

Shade Tree Advice Tool: Enhancing Resilience and Adaptive Agricultural Livelihoods in Uganda

Tips on shade trees for better cocoa crop yields

The Shade Tree Advice Tool utilizes the knowledge of expert and local farmers regarding trees in various agro-ecological zones. The tool provides accessible information online and offline, with pre-loaded locally specific content for optimal shade tree recommendations. Its architecture enables swift data transfers and ensures real-time synchronization between web and mobile devices. Additionally, the tool's simplicity allows for cost-effective adaptation and scalability of the application.



**International Institute of
Tropical Agriculture (IITA)**
IITA Uganda Climate Smart
Agriculture (CSA) Program

Technology from

ProPAS

Commodities

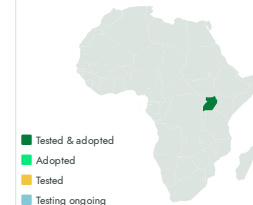
Sustainable Development Goals



Categories

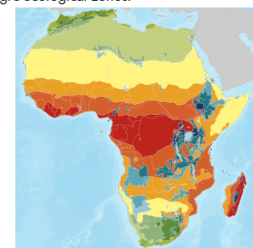
Production, Digital applications,
Advisory and information service

Tested/adopted in



Where it can be used

This technology can be used in the colored
agro-ecological zones.



Target groups

Farmers

✓ This technology is **TAAT1 validated**.

7-7



Scaling readiness: idea maturity
7/9; level of use 7/9



Open source / open access

Problem

- **Limited Guidance on Shade Tree Selection:**
Coffee and cocoa farmers lack sufficient advice or guidance on selecting the most suitable shade trees for their agroforestry systems.
- **Lack of Access to Comprehensive Information:**
Farmers often face challenges accessing locally specific and detailed information on shade trees suitable for their agroforestry systems.
- **Inadequate Data Synchronization and Transfer:**
The lack of efficient data synchronization between web and mobile devices can impede real-time access to updated and relevant information.
- **Limited Support for Sustainable Agroforestry Systems:** Extension workers, commercial farmers, and decision-makers involved in sustainable coffee and cocoa agroforestry systems lack specialized advice on optimal tree species selection.
- **Lack of Localized Data for Farmers:** Coffee farmers lack information tailored to their specific locations and conditions for selecting shade trees.

Solution

- The tool offers comprehensive advice and recommendations for optimal shade tree selection.
- It offers comprehensive information on shade trees, both online and offline, allowing smallholder coffee farmers, extension workers, and decision-makers in the coffee and cocoa industry to access and utilize the best shade tree advice.
- The tool is regularly updated with the latest information on shade tree selection, maximizing its efficiency and relevance for users.
- It offers tailored guidance for selecting appropriate tree species, specifically designed to aid in adaptation to climate change and the improvement of coffee and cocoa farming practices.

Inclusion assessment

3

Climate impact

7



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