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Stories from the Field: A Global Perspective

From awareness to readiness

What 3,427 farmers told us across 100 KVK workshops on Agri-PV and PM-KUSUM Component A

Dr. Sai Krishna, CEO, NSFI

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Audi 2, Bharat Mandapam, New Delhi

AGRIVOLTAICS WORLD CONFERENCE 2026

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The ongoing 50 workshops and where we invite partners

KVK Kawardha, Chhattisgarh · October 2024

100 KVK workshops, in farmers' own languages

AIM: Under MNRE's first-100-days agenda, run 100 awareness workshops on PM-KUSUM Component A through 100 KVKs to reach 3,000 farmers, and bring back farmers' own design solutions for higher scheme uptake.

MNRE

Strategic guidance on content, roll-out and the technical side of PM-KUSUM

GIZ

Commissioned the work; technical support, training material and coordination

ICAR · ATARIs

Opened the door to 100 KVKs via the Extension Division and 11 zonal ATARIs

ASCI – NSFI

Customised the content and delivered every workshop with our trainers

Ecosystem

IAA, NSEFI and IKI gave technical inputs; Transform Rural India mobilised farmers

We aimed for 3,000 farmers and reached 3,427

States

27

Krishi Vigyan Kendras

100

Languages · 17 trainers

13

Farmers took part

3,427

Interest forms submitted

3,392

Want to take up Agri-PV

3,218

Phase 1 · 7 states
with some PM-KUSUM progress

Phase 2 · 14 states
with no PM-KUSUM progress

Phase 3 · 6 states
with potential but no targets

Teach, listen, measure: how each workshop ran

01 02 03

Teach: four modules

- PM-KUSUM Component A: features and eligibility
- Agri-PV concept and land equivalent ratio
- System types, suitable crops, case studies
- Financing and implementation models

Listen: focus groups

- Held after every module
- Farmers listed the challenges they face or foresee, and proposed solutions
- Facilitators wrote a summary report for each workshop

Measure: interest forms

- Land, crops, irrigation, distance to substation
- Readiness, preferred model, budget
- Concerns and the support they need

Key findings: what farmers told us

KVK Kendrapara, Odisha · November 2024

Finding 1 · Small farms, rainfed fields, grid-powered pumps

60%

are small or marginal landholders

55%

farm rainfed land

55%

irrigate with electric pumps (diesel 16%, solar 8%)

68%

use no micro-irrigation; drip leads among those who do

54%

farm within 5 km of a substation, so eligible for Component A

29%

grow crops that need support structures (+30–50% mounting cost)

Finding 2 · Interest is high

92%

of participating farmers want to join PM-KUSUM

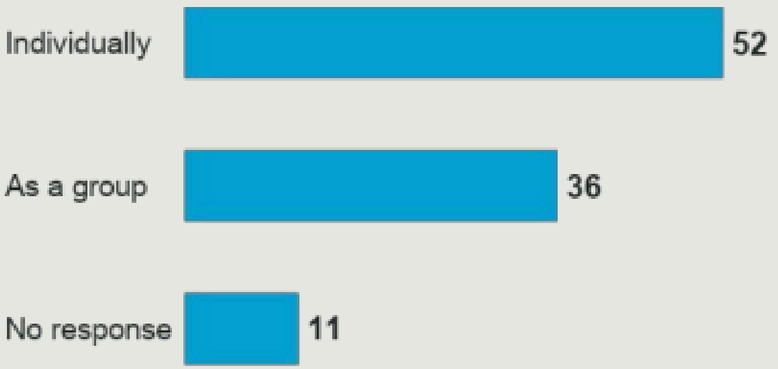
96% among farmers facing irregular power supply

Interest is strongest on holdings under 2.5 acres (36% of interested farmers), then 2.5–5 acres (24%). For them, Agri-PV means diversifying land use, not giving the land up.

KEY INSIGHT Interest is not the barrier. The gap is between saying yes and getting an installation.

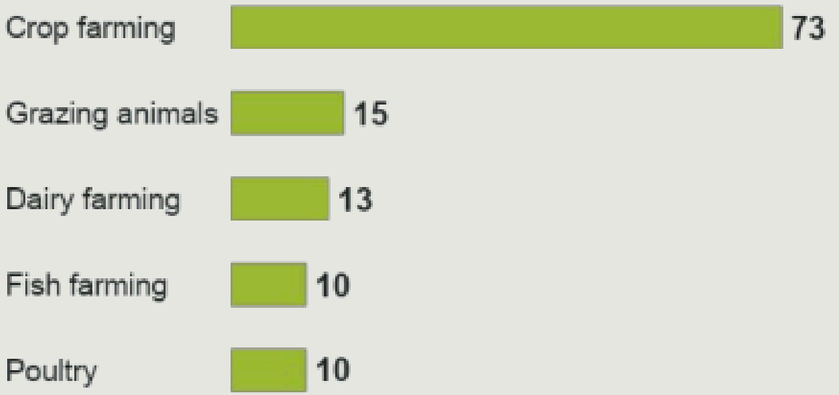
Finding 3 · Most would install alone, and keep farming

How they would install



Farmers in arid and semi-arid states show the most interest and lean individual. Hilly and coastal states lean towards group units, as do SHG members (47% group vs 39% individual).

What they would do under the panels



Farmers named several activities each. They see Agri-PV as a second income on land that keeps producing.

Finding 4 · Capital cost and returns come first

Most-raised individual concerns	Mentions
High capital cost and its effect on return on investment	72
Difficult online application process	33
Policies affecting viability: tariff, taxes	33
Opaque sanctioning, no progress updates	29
Loan and application documentation	28
Fitting designs to local wind, terrain, crops and disasters	25

KEY INSIGHT

The interest forms say the same: capital cost was the most-cited barrier (63%), and 66% of farmers' doubts were about finance.

Finding 5 · Finance first, then know-how and paperwork

Finance & bank linkage

57%

Technical help & training

30%

Application & paperwork

29%

What farmers asked about

66% financial: financing options, bank loans, the subsidy and out-of-pocket costs. 23% technical, 15% policy and regulation.

Groups need finance even more

65% of farmers preferring group installations asked for financial support, against 57% of individual installers.

KEY INSIGHT

Without finance and bank linkage, interest will not turn into installations. Farmers could name more than one need.

Finding 6 · Farmers brought 245 solutions of their own

Most-proposed solutions	Mentions
Lower margin money and interest rates, add subsidy, allow smaller units	58
Trustworthy annual maintenance support for the system's life	28
Location-specific models (wind, terrain, disasters)	24
Technical and O&M training for farmers	20
Simpler online application and documentation	17
Ongoing technical support	17
Attractive, transparent or market-linked tariffs	15
Helpline and handholding for queries and grievances	11

Solutions by theme

105

Installation, O&M and risk

86

Revenue and returns

54

Application and support

Lessons for programme design, outreach, financing and support

01 Programme design

- Smaller minimum plant size, set zone by zone
- Evacuation lines beyond 5 km as public infrastructure

02 Outreach

- Work through FPOs, PRIs, WUAs, cooperatives and SHGs
- Local-language, KVK-anchored sessions with demo units

03 Financing and risk

- Payment guarantees and a model farmer–developer agreement
- Standard lease rent; crop loans protected under a lease

04 Institutional support

- Simple online application with tracking; a single window
- A point of contact at each substation or district

Recommendations · Scheme design and eligibility

Right-size the plant

Lower the minimum permissible REPP capacity to cut margin money and risk. Set minimum sizes per agro-ecological zone from techno-commercial feasibility models, with substation-level feasibility for remote or peri-urban cases.

Treat the 5 km rule as public infrastructure

Today a farmer more than 5 km from a substation must arrange the line. Map renewable supply centres and let SIAs or DISCOMs build that evacuation infrastructure.

Go through community institutions

About half of responding farmers were open to the community route. Focus consultations and mass media on FPOs, PRIs, WUAs and cooperatives, many of which are financially sound.

Level the field with developers

Farmers voiced a trust deficit. Scrutinise empanelled developers, add a guarantee mechanism, and set a standard method for lease rent based on local yields and crop opportunity cost.

Recommendations · Lease terms, tariff and application

Clarify the Model Lease Agreement

Spell out who decides which crops are grown, who bears risk from high-tension wires, and who removes equipment at lease end. Define what counts as ‘Agro-PV land’.

Protect crop loans

Farmers fear a lease blocks crop loans. State in the policy guidelines, not only the Model Lease, that no charge is created on the farmer’s land.

Open access over higher tariffs

Tariff was the most debated point. Given DISCOM debt, permit open-access sale of power for Agri-PV where farmers are the generators, rather than raising tariffs.

Simplify application and clearances

Technology-driven applications with progress updates, a point of contact per state or region, and a single window where SIAs or a technical support agency arrange clearances.

Recommendations · PPA, connectivity and quality

Secure payments

Set up a payment guarantee mechanism between farmer-generators and DISCOMs, plus protection when the grid is unavailable to evacuate power.

A Model REPP Development Agreement

A farmer–developer agreement, alongside the model Lease and PPA, linking PPA obligations such as performance tests and minimum supply to the developer, with a minimum performance guarantee.

Share the cost of connectivity

Laying and maintaining the 11 kV line should be borne by DISCOMs or public investment. Define clearly where farmer responsibility begins and ends.

Support on the ground

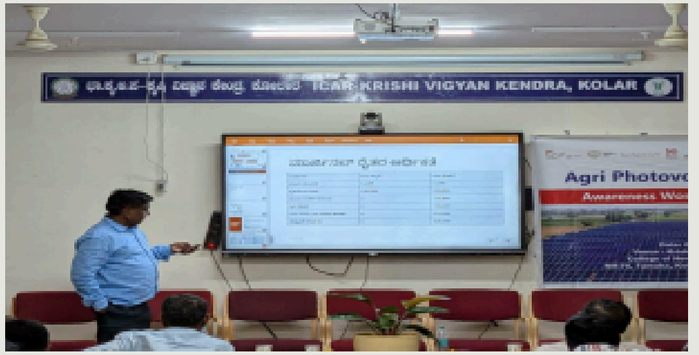
Make SIA-funded help with DPRs and financial models known locally. Mandate storage (BESS) where feeders are switched off during sunshine hours.

Way forward - From 100 workshops to the next 50

UNDER WAY

50 awareness workshops on agrophotovoltaics

34	1360	8
held so far	farmers	states



KVK Kolar, Karnataka · August 2026

WHERE WE INVITE PARTNERS

01 **From interest to installation:** farmer- and FPO-led pilots with banks, developers and SIAs

02 **A local point of contact:** KVK and substation-level help desks for applications and DPRs

03 **Skills and trust:** O&M training for farmers and vetted, guaranteed developers

THANK YOU!

3,218 farmers have said yes. Let's build the path from yes to installation together.

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