

FEED THE FUTURE HONDURAS PRODUCTIVE AGROFORESTRY SYSTEMS

Evidence-based scaling of multi-species agroforestry to increase export potential and economic growth of producers in Honduras' northern Atlantic region



The northern Atlantic region of Honduras has vast production and forest corridors. The region offers excellent agroecological conditions for diverse and sustainable production of key commodities such as timber, shade-grown cocoa and cardamom, and exotic and citrus fruits. However, dominant production models are unsustainable, contribute to widespread production inefficiencies, and deteriorate the natural resources that producers depend on. Limited access to technical training and finance further hinders rural employment and market development. These factors undermine local nature-based economies and create the conditions for increased migration.

The Feed the Future Honduras Productive Agroforestry Systems Project (2024–2029) is a public-private partnership funded by USAID as part of Feed the Future, the U.S. Government's global hunger and food security initiative. The Rainforest Alliance leads activities in partnership with local implementing partner Consultores de Desarrollo de Agronegocios (CDA) and private sector partners Doselva, Frutela, Inversiones Domínguez, and Innovative Business Solutions (IBS). Totaling US\$7 million in co-investments over the next five years (a 1:1 match with USAID funding), these private sector partners will provide farmers with:

- early payments to harvest products
- direct technical assistance on farms
- guaranteed access to differentiated markets
- increased information access for better business decision making

The project will strengthen the capacities and increase the incomes of 4,000 producers by developing a sustainable and

profit-driven agroforestry model of high-value timber production within target agriculture sectors including rambutan, cocoa, spices, yuca, and taro.

Over just one hectare of land, a producer can establish hundreds of plants with short and long-term growth yielding incremental levels of return and surges of income during wood harvesting periods (at years 5, 10, 15, and 20). Multi-species agroforestry can exponentially increase producers' net income over time, ensuring improved profit margins and access to consistent cash flow now and in the future. The Rainforest Alliance will produce the economic analyses for different production scenarios to demonstrate a model that can be replicated across production systems, such as livestock, coffee, and cocoa.

Overall, the project aims to create or strengthen 9,000 jobs, facilitate sales upwards of US\$40 million, and support at least 60 nature-based enterprises with enhanced business, organizational, and production capacities, including the creation and support of youth and women-led enterprises. Three objectives guide the scope of work:

1. **Improved income and resilience of producers** through more sustainable, profitable, and efficient rambutan agroforestry production systems. Through training and field-based technical assistance, producers implement agroforestry and climate-smart practices, increasing productivity and quality. Producers will also develop new products on farms such as shade-grown spices, fruits, and roots and will apply best practices to add value to agriculture, forest, and non-timber forest products. This includes setting up permanent demonstration plots to monitor species' performance over time and study aspects like product yield, commercialization potential, growth rates, quality, projected income levels, etc. Demonstration plots serve as learning grounds to transfer evidence-based knowledge and replicate good practices among producers.

2. **Increased access to finance and new markets** for producers and enterprises that implement nature-based solutions. The project engages public and private stakeholders to increase market opportunities and access to finance. For example, new products will be developed and tested in partnership with an American university for nutritional value, quality, and market potential. These products include fruit pulps, freeze-dried rambutan, and essential oils made from the nutrient rich seed. Additionally, fast-growing native timber species will undergo “thermo-modification,” a process that enhances the physical, mechanical, and aesthetic properties of wood while shortening harvesting cycles and facilitating rapid replanting. Species that respond well will have improved durability, water resistance, and stability, making them more apt for a variety of uses, including construction and furniture.
3. **Increased capacity in entrepreneurship, management, production, and marketing** with emphasis on women and youth-led enterprises. The project will support producers and associations to improve innovation, operating efficiencies, use of digital technology, brand visibility, web presence, and market access. Groups will assess ways to incorporate more women and youth into leadership roles, improve governance structures, and provide better services to members in the region.

IMPACTS TO DATE

- **271 producers trained** on regenerative production practices, including enhancing plant and soil health, irrigation efficiency, and tissue management.
- **Integrated technological package designed** to optimize training and technology transfer processes. These packages guide producers through regenerative practices to limit agrochemical use and improve crop management, up to post-harvest processing of the fruit.
- **Five permanent plots established** of high-market value cedar and mahogany to test in combination with target agricultural commodities and fast-growing native timber species.

PLEASE SUPPORT THIS CRITICAL WORK

In the wake of the U.S. Government’s pause on foreign aid and subsequent suspension of this program, the Rainforest Alliance is seeking immediate funding to support rambutan farmers with production and market development activities. This includes research and development of new rambutan-based products, the assessment of thermo-modified wood treatments to increase productivity, quality, and exportable volumes, and the adoption of climate-smart and regenerative practices.



Rambutan value chain development must capitalize on market potential while mitigating producer vulnerability

In northern Honduras, farmers grow rambutan, a fruit like lychee, across an estimated 4,230 hectares of forest landscapes. More than 80 percent of farms are situated in critical watersheds. Families have produced rambutan for generations but struggle to make ends meet—only 50 percent of yields are of export quality. Women and youth are under pressure to migrate in search of economic opportunities. In fact, 17 percent of rambutan producers have either migrated or attempted to migrate to the United States, and at least seven percent intend to migrate within the next three years.

- **Production and manufacturing:** Most plants in the area are young and will reach peak productivity within three or four years. Currently, average productivity yields about 13,300 lbs/ha (of an optimal 45,000 lbs/ha). Women produce even less, averaging just 10,400 lbs/ha. Rambutan processing facilities can incorporate new products, such as plantain or cassava, and increase their operating period from four to 12 months out of the year, generating new permanent jobs in rural communities.
- **Market development:** Walmart is the principal buyer of rambutan in Honduras, and there are ample opportunities to diversify the buyer base, including by selling in bulk. In the United States, wholesalers like W.Y. Industries and MontVerde Produce are interested in purchasing larger volumes of raw fruit and related products.