

AI-Driven Climate-Smart Beekeeping for Women

THE WORLD'S
SMARTEST
BEEKEEPING
COMPANION

AI-Driven, Climate-Smart Beekeeping (AID-CSB) works with women beekeepers in Uzbekistan and Ethiopia to improve bee health and productivity, making local agriculture more resilient to climate change, collating vital indicators on food security, bee health, and environmental conditions.

Funded by the German Federal Foreign Office, AI-driven beekeeping supports the sharing of region-specific best practices to increase honey production and improve bee and environmental health.

AID-CSB is made possible through a **beekeeping app that is adopted to the local context** through an inclusive, gender-responsive, user-centric process with beekeepers and stakeholders.

The app tracks and manages beekeeping tasks according to set goals such as increasing bee health or learning new beekeeping practices. The app then pools and processes local knowledge from regional beekeepers to deliver advice back to beekeepers, tailored to their individual hives, flora, and climate.

At the same time, the participatory development process strengthens digital literacy and enhances women's access to digital services.

Aligned to local settings and equipped with live community data, the climate-smart beekeeping platform allows stakeholders to monitor bee health and beekeeper progress, and to evaluate beekeepers success.

Objectives

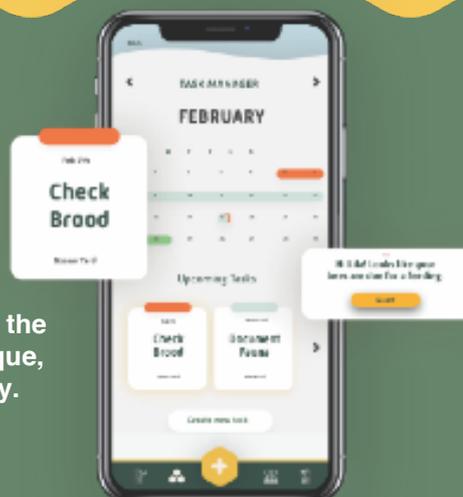
Support digital literacy & use of the beekeeping companion app

Improve bee health & hive management

Diversify & improve community livelihoods through beekeeping

Pool knowledge to build data & indices on bee, crop & environmental health

The frequency and types of inspections in combination with the climatic conditions create a unique, data-enabled profile of the honey.



The app helps beekeepers to know when to feed, treat and inspect their hives.



The Challenge

Declining bee and pollinator health is a threat to biodiversity and food security

Arguably the most important activities bees and honeybees in particular provide, are pollination ecosystem services, sustaining biodiversity. 75% of commercially grown crops are pollinated by bees and other pollinators.

While Uzbekistan and Ethiopia have long traditions of beekeeping, women beekeepers in particular often lack access to training materials and opportunities to connect with other beekeepers to improve management practices.

The Opportunity

Empower women beekeepers to increase biodiversity and healthy bee populations

Women in Uzbekistan and Ethiopia face unequal access to resources, technology, education, job opportunities and land rights. This divide limits their ability to practice climate-smart agriculture whereas beekeeping uniquely eliminates these traditional barriers and provides a COVID-19 resilient alternative.

Additionally, this project will increase digital literacy and provide a low entry-barrier economic opportunity within a network of mutual support.

Our Long-Term Goal

To empower women beekeepers to become micro-entrepreneurs with their own economic activity while improving local biodiversity, crop yields, and the health of bee populations.

2021 Milestones



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