

The intentional implementation of **sustainable land-management practices and agricultural techniques** is integral for success in Agrivoltaics

Sustainably grown food + **Sustainably produced energy**

Conventional agricultural practices often lead to multiple sustainability challenges, including **water scarcity, soil degradation, and loss of biodiversity**

When biodiversity declines, so does the land's ability to sustain productive agriculture. Over time, this can significantly reduce crop yields and ecosystem function.

OUR PROJECT



Our goal is to collect ecological data before, during, and after panel installation to get an image of biodiversity to inform best-practices guidelines for sustainable agrivoltaic development



BIODIVERSITY

THE WIDE VARIETY OF LIFE ON EARTH



WHY IS IT IMPORTANT FOR **AGRIVOLTAICS?**

WHAT IS BIODIVERSITY?

Biological Diversity: the variety of organisms present at different scales

Genes → Species → Ecosystems



Everything is CONNECTED

Diverse ecosystems are made up of a variety of **biotic** (living) and **abiotic** (non-living) factors with complex ecological relationships

Higher biodiversity = more ecological variation = stronger, more resilient ecosystems

WHY IS BIODIVERSITY FAVORABLE IN AGRIVOLTAICS SUCCESS?

Agrivoltaics systems may help farmers address **economic and ecological challenges**.

Compared to conventional farming, **Agrivoltaic systems may IMPROVE**



Pollinator variety



Pollination success



**Water retention
Erosion control**



Carbon storage



Soil Temperature



Beneath the Panels
Nirupam
678-333-7390

View photos of the biodiversity recorded during our pre-installation surveys!



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