FULL CIRCLE IN THE REMOTE TROPICS: 5 WAYS TO OPTIMIZE PERMACULTURE IN UNCONVENTIONAL SETTINGS

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Amazonian soils are notoriously nutrient-poor, making it difficult to grow crops without the use of slash and burn practices or synthetic fertilizers. A common result of this is that communities outside of urban areas do not have access to sufficient nutritional variation in their diets. This results in dietary deficiencies, especially in children, as well as more time and money spent importing food items from nearby cities. The objective of my research was to evaluate an approach for developing a community-centered permaculture planting plan, to both eliminate dependence on imports and sustain healthy, arable soil. I interned for Hoja Nueva, which works with remote native and migrant communities that are generally neglected by the government due to the region's inaccessibility. The case study focused on a native community located on the Piedras River in the Peruvian Amazon called Puerto Nuevo. Within the community, I conducted interviews about current diet and desired fruits and vegetables as well as identified two potential planting sites, then tested each for macronutrient concentrations and other soil fertility/microclimate parameters. Through the integrated research approach for this project, I concluded that there were five main considerations to incorporate while designing a permaculture plan in the remote tropics. Once completed, the mature permaculture site will hope to greatly enhance the diet and independence of the Puerto Nuevo community. Additionally, the five aforementioned permaculture design considerations can be applied to similar remote communities, increasing the possibility of sustainable systems in unconventional or resource-poor places.