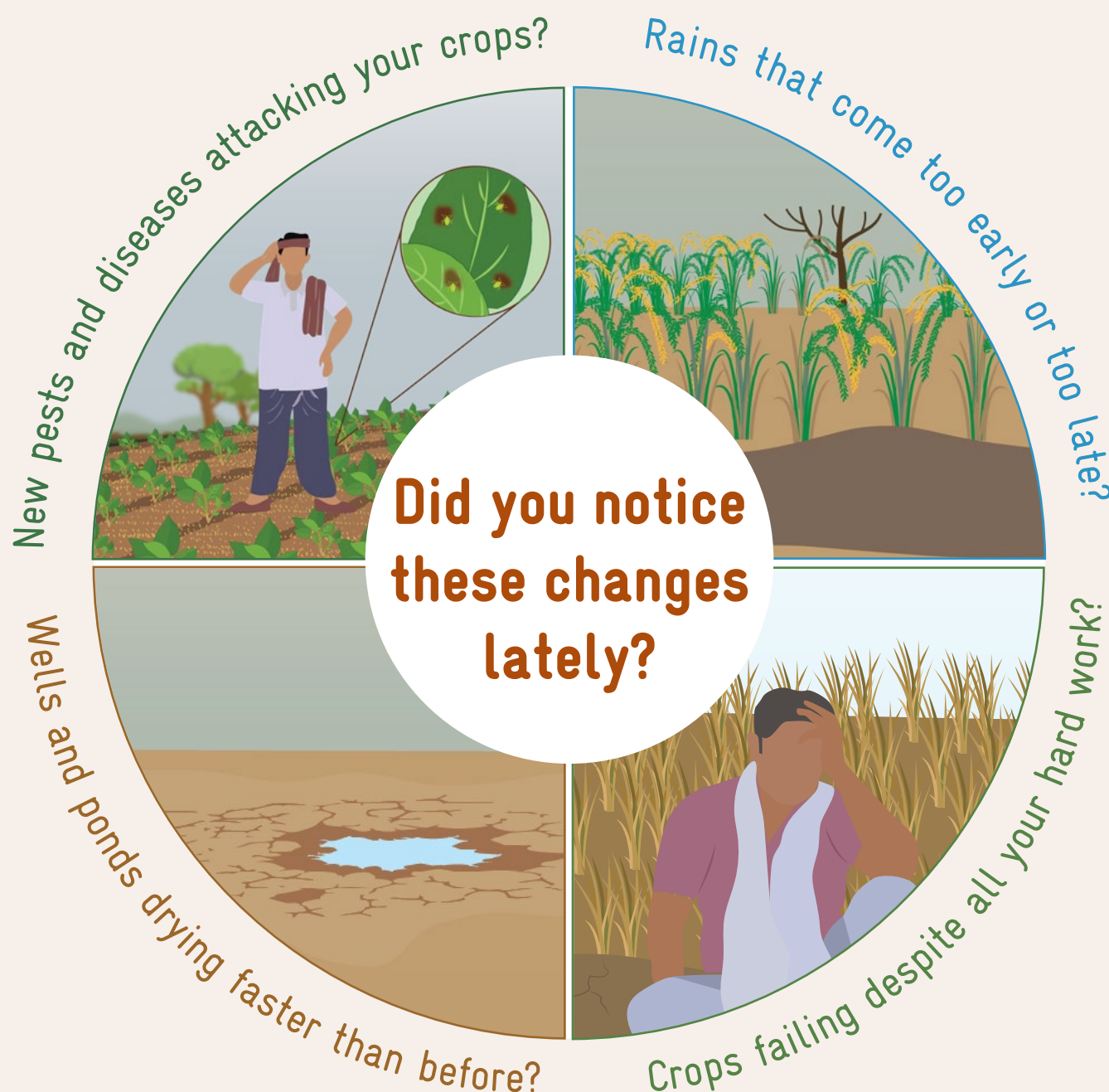


Bridging **Science** and **Solutions**

Climate risk insights for decision-makers



You are not alone!

India is facing intense climate changes

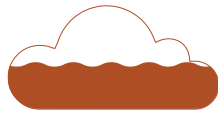
Your land is speaking

Are we ready to listen?

How **climate risks** affect agriculture and water?



21 of India's 36 states reported **extreme droughts** between 2001–2019 (IWMI, 2021)



Rainfall in June 2023 was **10% below normal**, delaying sowing for over 30% of farmers in Madhya Pradesh and Uttar Pradesh.



In Odisha, **40% of rice farmers** lost nearly half of their crops due to **flooding** in 2022 (ICRISAT survey)

What does **climate risk** look like?



Erratic Rainfall

In Vidarbha, Maharashtra, **untimely rains damaged nearly 40% of cotton crop in 2022.**
(Directorate of Economics & Statistics (DES), Government of India)



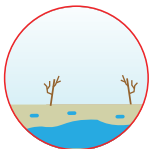
Rising Temperature

In Andhra Pradesh, heat stress **reduced mango flowering by 30% in 2023**, cutting farmer incomes.
(IMD Heatwave Impact Assessments, 2023)



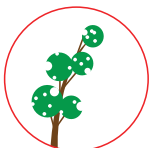
Low Yield

In Odisha **40% of rice farmers** lost nearly half their crop to **flooding in 2022**
(ICRISAT survey)



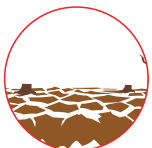
Declining Groundwater

In Rajasthan's Alwar district **Groundwater dropped by 3–4 meters in 10 years**, forcing farmers to abandon wells.
(Rajasthan Ground Water Department district reports)



Pest Attack

In Madhya Pradesh **Soybean farmers** faced **25–30% losses in 2023** due to fall armyworm outbreaks.
(Indian Institute of Soybean Research (ICAR-IISR), Indore)



Drought

Between 2001–2019 **21 out of India's 36 states** reported **extreme droughts**
(IWMI, 2021)



Floods

Bihar's Kosi basin **12,000 hectares** lost in **2022 floods**
(Bihar State Disaster Management Authority (BSDMA))

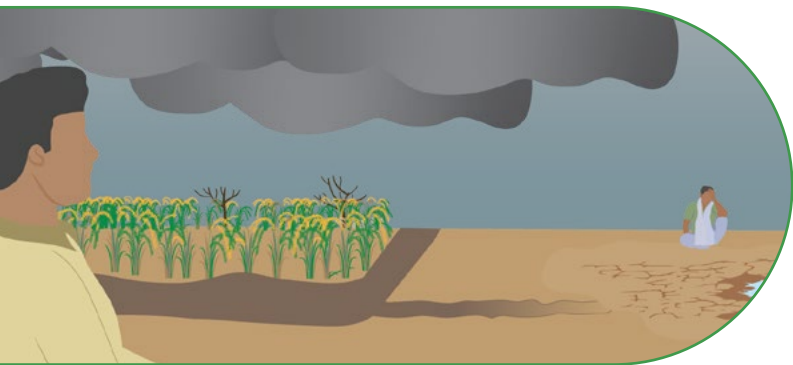
Climate risk is not just about weather
It also impacts your livelihoods, food, and dignity.

Making Climate Science Useful for You

Talking about climate risks – within our own community

Climate Risks, are not far-off issues, they are local.

Solutions, must begin from the ground up.



Start with

What people are seeing and feeling

“This year, my wheat harvest was less.”

“The pond dried early.”

“Mangoes flowered too soon”

Connect it To climate patterns

Explain in simple terms that rising temperatures or shifting rains could be causing these changes.



Use tools

People relate to

Wall paintings, folk songs, theatre, mobile videos, storytelling.

Ask Self Help Group (SHG) women to document crop losses, water issues.



Make it

Everyone's issue

Involve farmers, SHG leaders, children, elders.

Discuss at *choupals* (Village meetings), SHG meetings, panchayat gatherings.



Why it must be tackled locally?

Only you
know

The Land, Water,
Flaura and Fauna
and Traditions of
your village.

Local
solutions
work
better

Like Switching to
Short-duration Crops,
Reviving a Pond, or
Creating Seed-banks.

Waiting
delays
action

Big programs may take time to
reach the ground. **Local leaders,
SHGs, and Farmer producer
organization (FPO) can act now**
with simple, effective solutions.

When the
community
is informed
and united,
resilience
becomes
possible.

What You Can Do?

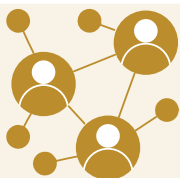
Actions That Matter



Talk about
changing rainfall and
crop patterns in every
SHG meeting.



Start a
“climate diary” with
women farmers: What
changed this season?
What worked?



Coordinate to
revive ponds, set up
kitchen gardens, and
promote millets.



Ask your
Panchayat to support
water-saving or
climate-resilient
farming programmes.



Your Action:

Be the voice of climate

- Smart living in your village.
- Lead the shift with local solutions.

For FPO CEOs



Use WhatsApp or in-person sessions to share crop advisories and climate forecasts with members.

Work with Agri Krishi Vigyan Kendras (KVKs) to demo climate-resilient crops.

Negotiate for bulk organic/natural inputs or insurance services tailored to weather risks.

Your Action: Turn your FPO into a hub for climate-smart farming.

For NGO Directors



Train field staff to talk about climate in every project — not as an extra, but as a core theme.

Integrate risk maps and seasonal forecasts in your programme designs.

Build local capacity to document and share impact stories from the ground.



**Put climate risk at the center of your
Proposals, reports, and community engagement**

Real Stories, Real Solutions

Jharkhand

Mapping Risks with Communities

CInI helps communities map problem chains through participatory loop diagrams, enabling farmers to spot risks, hidden impacts, and local solutions early.



Uttarakhand

Traditional seeds revive lost nutrition

Mount Valley Development Association seed banks preserved 70+ local seeds. Foxtail millet yielded 79% more than hybrid in 2023's drought.



Uttar Pradesh

Risk-Resilient Villages through Local Planning

In Chitrakoot, communities mapped flood risks and built raised handpumps and ponds to ensure water security.



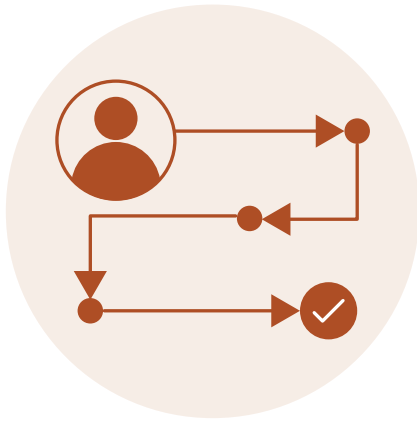
Madhya Pradesh

Beekeeping Transforms Livelihoods

With Under The Mango Tree society's support, tribal communities in Madhya Pradesh shifted from honey hunting to scientific beekeeping, using bee-boxes for safer, sustainable harvests that boost income, pollination, and climate resilience.

Tools that Bring People and Climate Science Together

Participatory tools that work in the field



Gender Responsive Adaptation Planning Tool (GreApt)

A local decision support tool using visuals and impact chains to integrate climate and gender risks, helping communities prioritise climate-resilient actions in agriculture and water.

Climate Expert (CE) Tool

Guides institutions and organisations in mapping hazards, assessing vulnerabilities, and planning gender-sensitive, cost-effective climate adaptation strategies.



Community Workshops with Science Translators

Workshops supported by KVKs, NGOs, and climate experts can demystify rainfall variability, Alternate Wetting and Drying, or temperature shifts.



Power in Participation

Storytelling. Leadership. Local Solutions.
Everyone Has a Role



SHGs and Women's Groups

Document climate impacts, revive seed diversity, share learnings with others.



NGOs and Facilitators

Enable community-led processes, amplify unheard voices, connect science to soil.



FPOs and Cooperatives

Use climate risk data to inform cropping cycles, input planning, and market decisions.



Institutions and Government Bodies

Fund local risk tools, bring in expert support, ensure representation of grassroots voices in plans.

Climate action will only work when those affected by it are shaping it.
Let's listen, co-create and lead together.

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