



RESEARCH PROGRAM ON  
**Climate Change,  
Agriculture and  
Food Security**



## Scaling up seasonal forecasts to over 2 million users in Senegal

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*CCAFS Outcome Case*

Unit	CCAFS West Africa Regional Program
Year	2013
Contact	Robert Zougmore
Theme	Climate Risk Management
Geographic focus	West Africa

### **Summary**

With CCAFS support, vital seasonal rainfall forecasts are reaching around two million people across Senegal, helping smallholder farmers make better-informed decisions about agricultural management in a changing climate.

CCAFS scientists worked with the national meteorological agency, Agence Nationale de l'Aviation Civile et de la Météorologie (ANACIM) to develop more accurate and specific seasonal rainfall forecasts, and to raise capacity of partners to do longer-term analysis and provide more targeted information for farmers. The forecast information provided includes the total rainfall, the onset and end of the rainy season, plus a 10 day forecast across the rainy season. The information is conveyed to farmers as agro-meteorological advisories that are tailored to meet their local needs. These advisories enable farmers to take crucial agricultural management decisions in the context of climate variability. While this approach has been piloted in the Kaffrine region since 2011, the geographical scope has now been widened through a partnership with the Union des Radios Associatives et Communautaires du Sénégal (URAC), an association of 73 community-based radio stations promoting economic development through communication and local information exchange. The union's reach extends across all of Senegal's 14 administrative regions and it operates in all local languages, giving it significant potential to transform lives through reliable information. Downscaled seasonal forecasts and 10 day forecasts across the rainy season are now transmitted as a special radio program in the four administrative regions of Kaffrine, Thies, Diourbel and Louga. The interactive nature of the radio program allows listeners to revert with their feedback including additional information, views, and requests of clarification.

### **Key facts**

- Vital seasonal rainfall forecasts are reaching around two million people across Senegal.
- CCAFS scientists worked with the national meteorological agency to develop more accurate and specific seasonal rainfall forecasts.
- Downscaled forecasts are transmitted through a special radio program in a partnership with an association of community-based radio stations.

<p><b>Lessons: key elements of success</b></p> <ul style="list-style-type: none"> <li>- Emphasis on communications and engagement through community-based radio stations.</li> <li>- Tailoring information to address local needs and priorities.</li> <li>- Partnerships with Agence Nationale de l'Aviation Civile et de la Météorologie (ANACIM) and Union des Radios Associatives et Communautaires du Sénégal (URAC).</li> </ul>
<p><b>Further reading</b></p> <ul style="list-style-type: none"> <li>- <a href="#">In Senegal, farmers use forecasts to combat climate risks</a></li> <li>- <a href="#">2013 CCAFS Report to CGIAR Consortium</a></li> <li>- <a href="#">2013 RPL West Africa Technical Report</a></li> <li>- <a href="#">Communicating the probabilistic seasonal forecast for a better farming management and decisions</a></li> </ul>
<p><b>Related Research Outputs</b></p> <p>Jarvis A, Lane A, Hijmans RJ. 2008. The effect of climate change on crop wild relatives. <i>Agriculture Ecosystems &amp; Environment</i>, 126(1-2), 13-23. doi: DOI 10.1016/j.agee,2008.01.013</p> <p>Ndiaye, O., Moussa, A., Seck, M., Zougmore, R., &amp; Hansen, J. 2013. Communicating seasonal forecasts to farmers in Kaffrine, Senegal for better agricultural management.</p> <p>Ndiaye, O., Zougmore, R., Hansen, J., Diongue, A., Seck, E.M. 2012. Using probabilistic seasonal forecasting to improve farmers' decision in Kaffrine, Senegal. <i>Risk Management-Current Issues and Challenges</i>, 497-504, 21. doi: 10.5772/2568 .</p>

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