COURTING
THE ENVIRONMENT

ECOLOGY AND ENVIRONMENTAL RESEARCH FOR LAWYERS

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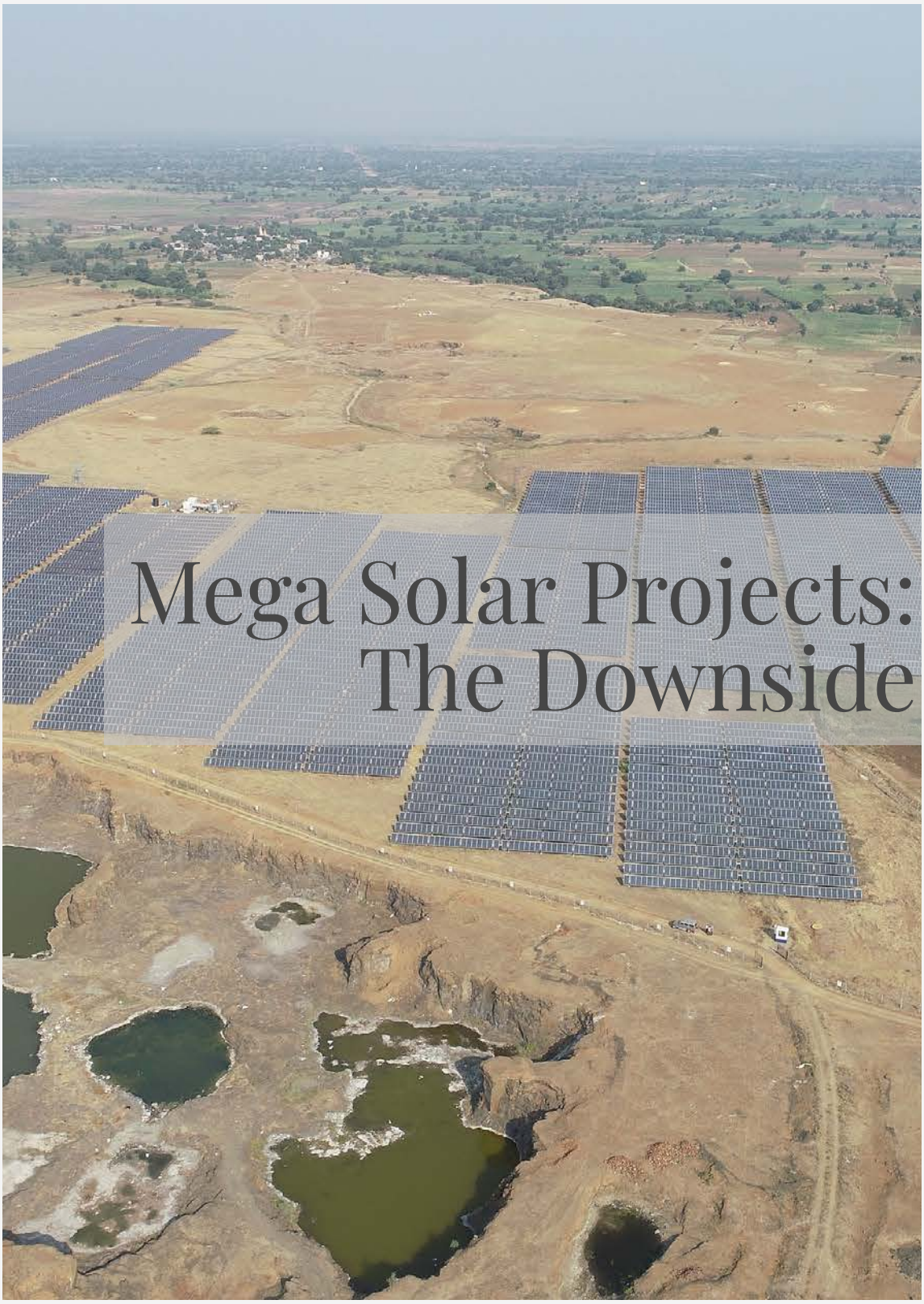


Mega Solar Projects: The Downside

Photo: Thomas Lloyd Group - https://commons.wikimedia.org/w/index.php?curid=77438893

ISSUES

01.

How 'green' is mega solar?

Solar energy is called a 'green' industry, and is considered a clean source of energy. But mega solar power plants cause a lot of damage in the guise of climate adaptation.

02.

Where are solar plants located?

Mega solar power plants are often located in grassland areas. These areas are home to unique plant and animal species, and many animal herding communities.

03.

Solar's impact on the environment

Mega solar plants located in grasslands, fragment habitats of endangered species like the Great Indian bustard. Roads built for the plants also threaten biodiversity.

04.

Solar's impact on people

Mega solar power plants cause herding communities, small farmers, and agricultural labourers lose access to their lands and livelihoods.

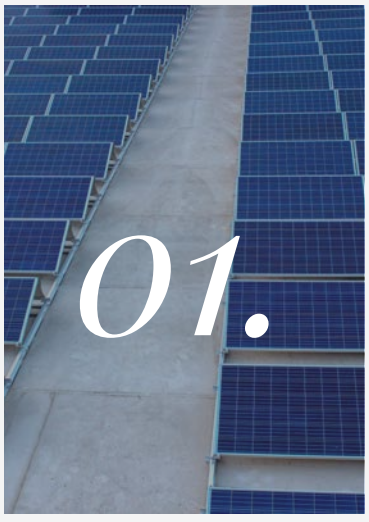
05.

What does that mean for solar?

Solar is a key renewable energy source. Alternatives to mega solar that harness solar energy without threatening the environment or livelihood are needed.

Photo: By Ji-Elle - Own work, CC BY-SA 4.0, https://commons.wikimedia.org/w/index.php?curid=85002546

Research Summaries



Mega Solar

Spatial justice and the land politics of renewables: Dispossessing vulnerable communities through solar energy mega-projects
Geoforum

Yenneti and others (2016)

Mega solar power plants are large-scale projects that are developed through public-private partnerships where the government acquires or hands over existing government land to a private developer. Eg: Charanka Solar Park in Kutch, Gujarat with a capacity of 200 MW, covering 2000 hectares. These projects, as in the case of other large-scale industrial projects, take over land that is in public use and convert it to an asset that is enjoyed by large corporations that invest and operate such projects.

Grasslands

Extent and Status of Semi-arid Savanna Grasslands of Peninsular India

Envis Bulletin: MoEFCC

Vanak and others (2015)

Grasslands are spread over 17% of India's land mass, and covers 11 Indian states. These are among the most neglected landscapes, and get little protection from government agencies. Only 0.1 to 8.7% fall within protected areas. Grasslands are mistakenly thought to be degraded forests, and are routinely misclassified as 'wasteland' . As a result they are left open to conversion to uses, such as - irrigated agriculture, forestry plantations, and other industrial uses. More recently they have been used to establish mega solar plants.

Biodiversity

Renewable Energy and Biodiversity: Implications for Transitioning to a Green Economy

Renewable & Sustainable Energy Reviews

Gasparatos and others (2017)

Mega solar power plants take up a lot of land. In addition to the space needed for setting up panels, they require connected infrastructure such as roads and other installations. It hinders the movement of wildlife and upsets their reproduction and hunting patterns. Solar plants also have high water requirement for operation that further stresses water-scarce areas where many of them are located.

SEE MORE:
Report of the Task Force on Grasslands and Deserts, Planning Commission, Govt of India

People

Distributional Justice in Solar Energy Implementation in India: The case of Charanka Solar Park

Journal of Rural Studies

Yenneti and Day (2016)

The benefits of large-scale solar energy are seen at a national and state level, and for the government agencies and private players involved. Large solar plants take over common land of villages that are traditionally used for grazing and harvesting natural resources. This affects the livelihoods of subsistence farmers and nomadic herding communities, whose access to these lands is cut off. Solar plants are seen as producing an "environmental good", but they come at a high cost to poor and marginalized people.

Photo: Unsplash, Ovee Thorat, Kesavamurthy N - https://commons.wikimedia.org/w/index.php?curid=58767707

WHY 'COURTING THE ENVIRONMENT' ?

In a public interest litigation before a High Court on an environmental matter, the Hon'ble Court remarked that the petitioners had not placed adequate scientific evidence supporting their case. With the wealth of environmental research that happens in reputed scientific institutions in India, it is a shame that it does not often reach environmental lawyers who need it the most. COURTING THE ENVIRONMENT is a triannual newsletter that attempts to address this deficit by conveying environmental research to a legal audience.

HIGHLIGHTS

Solar energy is an important alternative to fossil fuel and is essential for combating climate change and air pollution.

LESSONS

However mega solar plants have significant environmental impacts, and social costs, pushing many deeper into poverty.

CHALLENGES

Mega solar power plants need to be reconsidered. Rooftop solar panels offer a viable, low-impact alternative.

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