



Agriphotovoltaics

Introduction

Mr. Tobias Winter, IGEF-SO
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co-location of

Agriculture and Solar PV Agriphotovoltaics



#AgriPV



#APV

giz

Different from PV Pumps



Different from PV Rooftop

1 MW_p chicken farm rooftop, Kolar, Karnataka, India



InSolare
Solar Power Unleashed

© InSolare Energy Pvt. Ltd



Jain Irrigation, Jalgaon, Maharashtra

Different
from PV
Greenhouses



1 MW GIPCL plant Amrol, Gujarat



1 MW GIPCL and Anand Krishi Agricultural University, Amrol, Gujarat



1 MW GIPCL plant Amrol, Gujarat



750 kW, Bavaria, Germany

Source: Öko-Haus GmbH



Small scale kW system

Source: Institute for Sustainable Energy Policies ISEP



700 MW_p largest tracking system worldwide, Hongdunzi, Ningxia, China



1 hectare



100% potatoes



1 hectare



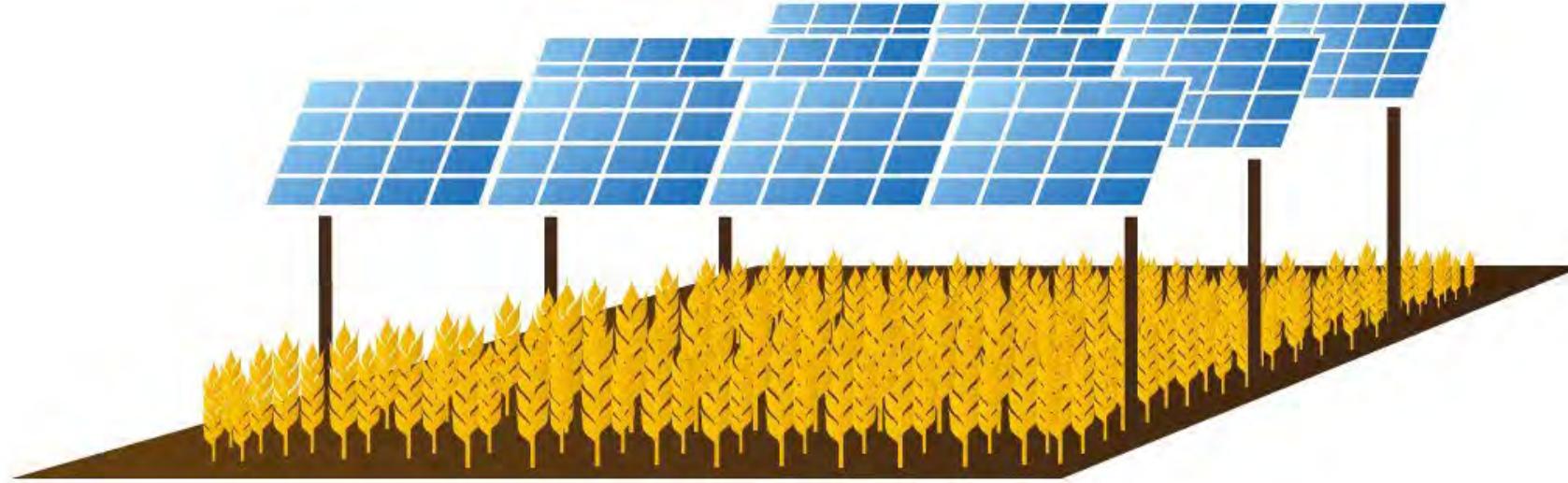
100% solar electricity



1 hectare



103% potatoes
83% solar electricity



1 hectare



80% wheat
80% solar electricity





CAZRITM
Enhancing resilience of arid lands

105 kW CAZRI plants Jodhpur, Rajasthan



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100 kW NISE plant near Gurgaon, Haryana



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105 kW CAZRI plants Jodhpur, Rajasthan



14.4 kW Jain Irrigation private research plant, Jalgaon, Maharashtra



14.4 kW Jain Irrigation private research plant, Jalgaon, Maharashtra



Jain Irrigation private research plants, Jalgaon, Maharashtra



200 kW Dayalbagh Agriculture University plant Agra, Uttar Pradesh



9.6 kW Jain Irrigation private research plant, Jalgaon, Maharashtra



9.6 kW Jain Irrigation private research plant, Jalgaon, Maharashtra



2.6 MW with raspberry in the Netherlands

Source: <https://revolution-green.com/special-solar-panels-agrovoltaics/>



2.6 MW with raspberry in the Netherlands



2.6 MW with raspberry in the Netherlands



7 kWp, Junagadh Agricultural University, Junagadh



7 kWp, Junagadh Agricultural University, Junagadh



12 MWp, Kochin Airport, India



7 MW_p, Degoan, Dhule Maharashtra

groSolar®
AN EDF RENEWABLE ENERGY COMPANY



1 MW GIPCL and Anand Krishi Agricultural University, Amrol, Gujarat



1 MW GIPCL plant Vastan, Gujarat





1 MW GIPCL plant Vastan, Gujarat



1 MW GIPCL plant Vastan, Gujarat



1 MW GSECL plant Panandharo, Gujarat





CAZRITM
Enhancing resilience of arid lands

105 kW CAZRI plants Jodhpur, Rajasthan





1 MW Aravalli District, Gujarat

Abellen CleanEnergy



1 MW Aravalli District, Gujarat

Abellen CleanEnergy



12 MWp, Kochin Airport, India



105 kW CAZRI plants Jodhpur, Rajasthan





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सौर पैनल वर्षा जल संचयन टॉका

क्षमता - 100000 लीटर

Solar Panel Rainwater Harvesting Tanka

Capacity - 100000 Litre



1 MW GSECL plant Panandharo, Gujarat

harsha
abakus solar



KRISHI VIGYAN KENDRA



110 kW Krishi Vigyan Kendra (NHRDF) Ujwa, Delhi



1 MW GSECL plant, Sikka, Gujarat





Higher elevation, single axis tracking and simple robotic cleaning may be a solution for India (here California plant without APV)



Robotic cleaning and/or Anti Soiling Coating



More info: <https://www.youtube.com/watch?v=sc5cV6XIYEg&t=13s>

 Ecoppia

The logo for Ecoppia, featuring the company name in a blue sans-serif font with a green circular graphic element integrated into the letter 'o'.



400 kWp Mahindra Susten's Agro Photovoltaic Model, Tandur, Telangana

2 MWp, Next2Sun, Eppelborn-Dirmingen



© Next2Sun

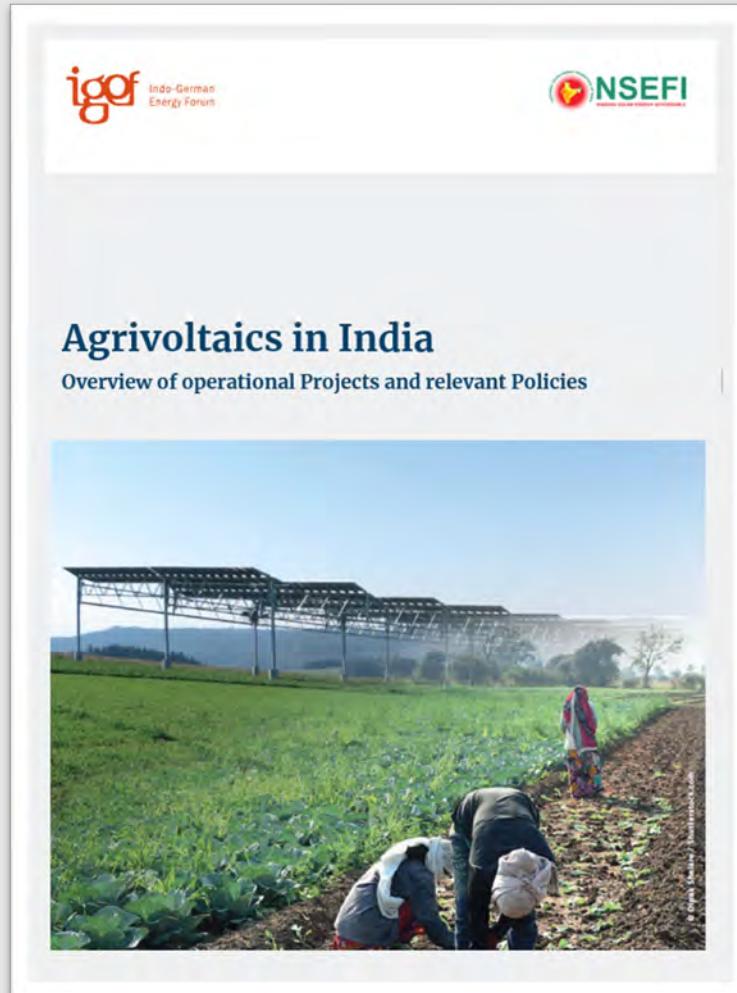




5 kW NISE plant vertical pilot near Gurgaon, Haryana

Agrivoltaics under KUSUM scheme

10 GW of 2 MW grid connected PV plants on barren agricultural land. More info [here](#).



Agrivoltaics in India

Overview of operational Projects and relevant Policies



R&D / Academic Plants

CAZRI plants in Jodhpur, Rajasthan - 100kW
Amity University plant in Noida, Uttar Pradesh - 10kW
Dayalbagh Agriculture University plant in Agra, Uttar Pradesh - 200kW
Junagadh Agriculture University plant in Junagadh, Gujarat - 7kW
NISE plant near Gurgaon, Haryana - 100kW
Jain Irrigation plants at Jalgaon, Maharashtra - 14.4kW

Government Supported / Tendered as Agrivoltaics

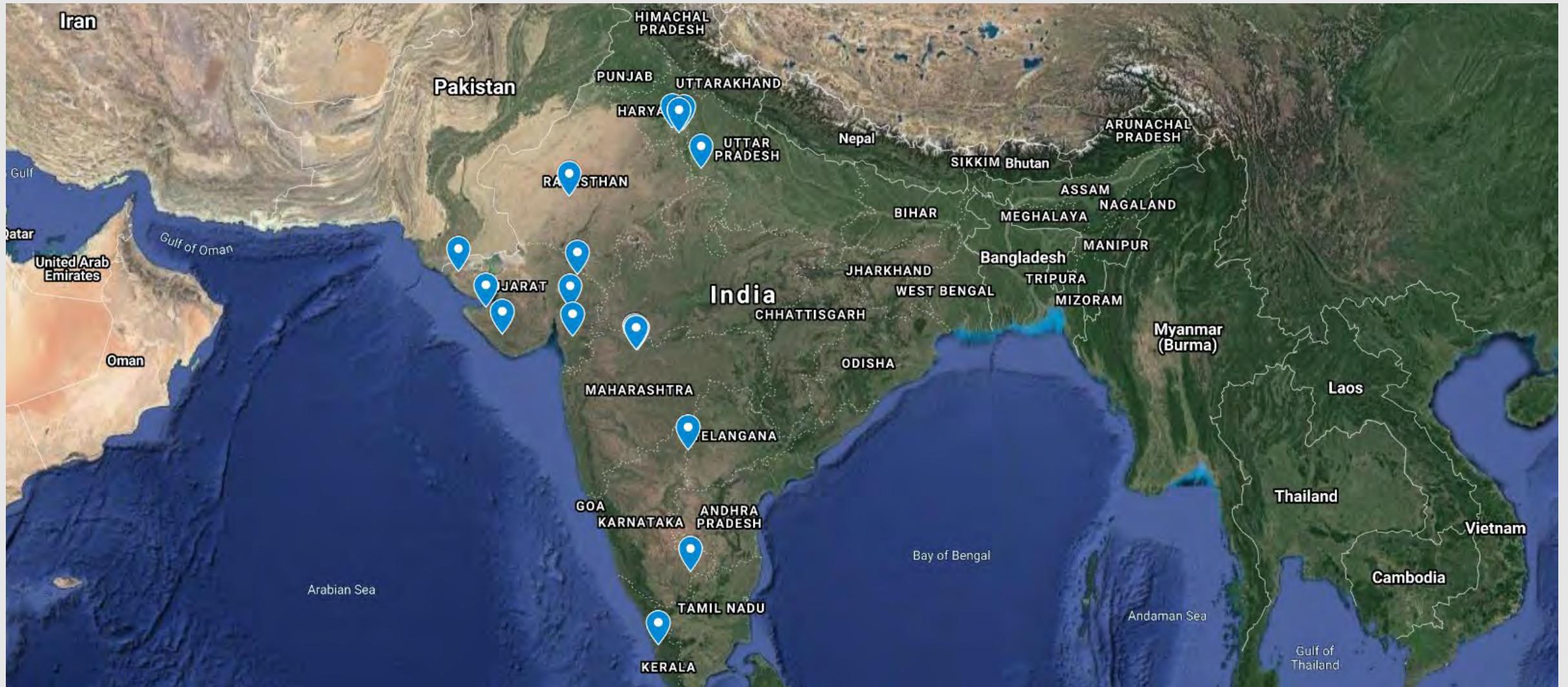
GSECL Harsha Abakus plant near Sikka, Gujarat - 1MW
GSECL Harsha Abakus plant near Panandharo, Gujarat - 1MW
GIPCL plant near Amrol, Gujarat - 1MW
GIPCL plant near Vastan, Gujarat - 1MW
Krishi Vigyan Kendra (NHRDF) Ujwa, Delhi - 110 kW

Commercial Projects

Abellon Energy plant in Aravalli District, Gujarat - 3MW
Cochin Airport plant, Kerala - 40MW
Mahindra Susten plant at Tandur, Telangana - 400kW
Hinren Agri-PV Rooftop (APVRT), Bangalore - 3kW

16 agrivoltaic plants in operation in India

<https://buff.ly/3tNHxsc>



धन्यवाद



Get in touch

...with the National Solar Energy Federation of India or Indo-German Energy Forum Support Office



Mr. Pulipaka
CEO
National Solar Energy Federation of India
pulipaka.nsefi@gmail.com



Ms. Kular
Agrivoltaic Projects
Indo-German Energy Forum Support Office
agropv@energyforum.in



India has highest solar energy security

365 days of solar photovoltaic (PV) generation in India, Germany and USA in the year 2020

