

Title: A Conceptual Framework for Enhancing Resilience to Climate Change in Ghana's Agriculture and Food Sector through Improved Climate Information Accessibility

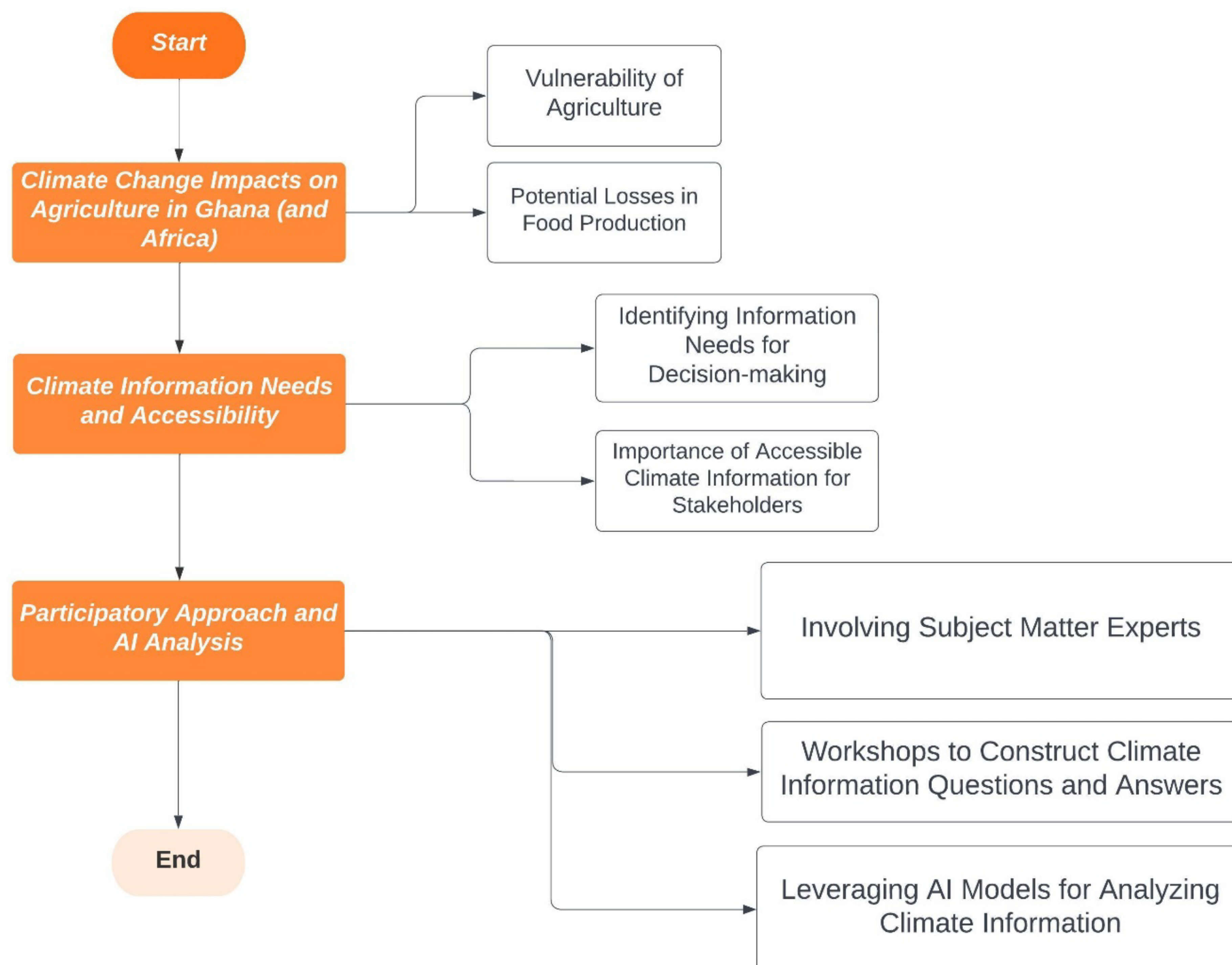


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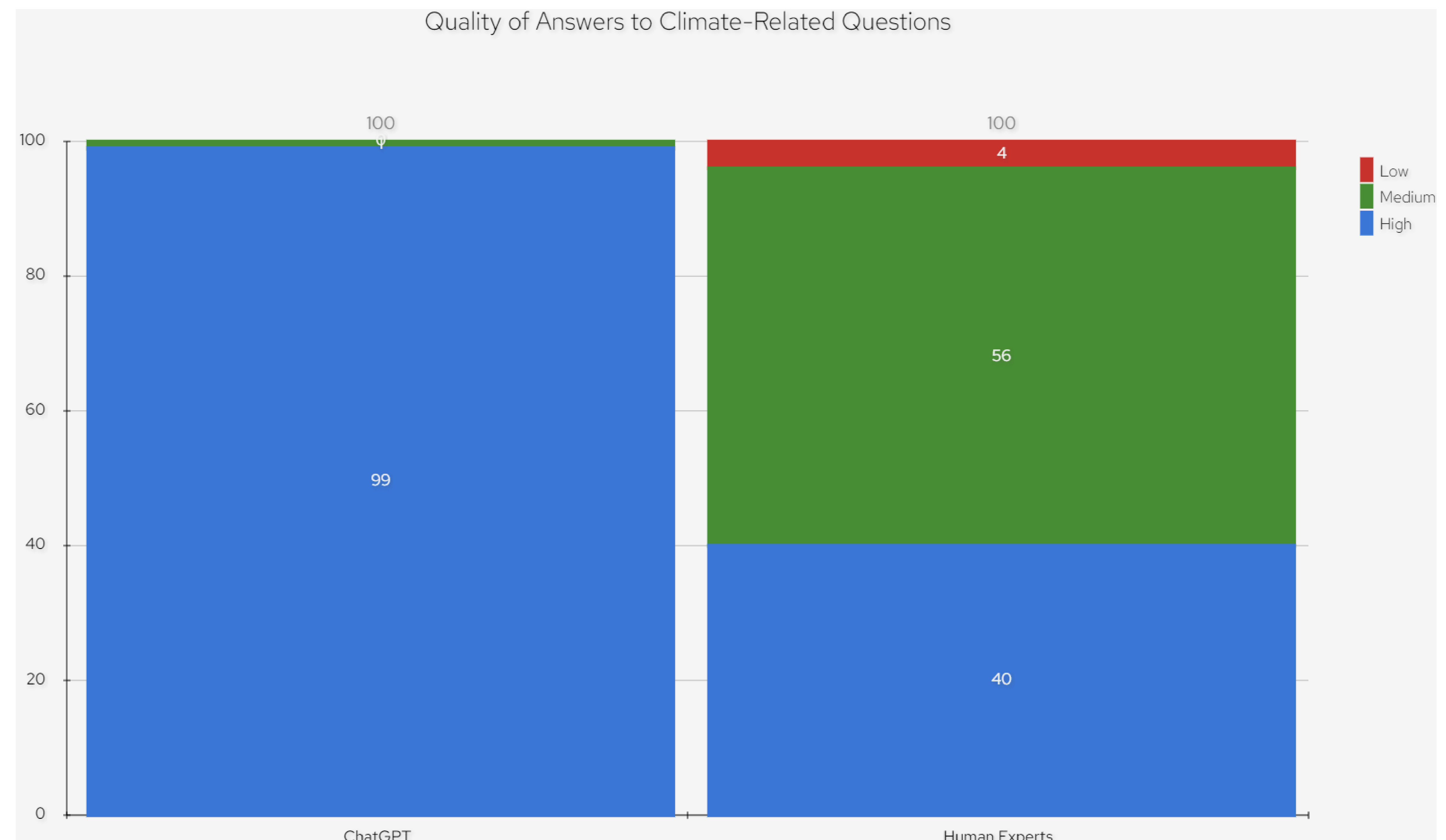
INTRODUCTION: This research addresses the critical gap in accessible and relevant climate information in Ghana's vulnerable agriculture sector by leveraging AI technologies, aiming to strengthen resilience and promote sustainable food security.

BACKGROUND: In Ghana, climate change threatens the agriculture sector, exacerbated by limited access to crucial climate information for informed decision-making. This study explores the role of AI technologies in meeting the climate information needs of agricultural stakeholders, aiming to bolster resilience and sustainability.

CONCEPTUAL FRAMEWORK



RESULTS



The Chart compares the quality of answer generated by ChatGPT and a panel of human experts to a set of 93 climate-related questions relevant to Ghana's agricultural sector. Quality is assessed on a scale of 'Low', 'Medium', and 'High.'

CONCLUSION: This research aims to make climate information more accessible and actionable for Ghana's agricultural stakeholders by leveraging AI technologies and participatory approaches. While AI like Large Language Models show promise in providing high-quality information, they must be fine-tuned for local relevance and specificity. The study underscores the potential for significant impacts on policy, resource allocation, and adaptation strategies, contributing to climate resilience and improved livelihoods in Ghana.

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