs to sell value added services – potentially in partnership with private partners;
- Identify data gaps and priorities, and technological needs and capacity to maintain new technology (the NMHS baseline assessment tool can help connect NMHS needs and cost-effective solutions); and
- Are informed by the NMHS financial planning tool.

OTHER SOLUTIONS INCLUDE:

- Drafting a private sector climate services code of conduct; and
- Creating a forum to regularly define mutual needs and goals, and how to work together to achieve the goals.

POLICY AND PROGRAM RECOMMENDATIONS

Government policy can help foster markets for climate services if the policy: 1) supports data sharing; 2) gives NMHSs control of their own finances and allows them to raise additional revenue for tailored services while supporting core operating and management costs; and 3) permits private companies to sell services to users. Many of the most contentious issues associated with charging users for climate and weather services can be avoided if those sales are limited to specialized services, and basic and early warning services are always provided for free.

Policy can support the creation of public-private partnerships by defining a process to develop partnerships rather than by enforcing rigid pre-set roles for public and private actors. A neutral host to mediate conflict and facilitate discussion can also help foster public-private partnerships. This has long been effective in the United States, where the American Meteorological Society was designated as a neutral host and facilitator for discussions about roles and partnerships. Today, the American Meteorological Society facilitates discussions about business models, national-security and international implications, the needs of weather-sensitive sectors such as renewable energy, water-resources, and transportation, and CS related policy and advocacy in the executive and legislative branches of government.

Donors can help foster public-private partnerships by supporting the development of strong national strategic plans, which include strategies to effectively engage the private sector and a platform to facilitate engagement that includes a neutral host to mediate conflict. Donor support can also help stimulate private sector participation in the climate services market. For example, some companies rely on donor support (often through subsidies) in order to develop and deploy products, services, and infrastructure in finance-constrained environments. Unfortunately, poorly constructed and targeted subsidies can distort the market, making it more difficult for other private sector companies to enter the market. Two broad categories of subsidies include:

Constructive subsidies that enable CS development, such as:

- *Subsidies that support the development of the infrastructure* necessary to collect and generate climate information. Government and donors will likely need to continuously fund the basic infrastructure to collect and produce weather information as a public good, which, if shared, can help stimulate a market for additional services.
- *Subsidies that help create products* with high development benefits that will generate a return (e.g. climate services for underserved populations). Developing this type of new business for an overlooked market makes financial sense when it is self-sustaining.

Perverse subsidies that can harm CS markets, such as:

- *Subsidies that simply reduce the cost to the user*, which can likely distort the market and should be avoided, or at least time-limited so they don't undermine other service providers.

NEXT STEPS

USAID, DFID, the World Bank, the World Meteorological Organization (WMO), NMHSs, and others are working to improve engagement with the private sector. In 2018, the WMO Executive Council approved the Public-Private Engagement Framework to guide global, regional, and national action to promote active engagement between the public, private, and academic sectors to successfully manage and participate in global climate services. The WMO sees issues of fairness, integrity, equity, ethics, sustainability, and transfer of knowledge and technologies to national institutions as key aspects for public-private engagement. More work is needed to further articulate the Public-Private Engagement Framework and engage with representatives of the private sector.

The private sector must be included in discussions of the Public-Private Engagement Framework as they can play a vital role in expanding climate services in Africa. But companies do not operate in isolation. Companies should work with stakeholders such as the WMO, governments, donors, and civil society to ensure climate services benefit the country's population. Furthermore, private companies and NMHSs need to better understand each other's strengths, weaknesses, and priorities. NMHSs require support to reform policy to foster private sector engagement and to generate information the private sector and users need. NMHSs also need support to effectively negotiate with the private sector, as this lack of capacity often limits private sector willingness to engage in public-private partnerships. This support will in turn help grow the market for CS and opportunities for private investment. Further refinement and use of the tools developed by the USAID Learning Agenda on Climate Services will help these efforts.

The Learning Agenda on Climate Services in Sub-Saharan Africa generated new information, evidence, and learning on the effective and sustainable production, delivery, and use of climate information to improve rural agricultural livelihood decision-making and outcomes. The program began in October 2016 and ran through September 2019. More information can be found at: climatelinks.org/projects/learningagendaonclimateservices.

SUGGESTED READING FROM THE LEARNING AGENDA ON CLIMATE SERVICES IN SUB-SAHARAN AFRICA

- *CLIMATE INFORMATION SERVICES MARKET ASSESSMENT AND BUSINESS MODEL REVIEW*. MAY 2018.
- *NMHS FINANCIAL PLANNING TOOL: USER MANUAL*. FEBRUARY 2019.
- *NMHS FINANCIAL PLANNING TOOL (EXCEL)*. FEBRUARY 2019.
- *NMHS CAPACITY ASSESSMENT TOOLS AND FINDINGS*. FEBRUARY 2019.