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Topic:

Biotechnology & developing countries

**“Assessing the Potential Economic Benefits of Crop
Biotechnology Innovations in East and West Africa”**

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ABSTRACT

This paper draws on available science-based information that has identified, and in some cases prioritized, the potential opportunities for crop biotechnology in East and West Africa. Based on this information, a structured set of simulations will be undertaken to provide coarse, but comparable assessments of the range of potential economic benefits of such technologies for specific commodity and potential productivity constraints of members' countries of the sub-regional organizations ASARECA and CORAF in East and West Africa respectively. These assessments should, in turn, help inform decisions by R&D investors about the scale and mix of an appropriate biotechnology investment portfolio. Therefore the goal of the proposed paper is to generate a matrix of gross benefit estimates for a range of commodities and productivity constraint combinations. The gross benefit payoff matrix, for each of 16 countries in both regions; has been constructed using a range of R&D, regulatory and adoption assumptions, as well as production and consumption data within East and West Africa in order to provide timely and relevant

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information to stakeholders in reviewing and adjusting their own biotechnology investment strategy in East and West Africa. In addition, we present a matrix summarizing expected GM crop technologies for consideration in East and West Africa in short and medium term, along with information on expected regulatory, adoption and productivity constraints that will help map the GM technologies within the gross benefit matrix.