

“Long-term climate change prediction” support the selection of cost-effective adaptation measures based on data

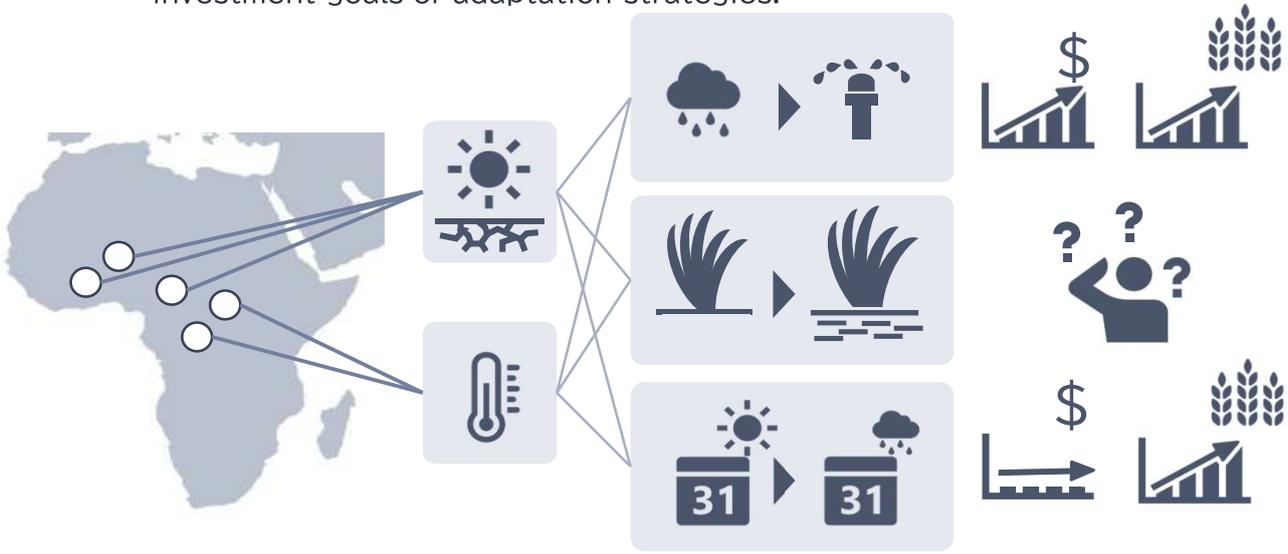
# Enhancing Agricultural Resilience Through Long-Term Climate Insights and ROI-Driven Investment Decisions

- As climate change progresses, agriculture is forced to adapt to rising temperatures and droughts.
- However, the impacts of climate change vary by location, and adaptation measures such as changing crop varieties and introducing irrigation are diverse, making it increasingly difficult to choose effective measures tailored to specific areas.

AI predicts cost-effective adaptation strategies tailored to location

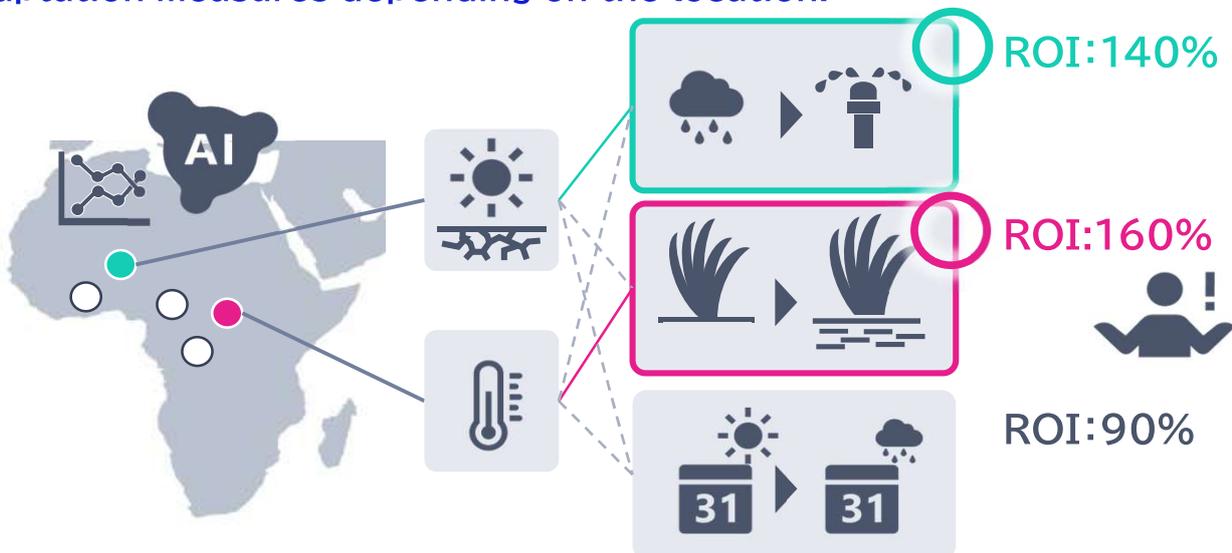
## As-Is

- When implementing adaptation measures, it is difficult to assess the impact of climate change on each location and ROI, making it impossible to set appropriate investment goals or adaptation strategies.



## To-Be

- It is possible to assess the long-term impacts of climate change and the cost-effectiveness of adaptation measures, choosing the most effective adaptation measures depending on the location.

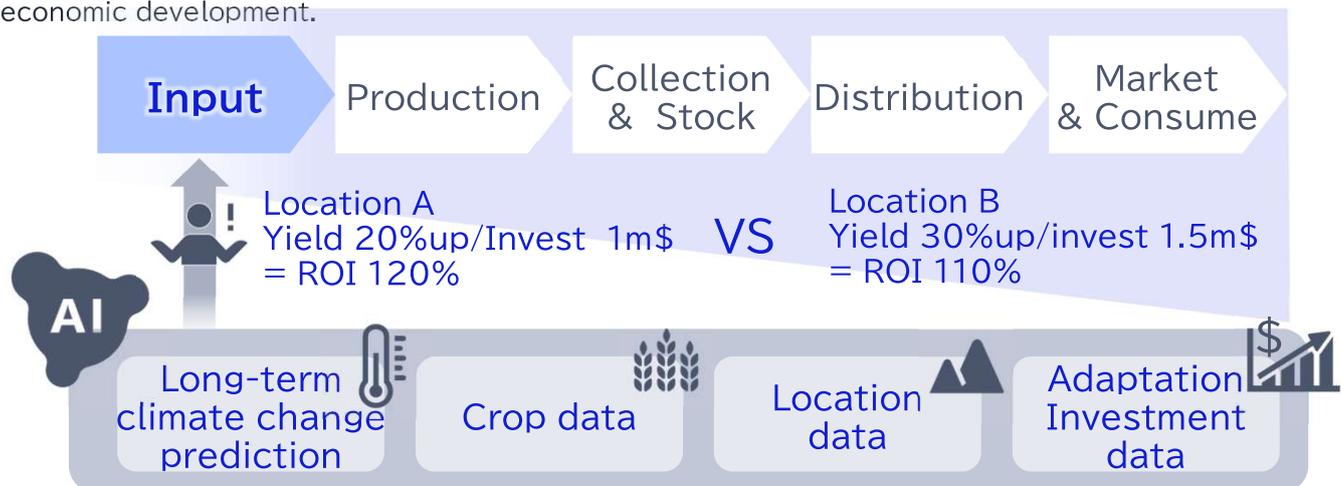


# Enhancing Agricultural Resilience Through Long-Term Climate Insights and ROI-Driven Investment Decisions

NEC and ClimateAi developed a conceptual model to estimate the effectiveness of climate change adaptation measures in the cultivation of cocoa and rice in Africa. In this project, ClimateAi's long-term climate change forecasting technology was combined with NEC's expertise in agritech to successfully quantify the impact of climate change on agriculture and clarify the return on investment for adaptation measures.

## Why should we choose adaptation measures and location based on data?

- By adapting to climate change from the upstream of the value chain, it is possible to increase distribution volumes both domestically and internationally.
- By continuously implementing adaptive measures based on climate change forecast data over the long term, it becomes possible to stabilize and increase yields, suppress hunger and poverty, and achieve economic development.



※The output by AI is a prediction and does not guarantee the value.

## Use cases / Benefits

- If it becomes possible to predict ROI for adaptation measures, it can promote decision-making for various stakeholders.

|                                     |  |
|-------------------------------------|--|
| International Organization/<br>MDBs | <ul style="list-style-type: none"> <li>• Identifying and selecting investment targets</li> <li>• Concentrating investments in highly effective area</li> <li>• Consideration of more effective measures</li> </ul>         |
| Investor                            | <ul style="list-style-type: none"> <li>• Verification of the recoverability of investment</li> <li>• Selection of investment projects</li> <li>• Utilization for monitoring the progress of investment projects</li> </ul> |
| Supplier                            | <ul style="list-style-type: none"> <li>• Identification and selection of regions suitable for product proposals</li> <li>• Monitoring of implementation effects and utilization in product development</li> </ul>          |

## Proven Experience in Public Sector Partnership

NEC has extensive experience working with governments and international organizations to deploy impactful solutions globally. For further details or collaboration opportunities, please contact: [info@agri.jp.nec.com](mailto:info@agri.jp.nec.com)



NEC Global site

## Learn more about Climate Ai

