# Questions Answers

1	What is WIS?	Live answered. Weather Information Services. WMO Information System (https://www.wmo.int/pages/prog/lsp/meteoterm_wmo_en.html)
2	Tufa. Thank you for exposing these very interesting metrics. We know that interventions are ongoing in the region. For example between December 2017 to April 2018 WASCAL has installed 50 automatic synoptic stations to 10 NMHS in West Africa. As I see that synoptic station bear some weight in the way these metrics are compiled. My question is: Is there any periodicity set-up to update these metrics?"	Live answered
3	What is NMHSs?	Live answered. NMHS = National Meteorological and Hydrological Service (https://www.wmo.int/pages/prog/lsp/meteoterm_wmo_en.html)
4	What is WASCAL?	WASCAL stands for West African Science Service Center on Climate Change and Adapted Land Use. West African Science Service Center on Climate Change and Adapted Land Use https://www.wascal.org/
5	Mark, do you plan to do this kind of assessment every year, or on a regular basis? It would be inetresting to see changes.	We are only doing this first stage of development for now. It would be up to the availability of funds and people to keep the assessments going on a regular basis
6	What it mean fully met and partial met creteria?	The metrics are combined for each pillar and give a score between 0 and 100. Partially met means a score between 70 and 79, fully met means over 80 i.e. they score high in the relevant metrics
7	How do you evaluate historical weather/climate data gaps in some African countries? How fast is attracting mobile operators in facilitating climate/weather information delivery to end users?	This is a difficult question to answer - how many weather stations is enough? It depends on the appplication and current data availability. But for the purposes of this assessment we assumed WMO guidelines i.e. every 50km, which is not a realistic density for many countries. There has been some work with mobile operators, mostly in the private sector. There are good opportunities to do this, but it requires a sensible business model to share costs and revenue.
8	Mark, is there a way to integrate and share data between regional MET office to enhance forecasting skill for their own country or regional level just like WASCAL consortuim?	If the data can be shared on the GTS then it is integrated into some of the international forecasts. Otherwise they could be integrated into a locally run forecasting model, but this is very advanced and takes a lot of human skill and resources. Besides these options, locat data if it is available is used by forecasters in their interpretation of the forecast. But the sharing of the data in the first place is key and difficult because it is opten widely distrubuted across many databases - even in the same country
9	The assessment presented by Mark Tadross. Is there a report on this available or is it not yet published?	Hi Tanya, there is a report but it is currently being reviewed by the NHMS themselves. I expect it will be published in the near future

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10	Good afternoon! A question for Kinfe and possibly the other respondent. To what extent does the NHMS work in collaboration with national agricultural development banks in the provision of climate services and intervention advice to small-scale farmers?	We have several success stories of excercicing farm level climate service provision, working jointly with key stakeholders including, Agricultural Research Institutes, Universities, Local Agricultural Offices, as well as model farmers. The value addition from climate information was exteremely encouranging. However, this are on pilot or expermental level and it has to be scaled up. My expereince on the support of local banks in relation to climate services is on weather based index insurances.
11	It's not clear to me from the first 2 presentations how the capacity categories are aligned vis-a-vis the i) WMO categories of basic, essential, full and advance corresponds with the ii) not met, partially met and fully met category, and the iii) essential and desirable category	It is confusing ! i) is the category and for each there was a seperate set of metrics which described what capacity was needed to be in that category. ii) The overall score of those metrics described whether the category was partially met (>70 score), or fully met (>80 score). iii) the essential and desirable refers to the metrics related to the current category (essential) and category above (desireable). Hope that makes sense
12	Dear Mark Tradross: in the list of capacity gaps you identified, operational verifications system was missing. Is operational verification system (e.g. forecasts verification, rating customer satisfaction, etc.) relevant in the context of climate information services delivery?	Yes this is very important. We included metrics which assess whether there are QA/QC procedures for observations, and whether forecasts have been verified for their skill - though these aspects could be emphasised more perhaps.
13	Mr. Kinfe, could you tell with which Universities you are collaborating and what issues of climate services?	We collaborate with Arbaminch University, Mekelle University, Haromiya University, Adama University and Addis Ababa University in building climate services capacities of Ethiopias. Also we have joint farm level climate service experiment with Hawassa Universty too. Major issues of climate services are to jointly experiment how agricultutral production and productivity will be enhanced by introducing location specific and tailored climate services as well as assessment of users feedback on exsiting climate services by NMA. The other engagement with university is to train our staff as at MSC level.
14	As the International Director for the Regional Sustainable Energy Center of Excellence www.rsece.org our interaction with the Extension Service located at Ahmadu Bello University in Nigeria we would cooperate with the Sub Saharan Africa region. The United Nations Food and Agriculture Organization (FAO) suggests several inputs to help small farmers that include specifically Information. The goal of the FAO is for the small farmers to increase yields by 50%.	This is a great experience to share with all. I thought that delivering information needs innovation that are not in SMHs. Need to have innovation players (IT sectors, socila sciences)
15	Mark - Did you include a metric to assess financial sustainability of met services or something similar?	We had a whole section of questions (which could have been made into metrics) on finances and budgets but it was difficult getting answers, partly because in some cases the NHMS is not in control of budgets.
16	Which types of institutions can host the types of collaboration that you are making to bridge universities and Met Services? These institutions are in different ministries and generally do not cooperate. Where did you have funding to support these types of collaboration?	Live answered
17	Prof Gaye. Access to weather data is a big challenge in Nigeria. Even for scholars, researchers and students, data from national weather agencies is still very difficult. How can open data policy be fast tracked in sub saharan African countries?	I thought we need open data policy. The data need to be shared and of course we can found out how government can compensate the Met service or any data producers. Of course there are other solutions.

<u>#</u>	Questions	<u>Answers</u>
18	Why not a two tier system, where there is basic and free information through a Call Center of an Extension Service? A second level may have a subscription fee to help cover added costs.	It coud be. But in fact the best way is to release openly the data. The added value should be in extension services.
19	Dear Blaine: This is a comment - For regular evaluation to measure progress of NMHSs in a sustainable way, the Regional Climate Centres needs to be capacitated to conduct the evaluations using the metrics.	Hope institutions are able to incorporate metrics. How do these metrics relate to regional institutions is a good question. Regional level tool may need to be developed.
20	Mr Kinfe: can you share us NMA experience how you guys integrated with the ag. sector though Agromet platform?	In Ethiopia we have Agromet palform, where key stakeholders who involve in agricultural value chain, including Minsitry of Agriculture, Agricultural Research Institute, Agricultutal Transformation Agency, regional/local agricultural offices, etc, join together to define agricultural meteorological services required to help small hold farmers in Ethiopia. This is a semi permanent forum, where, climate and weather forecasts of different spatial and temporal scale is linked with agricultural decision making and farm level practices at different level; policy level decision to farm level action.
21	Storry from Germany: even here it took a long time that we opened our data policy. For us it was a legal issue, and that might be the case in African NMHSs, too. As long as they on can live from selling data rather then products and services, free access to data will be difficult. Unless, the government forces free and open data access in order to allow for (commercial) us.	Yes it is the same in Africa. I think it has to be a slow process where we show the benefits of sharing data i.e. that there can be more revenue from sharing vs selling data and build confidence in the process. This would start with selected partners at first, before sharing freely which will possibly be far in the future. I agree there is a need for decision at governmental level
22	Sorry, if I've missed something in the presentations, but I'd like to ask if there are any assessment metrics of the NMHS's observing systems that take into account if data from stations is actually collected at central facilities and exchanged (with national and international users) e.g. in terms of the expected data volumes? At WMO we see that for example the data available/shared internationally (e.g. in near real time) is very little compared to the denseobserving networks described by many countries.	I agree that it need to be assessed
23	How will USAID use this going forward? Will you design programmes based on the capacity needs that are identified? Thank you!	We are decentralizing decisions, so country office makes the decision in collaboration with DC office on going forward. This tool is really critical to help decision-making related to engagement. This is not stand-alone project but part of a larger invesment (in agriculture). We are using the tool for identifying areas for cooperation with NMHS. This is guidance to see where USAID is needed most for NMHS to tap into its climate services potential.