



**Climate Adaptation and Resilience
(CARE) for South Asia Project**

Innovations in Climate Adaptation and Resilience (iCARE)

**Building Climate Resilience Through Aquaponics in
Rural and Peri-Urban Areas of Nepal**

Project Name	Building Climate Resilience Through Aquaponics in Rural and Peri-Urban Areas of Nepal
Lead Organization Name	Wind Power
Country of Implementation	Nepal
Summary Description	<p>With a worldwide occurrence, climate change has significant consequences for Nepal, which is ranked as the 12th most vulnerable country globally. This vulnerability is characterized by a dual relationship with agriculture, where it both significantly impacts the sector and is substantially influenced by it.</p> <p>In response to the undeniable global phenomenon of climate change, WindPower Nepal, with support from ADPC, has launched a project in the Konjyosom Rural Municipality in Nepal. Konjyosom Rural Municipality, located in the southern part of Lalitpur, is mainly home to marginalized indigenous Tamang communities, where rain-fed agriculture is predominant.</p> <p>The project's main objective is to implement a climate-resilient aquaponics system in urban and peri-urban areas of Nepal, like Konjyosom Rural Municipality, benefiting 10 vulnerable households. Using an innovative "hub and spoke model" the project collaborates with Shree Gupteshwori Women Multiple Cooperative and establishes it as the central hub, ensuring efficient operation, while individual households act as spokes, receiving aquaponics systems as targeted beneficiaries. This integrated approach combines aquaponics and rainwater harvesting to enhance community resilience and promote a circular economy. A fish breeding center will be built in the cooperative to produce fish fingerlings, which will be further distributed to households for aquaponics systems, promoting a sustainable system operation. Also, a demonstration unit at the cooperative's office will be established in the cooperative for community members and visitors to learn about the aquaponics system and for conducting training programs.</p> <p>Aquaponics stands out as an innovative solution due to its ability to optimize resource utilization and create a closed-loop system through waste conversion and nutrient cycling. By fostering self-sufficiency, supporting local economic growth, and empowering communities to cultivate their own</p>

	sustenance, the project enhances food security in the face of climate change.
Expected Outcome	<ul style="list-style-type: none"> ➤ Women in Konjyosom Rural Municipality are resilient to climate change and benefit from sustainable farm-based livelihoods ➤ Improved climate resilience in rural and peri-urban areas of Nepal through the adoption of aquaponics systems, reducing the vulnerability of households to climate-related risks. ➤ Increased availability of fresh, locally produced vegetables and fish, contributing to enhanced food security among targeted households.
Partner Government Agency(ies)	<p>Konjyosom Rural Municipality</p> <p>For this initiative, we partner with the “Shree Gupteshwori Multiple Cooperative Ltd.” a crucial collaborator essential to the success of the project. The cooperative plays a central role in implementing and overseeing both the aquaponics system and breeding center. Committed to community development, women's empowerment, and sustainable agriculture, the cooperative aims to improve the well-being of its members and the local community. Their substantial contributions include providing valuable and essential resources, and tapping into local expertise, ensuring the effectiveness, and enduring success of the aquaponics and breeding system. Through their active engagement, the cooperative not only fulfills its designated roles but also aligns its aspiration with the broader mission of fostering social and environmental sustainability.</p>
Project duration	15 Months

Implemented By



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