

# Roots of Resilience

Scaling Impact Through Market Integration and Innovation

## Background and Rationale

- Climate change is increasingly impacting agricultural productivity. These impacts are most evident in vulnerable communities, including smallholder farmers and forest-based communities.
- Perennial plantation systems are highly vulnerable to climate change despite perennial tree crops having the potential to create microclimates that improve resilience of understory crops. A vulnerability of these systems is their long lifespans reduce the opportunity for immediate adaptation and require long-term adaptation planning and significant investment to optimize resilience.
- Strong demand for climate-driven data systems to inform tailored, market-based adaptation plans.
- Adaptation gaps persist; policy focus on staple crops sidelines perennial crops.
- Industry-wide sustainability and traceability programs are crucial but remain fragmented and need expansion and, where possible, uniformity to support climate adaptation planning and investment.
- Low adoption of sustainable risk transfer tools; need tailored, cost-effective solutions with links to sustainability programs (e.g., specialty coffee, sustainable brands).

FOR FURTHER INFORMATION, PLEASE CONTACT:

**BRETT SUTTON**  
Asian Development Bank  
bsutton.consultant@adb.org

**PROF SHAHBAZ MUSHTAQ**  
University of Southern Queensland  
Shahbaz.Mushtaq@unisq.edu.au

#CAIP2025

CLIMATE ADAPTATION INVESTMENT PLANNING FORUM 2025

## Climate Adaptation Investment Planning

A Program to Bridge the Gap between Climate Adaptation Planning and Financing in Asia and the Pacific



### Overall Goals

The project aims to enhance the climate resilience of vulnerable farmers, communities (including women, ethnic communities, and other marginalized groups) and industries engaged in perennial plantations and small-scale agroforestry by improving their adaptive capacity through developing demand-driven climate information services, supporting long- and short- term adaptation and investment planning, implementing priority adaptation solutions, and creating financial ecosystems and solutions that both encourage adaptive practices and de-risk against climate change.

### Project outcomes

- Improved access to demand-driven climate information for evidence-based planning and decision-making, benefitting small scale farmers, governments and industries
- A deeper awareness of climate-related losses in perennial plantations resulted in customized, market-driven adaptation strategies and investment plans.
- Better integration of mitigation and adaptation measures reduced environmental footprints and improved sustainability.
- Sustainable insurance programs and farmer finance models have been adopted to enhance financial resilience, including through novel delivery mechanisms such as a business/user-pay model.
- Skilled, data-driven workforce increases effective use of climate tools, adaptation strategies, and insurance in farming.

### Target Area and Industries

The project will focus on perennial plantation systems and small-scale agroforestry systems. The perennial production systems include:

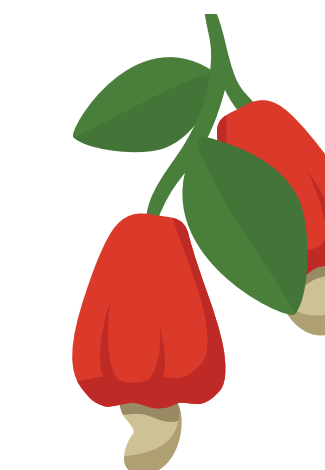
**Coffee**  
(arabica and robusta)



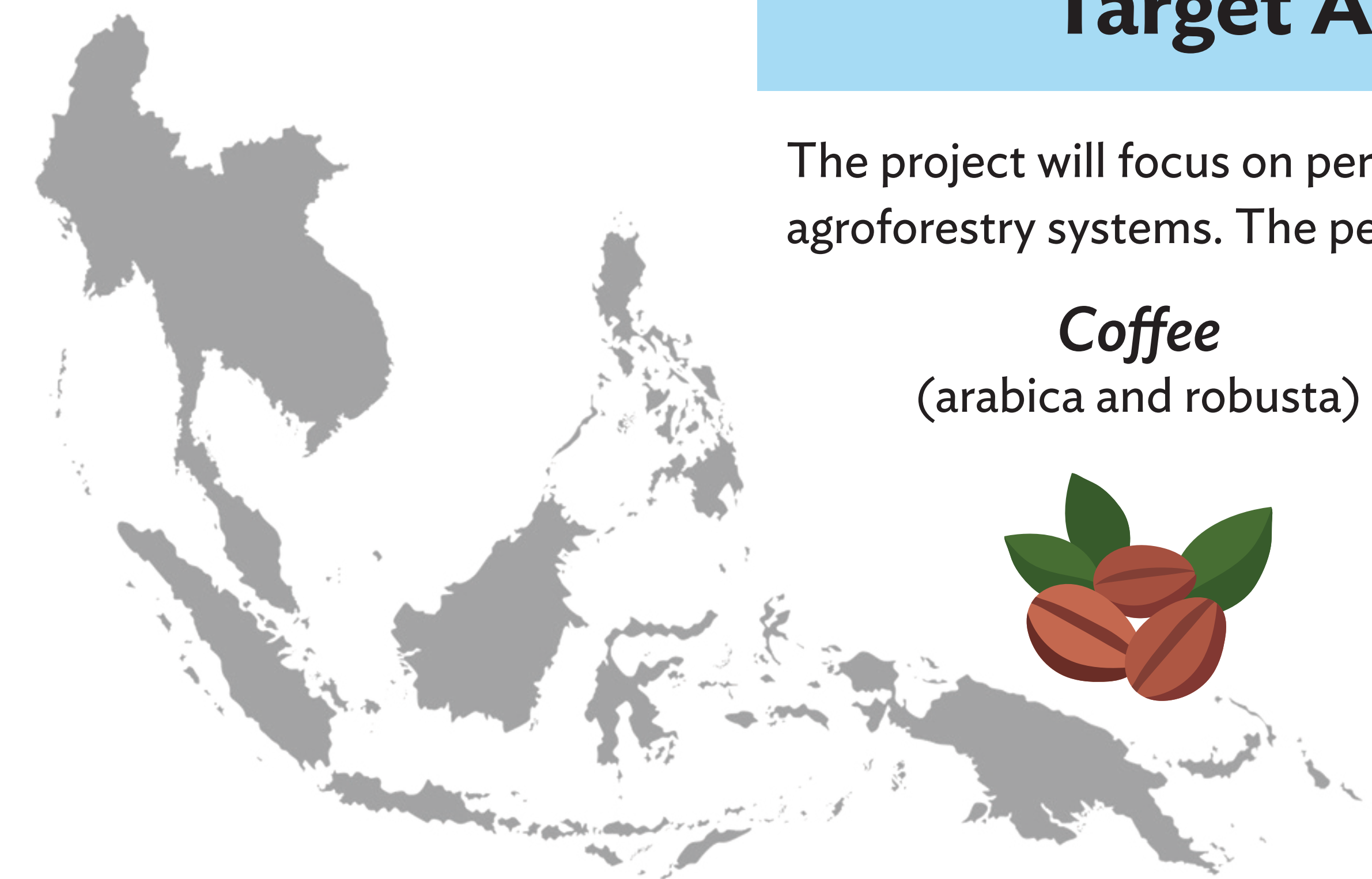
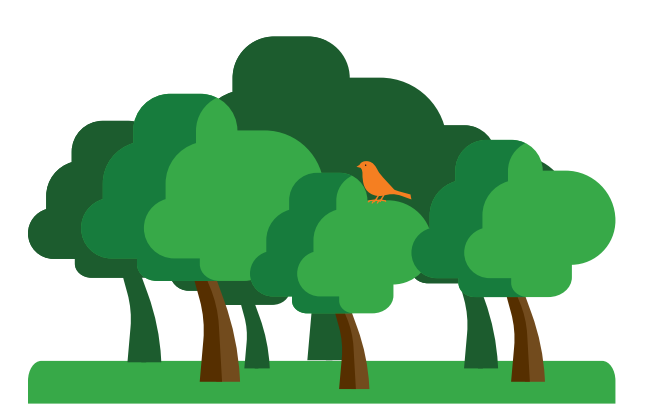
**Cocoa**



**Cashew**

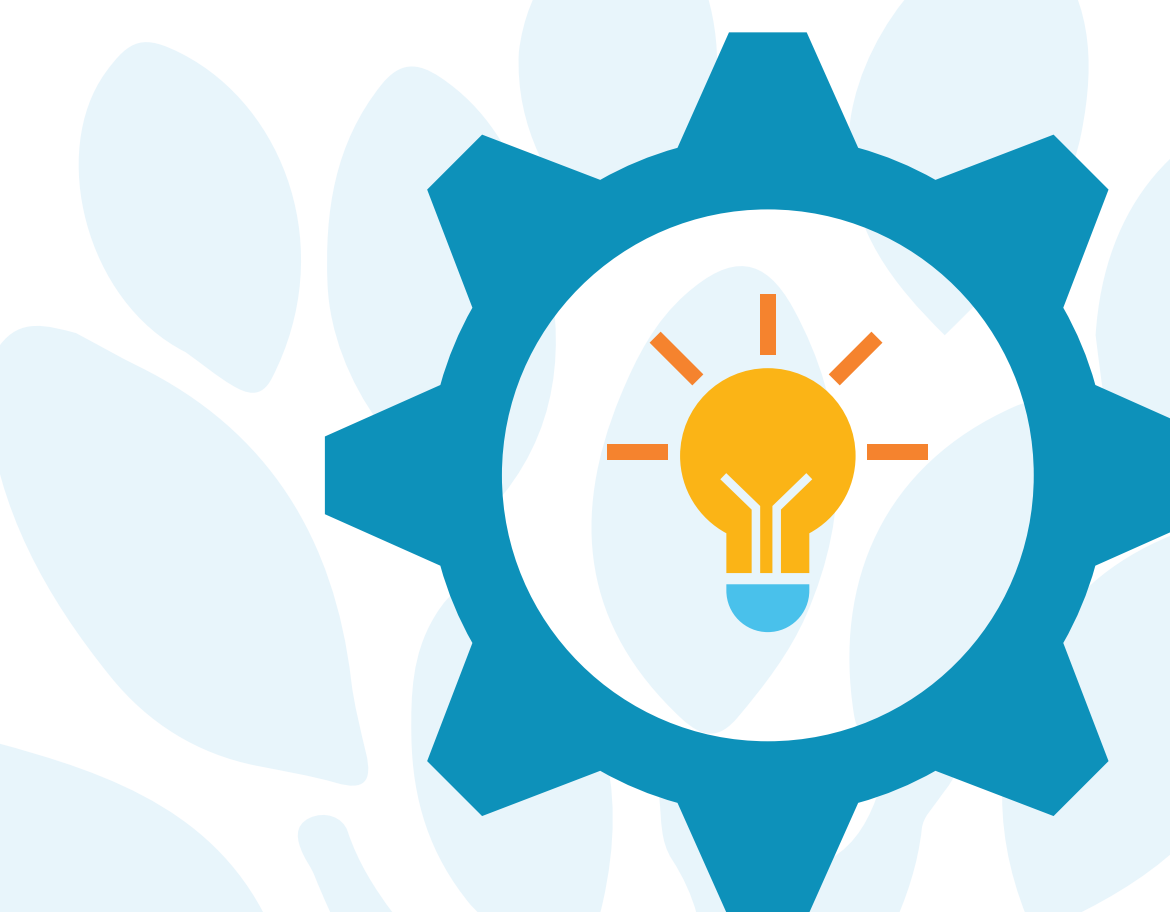


**Smallholder forestry**



### Project Work Package

**WP1: Climate modeling, products and risk assessment tools**



**WP2: Measuring and improving capacity for adaptation investment planning and implementation**

**WP3: Innovative risk transfer and sustainable upscaling approaches**



**WP4: Integrating traceability with mitigation and adaptation planning**



**WP5: Awareness, knowledge sharing and capacity building**