

# Land regulations in 11 states covering most regions of India



Auroville Consulting



# AIM OF THE STUDY



- Legal framework of the selected states in the context of 1-10 MW AgriPV installations.
- Prime focus on land regulations and how they influence the status of
  - Land-use category
  - Probable change in tax incidence for farmers and developers
  - Finance availability for project development
  - Permit requirement

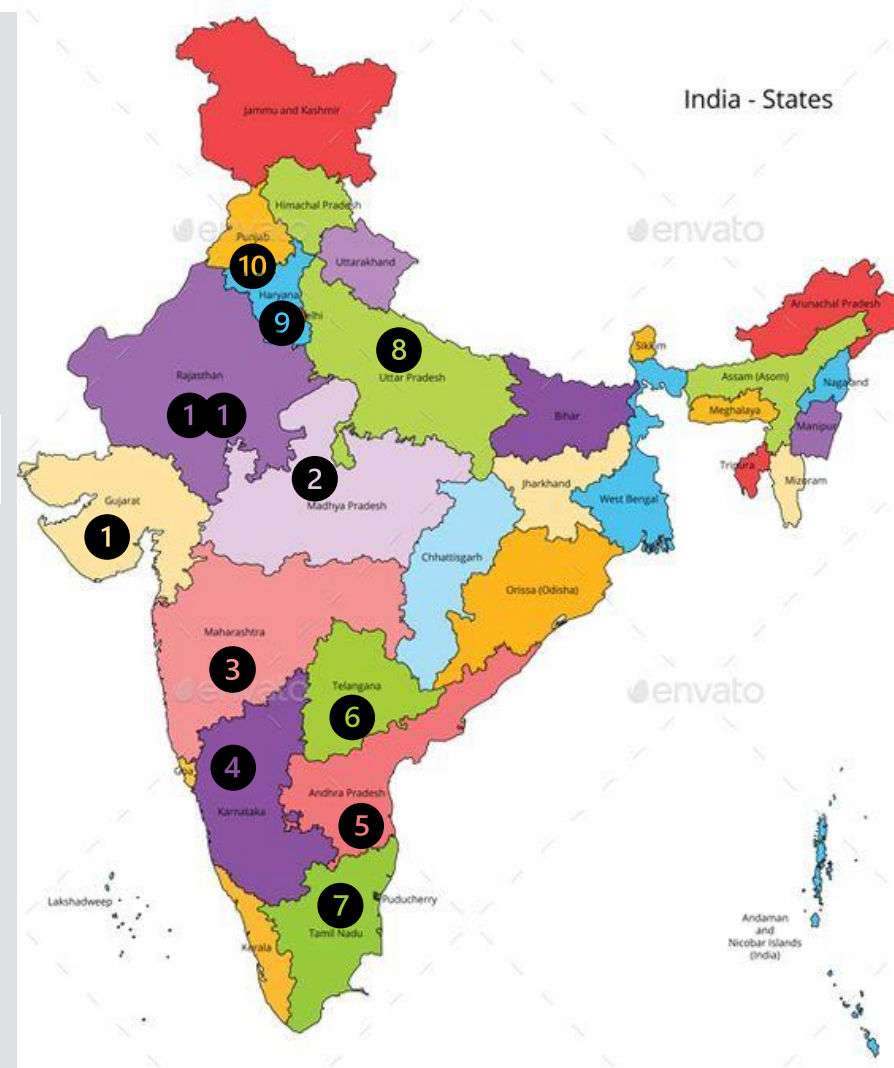


# STATES



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- Gujarat and Madhya Pradesh 
- Maharashtra and Karnataka 
- Andhra Pradesh, Telangana and Tamil Nadu 
- Uttar Pradesh, Haryana and Punjab 
- Rajasthan 



# KEY POINTS



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- Overview on solar sector
- Involved GoI instrumentalities
- Stake holders
- Overview of land laws (especially agricultural lands)
- Specific queries and responses
- Approvals and issuing authorities
- Single window act
- Taxation rules for farmers and developers
- Recommendations to accelerate Agri PV construction permits



# AgriPV PROS & CONS



- Most conventional Indian crops require full sunlight, which would be limited by the erection of solar panels over the crops.
- Overall project cost may be high due to increased installation height of solar panel, maintenance costs, cleaning, etc.
- Land holds sentimental value for farmers. Extensive awareness and community participation required.
- Technical feasibility of module cleaning, elevation of solar panel and availability of ground water to be researched and tested for best practices.

# STATEWISE PERMISSION OVERVIEW



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State	Permission	Special mention and condition
Gujarat	needed	According to section 65 requires approval from collector
Madhya Pradesh	needed	According to land ceiling act requires approval from subdivisional officer
Maharashtra	needed	According to section 44 A requires permission from collector
Karnataka	needed	According to land revenue act 1964 requires permission from commissioner
Tamil Nadu	needed	According to TN NA rules 2017, requires permission from panchayath to collector
Andhra Pradesh	needed	According to section 44 A requires permission from collector
Telangana	not needed	According to Telangana agricultural act, only a payment is required
Uttar Pradesh	not needed	No permission is required, but the designs need to be submitted to UPNEDA
Punjab	needed	According to Land act 1973, no permissions are required for land conversion but many approvals are required from electricity generation
Haryana	needed	According to Land act 1973, apart from the permissions required in Punjab, land leasing agreement plays a key role
Rajasthan	No mention	Insufficient land legislation and no mention on APV

# SPECIAL NOTES



- In general, a construction permit is required to install an agrivoltaics system on any type of land
- It is not specifically permitted to construct a PV plant on agricultural land, except under KUSUM Component A
- In the worst case, the farmer will lose agricultural subsidies (e.g. Minimum Support Price MSP). However, this is very state specific.
- Uncertainties in legal framework may lead to no lesser investment opportunities in AgriPV in India





# SPECIAL NOTES FOR RAJASTHAN



The types of land in Rajasthan include the following types:

1. Nehari (Artificially irrigated): This characterisation is for lands that fall in the catchment area of a major or minor irrigation project in Rajasthan.
2. Chahi (Well Irrigated): This includes the lands which are irrigated using groundwater, ponds etc. but does not include lands in the Nehri category.
3. Barani (Unirrigated): The lowest category of land for yield which is not irrigated but totally dependent on seasonal rain. However, this land is cultivable. Majority of lands in Rajasthan fall in this category.
4. Banjar (Fallow): Lands that are not being used for any purpose and this includes desert areas as well.





# SPECIAL NOTES FOR RAJASTHAN



- Rajasthan Tenancy Act, 1955 came into force with the primary objective of defining the rights and obligations of agricultural tenants and farmers in Rajasthan.
- The majority of farmers in Rajasthan fall under the Khatedar tenants category amongst 4 categories.
- Any agricultural land held in the Khatedari tenancy of the applicant, may be converted for purposes of Solar farm/Solar Plant/Solar Power Plant, Wind Farm/Wind power plants in rural area



# SPECIAL MENTION



- Telangana and Uttar Pradesh states does not require any permission and the construction is easier, with sufficient technical assistance.
- For Maharashtra and Karnataka if the agricultural usage is not hampered and additional activity can be performed, then there is no need for permission. However, intimation is required.



# SUGGESTIONS



- Fiscal incentives, government schemes, concessions, exemptions, attractive credit facilities, budget allocation to be provided to boost potential.
- Pre-fixed progressive tariff for Agri-PV project.
- AgriPV specific regulated policies must be introduced.
- Exploring legalities in the east of India
- Define AgriPV
  - minimum height for horizontal systems
  - maximum permitted land loss
  - maximum permitted yield loss
  - removable mounting structure



# LEGAL ASPECTS IN OTHER COUNTRIES



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Additionally a legal overview study is being prepared for 16 nations :

- Does Agrivoltaics definition exist legally?
- Existing definition
- Does land classification exist for agrivoltaics? (eg:desertified land, cultivable, barren etc)
- Is Agrivoltaics allowed without losing agriculture subsidies or tax exemption?
- Max. agricultural yield loss permitted
- Is yield loss certified? If yes, how?
- Max land loss permitted
- Requirement for structures to be removable?
- If yes, what are the provisions if known? (eg: standards for metal, cement,etc)
- Specifications on feed in tariff if they exist





**Thank you**

**धन्यवाद**

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