

**BEFORE THE NATIONAL GREEN TRIBUNAL EASTERN
ZONE BENCH, KOLKATA**

MEMORANDUM OF APPLICATION

**(Under Section 18(1) read with Sections 14,15 & 17 of the National
Green Tribunal Act, 2010**

UNDER THE ENVIRONMENT (PROTECTION) ACT, 1986

O.A. No. 119 of 2024

Between:

Mr. Srinivasan Sampath Kumar
.....Applicant

-- Versus --

1) The Chief Executive Officer
Kolkata Metropolitan Development
Authority
Government of West Bengal

2) The Secretary
Govt. of India
The Ministry of Environment,
Forest & Climate change

3) The Addl. Chief Secretary,
The Department of Environment,
Govt. of West Bengal

.....Respondents

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FORM I
[See rule 8(1)]

**BEFORE THE NATIONAL GREEN TRIBUNAL EASTERN
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MEMORANDUM OF APPLICATION

(Under Section 18(1) read with Sections 14,15 & 17 of the National
Green Tribunal Act, 2010

O.A. No. _____ of 2024

Between:

Mr. Srinivasan Sampath Kumar
P 590 Purna Das Road
P.O. Ballygunge
P.S. Rabindra Sarobar
Kolkata 700029
Mobile: 9831005197
Email: sskumarlegal@gmail.com
.....Applicant

- versus-

1) The Chief Executive Officer
Kolkata Metropolitan Development
Authority,
Government of West Bengal
Unnayan Bhavan, DJ-11, Sec-II,
Salt Lake, Kolkata 700091
Email: ceokmda@gmail.com

2) The Secretary
Govt. of India
The Ministry of Environment,
Forest & Climate change
Indira Paryavaran Bhawan
Jorbagh Road, New Delhi-110003
Email: secy-moef@nic.in

3) The Additional Chief Secretary,
The Department of Environment,
Government of West Bengal
Prani Sampad Bhavan, 5th Flr, LB-II,
Sector 3, Salt Lake, Kolkata-700098
Email: acsenwb@gmail.com
Psecy.env-wb@gov.in

.....Respondents

- a) The address of the Applicant is as given above for the service of notices of this application
- b) The addresses of the Respondents are as given above for service of notices of the application
- c) The Applicant abovenamed, begs to present the Memorandum of Application against the illegal allotment of eco-sensitive green corridor land of the Rabindra Sarobar Lakes by Respondent 1 to a private entity, on the grounds as set out herein:

The applicant most respectfully Sheweth:

FACTS IN BRIEF:

- 1) That the applicant is an advocate, an activist, an author, and a social worker, residing at P-590, Purna Das Road, P.O. Ballygunge and P.S. Rabindra Sarobar, Kolkata-700029, which is located in the vicinity of Rabindra Sarobar Lake, hereinafter called the 'LAKE,' a waterbody of immense environmental and social significance. A copy of his Aadhar Card is attached as Annexure-A1, hereto.
- 2) That the lake and their surrounding green space span 192 acres. The water body is 73 acres, while the green corridor cover is 119 acres and supports biodiversity. Source: Wikipedia. A copy of the downloaded page on Rabindra Sarobar is attached as Annexure -A2, hereto.
- 3) That the applicant is residing in the Lake's neighbourhood for numerous years, actively participating in activities such as jogging, walking, swimming, and birding. Over the years, he has observed the deterioration of the lake, including widespread barricading and access restrictions, deterioration of water quality, harm to the ecology, flora, and fauna, despite significant financial assistance in its upkeep.

- 4) That the importance of waterbodies like the lake has now been reduced to commercial profit centres, exploited frequently for short-term gains by a few, utterly disregarding the adverse long-term impact on the environment or ecology.
- 5) That, in the past, many patches and portions of this nationally recognised biodiversity waterbody have been allotted, leased out, rented, or transferred, in one form or another to several institutions and sports bodies that have expanded their footprints, disrupting the greenery by constructing public utilities like parking spaces, etc. in the green areas.
- 6) That, but for the lake, which acts as a vast reservoir of rainwater, the recharge water table of South Kolkata would have gone further down, resulting in a severe water shortage for the number of high rises that draw groundwater from their deep tubewells. Currently, the water level in the lake has reduced by more than six feet, the fall, now a recurring annual event, which results in lesser dissolved oxygen levels in the lake, and the death of many fish species.
- 7) That the lake users have consistently resisted and thwarted attempts of numerous interested parties to seize the green corridor on the northern flank of the lake, bordering Southern Avenue, under various pretexts over the past few decades.
- 8) That about 34 years ago, a cricket academy was established in the green corridor of the lake called the 'Calcutta Cricket Coaching Centre.' The private entity, is barred for the public. Such preferential allotments have also resulted in selective use of public facilities by a few privileged entities, which is against the very policy and ethos of environment protection. A photo taken by me of the said cricket academy on May 23, 2024, is attached as Annexure-A3, hereto.

- 9) That the adjoining western plot of the 'Calcutta Cricket Coaching Centre,' close to 3 acres, is being used for football training exclusively by a few coaching clubs and not a blade of grass grows in these plots, which were once gave lush green cover.
- 10) That the applicant, as a conscientious citizen, is distressed to learn from a few concerned lake users, as well as environmental activists, that the present custodian of the lake, the KMDA, has reportedly allotted a huge plot of land, about 5 bighas, in the green corridor of the lake, adjoining Southern Avenue between Gate No. 9 and Baroj Road, to certain private individuals representing an entity named 'Calcutta Entertainment Club Foundation.'
- 11) That the applicant states that his apprehension is confirmed by banners and notices of the KMDA announcing the said plot of land has been allotted for celebrity cricket. Several publicity banners have been put up by the KMDA, announcing, "This ground is allotted for celebrity cricket practice" and further states as "ordered by K.M.D.A." In Bengali, it states, "Permission has been granted for celebrity cricket practice on this ground." A banner photographed by me on May 23, 2024, is attached as Annexure-A4, hereto.
- 12) That the applicant found out from the web that the said private entity to whom the KMDA is reported to have allotted the 5 Bigha plot of land in the Rabindra Sarobar green corridor is named 'Calcutta Entertainment Club Foundation' (CIN: U88900WB2023NPL-263022), has a paid-up capital of Rs. 30,000.00, and the following are the directors and key management personnel: Mr. Jishu Ujjal Sengupta, Sourav Das, and Indrasish Roy. However, the applicant was unable to obtain any information about the entity from the Registrar of Companies. A downloaded copy of the website of the entity is attached as Annexure-A5, hereto.

G R O U N D S

- 13) That more than the estimated market value of the land of 5 bighas allotted to the said private entity by KMDA, which is anywhere in the vicinity of Rs.150 crores, what is alarming is the blatant abuse of discretion and discrimination by the custodian of lake, the KMDA, at the cost of environment, which must be stopped forthwith in public interest.
- 14) That a national Lake as Rabindra Sarovar is a treasure, and its users, morning walkers, environmentalists, botanists, birders, swimmers and rowers are all an integral part as saviours of this great eco-sensitive and heritage property, which belonging to the nation.
- 15) That the applicant asserts that huge playgrounds like Vivekananda Park and Deshapriya Park exist near the lake, where sports and related activities, in particular cricket, are played. This is in addition to the southwestern part of the lake, which house a huge underutilized sports stadium and several dedicated grounds around it for training in games like cricket, football, etc. In addition, there are several private clubs, which the celebrities could use, instead of targeting a public eco-sensitive, green corridor, as in Rabindra Sarobar lake area.
- 16) That the applicant craves leave to explain ‘Custodian of property,’ (1845) as quoted in Black’s Law Dictionary, 11th Edition page no. 483, which states: “A Custodian responsible for managing real or personal property. The custodian’s duties generally include securing, safeguarding and maintaining the property in the condition received and accounting for any change in it.” The KMDA is in every aspect a custodian of Rabindra Sarobar Lake and not an owner of the same. A copy of the extract of the said page from the Black’s Law Dictionary is attached as Annexure-A6, hereto.

17) That the applicant states that the KMDA has wrongly presumed itself to be an absolute owner of the lake, entitled to handover any portion of it, in any manner it pleases, which is grossly illegal and ab initio void.

18) That the preservation and strengthening of waterbodies like Rabindra Sarobar is crucial due to the rising temperatures and decreasing water table in and around Kolkata city.

19) A lot of native and migratory birds have made the lake their habitat and the migratory birds arrive every year, which must not be disturbed. Relocating the cricket and football activities from the northern flank of the green corridor bordering Southern Avenue, and growing an urban forest like the internationally popular Miyawaki method in the green corridor will change the environment profile of the area for the better, which will become a case study for the entire country. An extract on Miyawaki forest from JSTOR, a reputed publisher, is attached as Annexure-A7, hereto.

20) It is a well settled principle in law as decided in M/s Ajar Enterprises Private Limited Versus Satyanarayan Somani and Ors. in the Civil Appeal No. 10852 of 2017 [Arising out of SLP (C) No. 7116 of 2016] with Civil Appeal No. 19853 2017 @SLP(C) No. 8145 of 2016 AND Civil Appeal No. 10854 2017 @SLP (C) No. 13455 of 2016 while granting leave it has observed:

Pages 34-35 Quote: "Justice Jagdish Singh Khehar (as the learned Chief Justice then was) in his concurring judgment held that :

"200. I would therefore conclude by stating that no part of the natural resource can be dissipated as a matter of largess, charity, donation or endowment, for private exploitation. Each bit of natural resource expended must bring back a reciprocal consideration. The consideration may be in the nature of earning revenue or may be to "best subserve the common good". It may well be the amalgam of the two. There cannot be a dissipation of material resources free of cost or at a consideration lower than their

actual worth. One set of citizens cannot prosper at the cost of another set of citizens, for that would not be fair or reasonable.”

49 Undoubtedly, disposal of natural resources by auction is not a mandatory principle for, as the Constitution Bench held, individual statutes may provide for modalities of transfer by alternate modes which subserve public interest. In the present case, as we have noted, Rule 5 of the 1975 Rules provides four modalities: (i) direct negotiations; (ii) auction; (iii) inviting tenders; and (iv) concessional terms. Where the statute has provided for several modes of disposal, the choice among one of the available methods must facilitate the fulfilment of public interest. requires consideration being given to all aspects of the matter including the nature and value of the land, the purpose of the allotment and the need for the authority to generate funds to facilitate the objects for which it was constituted, such as planned development. The choice of one of a range of permissible choices can never be based on the anvil of conferring an undeserved benefit on a commercial developer. The choice of methods is not left to the unbridled discretion of a public authority. Where a public authority exercises an executive prerogative, it must nonetheless act in a manner which would subserve public interest and facilitate the distribution of scarce natural resources in a manner that would achieve public good. Where a public authority implements a policy, which is backed by a constitutionally recognised social purpose intended to achieve the welfare of the community, the considerations which would govern would be different from those when it alienates natural resources for commercial exploitation. When a public body is actuated by a constitutional purpose embodied in the Directive Principles, the considerations which weigh with it in determining the mode of alienation should be such as would achieve the underlying object. In certain cases, the dominant consideration is not to maximise revenues but to achieve social good such as when the alienation is to provide affordable housing to members of the Scheduled Castes or Tribes or to implement housing schemes for Below the Poverty

Line (BPL) families. In other cases where natural resources are alienated for commercial exploitation, a public authority cannot allow them to be dissipated at its unbridled discretion at the cost of public interest.” – Unquote.

The full set of the downloaded copy of the Supreme court judgement will be produced at the time of hearing. The relevant title page and pages 34-36 of the judgement are attached as Annexure -A8, hereto.

L I M I T A T I O N

The cause of action by way of allotment of a part of the recognized national lake green corridor by the KMDA to a private entity for commercial exploitation, has happened in March 2024, and the petition, thus, does not fall under the bar of Limitation under Section 14(3) of the National Green Tribunal Act, 2010.

J U R I S D I C T I O N

21) The Cause of action has taken place in Rabindra Sarobar Lake in Kolkata, falling under the jurisdiction of the Eastern Zone of this Hon'ble Tribunal and as such, this Learned Tribunal is competent to try, entertain and determine the application in respect of jurisdiction.

22) That this application is bonafide and for the ends of justice and equity.

R E L I E F S O U G H T

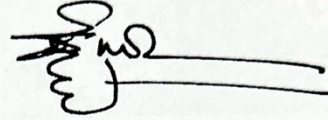
Therefore, the applicant prays:

- i) For passing an order for an ad-interim injunction against the handing over and approval for the subsequent conversion of the sensitive green corridor of the Rabindra Sarobar lake by Respondent 1 to a private party in violation of the Environment (Protection) Act, 1986,

- ii) For passing an order of permanent injunction, against the allotment of any piece or parcel of the sensitive green corridor of the Rabindra Sarobar lake, which is under the National Lake Conservation Plan (NLCP), GOI, by KMDA, to any private entity at the detriment of environment.
- iii) For passing a further order, that the KMDA, as a custodian of the national lake, must only preserve, conserve and maintain the lake and cannot abrogate the inalienable user right of the Applicant and/or other lake users without due process of law.
- iv) To direct KMDA to initiate a feasibility study of shifting all cricket and football activities from the present northern flank of the green corridor bordering Southern Avenue.
- v) To direct KMDA to initiate a study to establish a urban forestry project based on Miyawaki, or any other similar dense afforestation method on the green corridor.
- vi) Such other relief or reliefs as this Learned Tribunal may think fit and proper for ends of justice, law and equity

VERIFICATION

I, Srinivasan Sampath Kumar, the applicant herein, do hereby declare that the statements made above in the foregoing paragraphs are true to our knowledge and belief. I sign this verification this the 27th day of May, 2024.



Deponent

SL. No. 150 Date 28/5/24

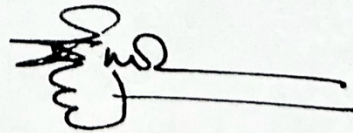
AFFIDAVIT

BEFORE THE NOTARY PUBLIC
ALIPORE JUDGES' COURT
KOLKATA-700 027



I, Srinivasan Sampath Kumar, son of Late Venkatachari Srinivasan, aged about 72 years, by faith-Hindu, by occupation - legal practice, residing at P-590, Purna Das Road, 5th Floor Post Office- Ballygunge, Police Station Rabindra Sarobar, Kolkata - 700029, do hereby solemnly affirm and say and follows :-

1. That I am the Applicant of the instant petition and am well acquainted with the facts and circumstances of the case. This is true to my knowledge and belief.
2. That the statements made in paragraph nos. 1 to 29 of the foregoing petition are true to my knowledge and the rest are my humble submission before this Hon'ble Tribunal.



Deponent
Identified by

Solemnly declare and affirmed before me on Identification under the Notaries Act











MARUFA KHATOON
Notary Public Govt. of India
Regd. No.-13815/2018
Alipore Judges Court

28 MAY 2024

Identified by me

DEBASISH CHOWDHURY
Advocate
ALIPORE JUDGES' COURT, KOL-27
Regd.No.- WB/929/1990

  আধার	  AADHAAR
ভারত সরকার Government of India	ভাৰত Government of India
ভারতীয় বিশিষ্ট পরিচয় প্রাধিকরণ Unique Identification Authority of India ভূমিকাভুক্তির নম্বর/Enrolment No.: 1490/50086/07219	তথ্য ■ আধার পরিচয়ের প্রমাণ, নাগরিকত্বের প্রমাণ নয় ■ পরিচয়ের প্রমাণ অনলাইন অ্যাক্টিভেশন দ্বারা লাভ করুন ■ এটি এক ইলেক্ট্রনিক প্রক্রিয়ায় তৈরী হয়
To শ্রীনিবাস সম্পত কুমার Srinivasan Sampath Kumar S/O: Venkatchari Srinivasan FLAT-5N P-590, PURNA DAS ROAD Sarat Bose Road Kolkata Sarat Bose Road West Bengal - 700029 9831005197	INFORMATION ■ Aadhaar is a proof of identity, not of citizenship. ■ To establish identity, authenticate online. ■ This is electronically generated letter.
Download Date: 02/01/2017 Generation Date: 12/07/2016 	■ আধার সারা দেশে মান্য। ■ অমার ভবিষ্যতে সরকারী ও বেসরকারী পরিষেবা প্রাপ্তির সহায়ক হবে। ■ Aadhaar is valid throughout the country. ■ Aadhaar will be helpful in availing Government and Non-Government services in future.
আপনার আধার সংখ্যা / Your Aadhaar No. : 9680 9156 6643 আমার আধার, আমার পরিচয়	
ভারত সরকার Government of India শ্রীনিবাস সম্পত কুমার Srinivasan Sampath Kumar জন্মতারিখ/ DOB: 01/04/1952 পুরুষ / MALE 	ভারতীয় বিশিষ্ট পরিচয় প্রাধিকরণ Unique Identification Authority of India ঠিকানা: পত্র/৪: ভেনকটচাচারী শ্রীনিবাস, ফ্ল্যাট-5N, পি-590, পূর্ণ দাস রোড, সারৎ বোস রোড, কোলকাতা, পশ্চিম বঙ্গ - 700029 Address: S/O: Venkatchari Srinivasan, FLAT-5N, P-590, PURNA DAS ROAD, Sarat Bose Road, Kolkata, West Bengal - 700029
9680 9156 6643 আমার আধার, আমার পরিচয়	9680 9156 6643
	



TRUE COPY ATTESTED

MARUFA KHATOON
 NOTARY PUBLIC
 GOVT. OF INDIA
 Regd.No.- 13315/2016
 Alipore Judges' Court

28 MAY 2024

Rabindra Sarobar-Wikipedia

Rabindra Sarobar (formerly known as **Dhakuria Lake**) is an artificial lake, garden and park in [South Kolkata](#) in the [Indian state](#) of [West Bengal](#). The name also refers to the area surrounding the lake.^[1] It is flanked by [Southern Avenue](#) to the north, Shyamaprasad Mukherjee Road to the west, [Dhakuria](#) to the east and the [Kolkata Suburban Railway](#) tracks to the south.

History

In the early 1920s, the [Calcutta Improvement Trust](#) (CIT), a body responsible for developmental work in the [Kolkata metropolitan area](#), acquired about 192 acres (0.78 km²) of marshy [jungles](#). Their intention was to develop the area for residential use – improving the roads, raising and levelling some of the adjacent land and building lakes and [parks](#). Excavation work was undertaken with the plan of creating a huge lake. The excavation of the lake was led by CIT's first chairman Cecil Henry Bompas, Kolkata Municipal Corporation's chief-engineer M.R. Atkins and a young Bengali passout from Shibpur B.E. College Prabodh Chandra Chatterjee and initially it was known as Bompas Lake.^[2] Originally known as Dhakuria Lake, in May 1958, CIT renamed the lake as Rabindra Sarovar, as a tribute to [Bengali](#) writer and [Nobel Laureate](#), [Rabindranath Tagore](#).^[4] The area around this excavated lake was later developed to build recreational complexes, which included children's parks, [gardens](#) and [auditoria](#).

Today the lake and its surrounding areas are one of the most popular recreational areas in Kolkata. 73 acres (300,000 m²) are covered by water, while shrubs and trees, some of which are more than 100 years old, occupy the rest of the area. A partial tree census in 2012 recorded 50 different species.^[5] In the winter, one can spot some [migratory birds](#) around the lake,^[6] though the numbers are dwindling because of the rise in [pollution](#) level. The lake itself is home to many varieties of fish. Fishing is strictly prohibited. A number of people come for a walk around the lake in the mornings to enjoy the fresh air. Many visit the sunrise point to offer their prayers to the sun. During the day, it is visited by families on a picnic, tourists, young lovers and joggers.^[7]



Calcutta Cricket Coaching Centre



One of the many similar banners put up by KMDA at the Rabindra Sarobar lake.

CALCUTTA ENTERTAINMENT CLUB FOUNDATION

Reg No:

U88900WB2023NPL263022

CALCUTTA ENTERTAINMENT CLUB FOUNDATION is a Non-government company that is registered under the Registrar of Companies (RoC) **Kolkata**, with a Corporate Identification Number (CIN) of U88900WB2023NPL263022. The company was incorporated on 13-06-2023, and is based in the state of West Bengal. It falls under the category of Company limited by shares and has an authorized capital of Rs. 1500000. The paid-up capital of the company is Rs. 30000. The primary activity of the company is related to Other social work activities without accommodation n.e.c.. The registered office of **CALCUTTA ENTERTAINMENT CLUB FOUNDATION** is located at 60/116,Haripada Dutta Lane, **Kolkata**, Kolkata, West Bengal, India - 700033

Contact Details

Mobile Number:

NA

Website:

Click here to add website...

Email Address:

ptekriwalco@gmail.com

Address

60/116,Haripada Dutta Lane,Kolkata, Kolkata, West Bengal, India - 700033

Activity Description

Founded:

23 June 23

Authorised Capital: 1500000

Paid Up Capital: 30000

Company limited by shares

Statutory Details

GST:

NA

IEC:

NA

NUMBER OF EMPLOYEES:

NA

LEGAL STATUS OF FIRM:

NA

- DE ▶ **custodian of property.** (1845) A custodian responsible for managing real or personal property. • The custodian's duties generally include securing, safeguarding, and maintaining the property in the condition received and accounting for any changes in it.
- DE **custodian bank.** See BANK.
- DE **custodian of evidence.** See CUSTODIAN.
- nti* **custodian of property.** See CUSTODIAN.
- ay-* **custodian's deed.** See DEED.
- the* ***custodia terrae et haeredis.*** See DE CUSTODIA TERRAE ET HAEREDIS.
- [he* **custody, n.** (15c) **1.** The care and control of a thing or person for inspection, preservation, or security.
- ing* ▶ **constructive custody.** (1822) Custody of a person (such as a parolee or probationer) whose freedom is controlled by legal authority but who is not under direct physical control.
- ary* ▶ **involuntary protective custody.** (1975) *Criminal law.* A prison's removal of an inmate from the general prisoner population at the discretion of the administrators, usually on the basis of concern for the inmate's safety. — Abbr. IPC.
- ord* ▶ **penal custody.** (18c) Custody intended to punish a criminal offender.
- ist.* ▶ **physical custody.** See PHYSICAL CUSTODY (1).
- .CE* ▶ **preventive custody.** (1976) Custody intended to prevent further dangerous or criminal behavior.
- in]* ▶ **protective custody.** (1929) **1.** The government's confinement of a person for that person's own security or well-being, such as a witness whose safety is in jeopardy or an incompetent person who may harm him- or herself.
- 6c)*
- ase*
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The Miyawaki Method: A Better Way to Build Forests?

India's forest production company is following the tenets of the master Japanese botanist, restoring biodiversity in resource-depleted communities.



By: [Lela Nargi](#)

July 24, 2019

In 2010, Shubhendu Sharma cleared the grass from the 75-square-meter backyard of his family home in the city of Kashipur, in India's Himalayan Uttarakhand state. Into the intensely compacted soil he planted 224 saplings of some 19 species of shrubs and trees— timber, and guava and mulberry among other fruit trees. Then he weeded and watered and monitored. He watched as the young, frail plants leafed and flowered, quickly growing tall and thick, as a dozen species of birds moved in to the newly lush habitat, as a thermometer registered coolness beneath the trees—a difference of some 5 degrees Celsius from the surrounding air—even in June's blistering heat. And August's Monsoon rains, which once puddled on the surface of the yard, absorbed into the dirt "like a sponge," says Sharma. In a year, his backyard had become a self-sustaining mini forest.

Planting it was an odd pursuit, given that Sharma had never been particularly interested or drawn to studies or work involving flora. He made his living as an industrial engineer, a career he had dreamed of, in fact, since his boyhood. But in 2009, while working on assembly line and dispatch systems at a Toyota plant in Karnataka, Sharma was captivated by a presentation given by Akira Miyawaki. **The Blue Planet Award-winning botanist** from Japan is celebrated for his very particular approach to afforestation—**a soil-, air-, water-, and climate-remediating process** by which trees are planted where no trees existed before. He'd come to apply his method to a tract of land around the factory where Sharma worked.

Sharma volunteered to help place **over 32,000 native trees** and plants like neem, mango, and teak into the otherwise industrial landscape. And from that day on, his fate was sealed. In 2011, after proving that Miyawaki's method could work for his own experimental backyard forest, he quit his job at Toyota and opened a forest-production company named **Afforestt**, which practices what Miyawaki preaches: the introduction to a depleted landscape of "potential natural vegetation," which is what would naturally occur in that particular place without human intervention.

Since then, Afforestt has planted over 450,000 trees in 144 tiny, fast-growing forests in 50 cities around the world, helping improve global ecosystems functionality one miniscule but power-packed patch at a time.

Afforestation Basics

It's no secret that Earth is rapidly losing its forests. Just between 1990 and 2015 the world lost 129 million hectares of them, which equals "two Texas," as the *Washington Post* put it. Deforestation is responsible for an estimated 5 billion tons, or 17 percent, of annual global carbon emissions, not to mention soil erosion and biodiversity loss.

In contrast, growing forests has numerous benefits. Forests remove vast amounts of carbon from the air and store it in leaves, branches, trunks, roots, and dirt. Tropical forests alone store one quarter of a trillion tons of carbon, according to the World Wildlife Fund for Nature. Older trees store more carbon, while younger trees remove, or *sequester*, more of it. Forests cool the air and generate oxygen, plus they clean our waters and regulate precipitation and wind. They also house 80 percent of our terrestrial biodiversity, reduce soil erosion, halt desertification, and lessen the impacts of floods. Newly planted forests improve land degraded by mining, growing crops, and over-grazing livestock. Planting forests can also help reduce fertilizer runoff into rivers that causes algae blooms and create wildlife corridors between one isolated verdant bit and another. That's why afforestation is critical to the continuation of life on our planet, which is rapidly heating while losing its ecological biodiversity.

Historically, afforestation was largely seen as a means to generate income from timber and other products.

Recognizing the essentialness of forests, the International Union for Conservation of Nature (IUCN) and the German government issued the Bonn Challenge just as Sharma was getting Afforestt up and running. This initiative piggybacked onto earlier efforts from various international players to commit countries to saving and creating forests; the goal of the Bonn Challenge now is to restore 350 million hectares of degraded land by 2030 by planting millions of trees.

Historically, however, afforestation was largely seen as a means to generate income from timber and other products. So afforestation projects often favored plantations of single species, like Monterey pine or Sitka spruce or oil palms. Many of the Bonn Challenge projects follow the same monoculture approach, which has its pros and cons.

Monoculture forests have carbon benefits—204 million acres worth of new plantations could sequester **18.1 gigatons of carbon dioxide by 2050**. But Project Drawdown points out that “they are often created with purely economic motives and little regard for the long-term well-being of the land, environment, or surrounding communities.” It also calls them “ecological deserts,” as a stand of only pines, for example, does little to promote the multi-species plant and animal diversity found in a natural forest system. Monocultures of trees can also cause harm. In 2008, **Karachi stuck into the ground 2.2 million non-native Conocarpus trees**, a species notorious for contributing to droughts in water-scarce places, which left experts worrying about the potential adverse effects.

The Miyawaki Method

As a young graduate student in the late 1950s, Akira Miyawaki learned about the emergent concept of potential natural vegetation (PNV). This, along with his studies in phytosociology—the way plant species interact with each other—guided his explorations of the vegetation growing throughout his native Japan. Eventually, he began visiting **Shinto sites** and observing **their chinju no mori, or “sacred shrine forests.”** Miyawaki determined that these were time capsules, showing how indigenous forest was layered together from four categories of native plantings: main tree species, sub-species, shrubs, and ground-covering herbs.

Using this four-category system, along with his **surveys of these sites and his knowledge of PNV and phytosociology**, Miyawaki designed his own system for planting forests.

It works like this: the soil of a future forest site is analyzed and then improved, using locally available sustainable amendments—for example, rice husks from a nearby mill. About 50 to 100 local plant species from the above four categories are selected and planted in clumps as seedlings in a mix like you would find growing naturally in the wild. The seedlings are planted very densely—30,000 to 50,000 per hectares as opposed to 1,000 per hectare in commercial forestry. For a period of two to three years, the site is monitored, watered, and weeded, to give the nascent forest every chance to establish itself.



Courtesy Afforestt

During this early period, the plantings compete with each other for space and access to light and water—a battle that encourages much faster growth. In conventional afforestation techniques, five to ten centimeters of growth per year is considered the norm, depending on the species. In the Miyawaki method, trees grow about 10 times faster. Once stabilized, the forest is left to flourish, forevermore, on its own without further interference.

Miyawaki has planted over 40 million trees in this way, in 15 countries, including, especially, his own. Critics have accused him of shilling for corporations like Toyota, which have contributed to deforestation in places such as India, and of creating monotonous-looking forests that are expensive to boot. But at the age of 91 he continues to plant trees —**90 million of them are slated to be put in along Japan's coast** as a buffer against future catastrophic tsunami damage. And disciples like Shubhendu Sharma have emerged to pick up where he will eventually leave off.

The Sharma Algorithm

An engineer with a native zeal for quantifying systems, Sharma turned Miyawaki's method into a set of assembly line instructions. Using an algorithm similar to Toyota's assembly line that produces several different types of cars, each with its own requirements, he derived his own formula to make a multi-layered forest with plantings that also have different time, space, and other needs. Although his company offers consultation, training, and the actual building of forests, anyone can email Afforestt and receive access to Sharma's graphs and instructions for planting a forest, start to finish. "Dr. Miyawaki invented this process, and whatever I understood of the methodology I wrote it as a standard operating procedure, so it could be replicated," says Sharma.

From that manual, a would-be forester learns so much, including how to determine soil type using the "ribbon test;" how to collaborate with a local nursery to find truly native species; how to prepare the planting site; and how to arrange saplings, three to four per square meter, into a grid. (When planting his backyard forest, Sharma accidentally introduced two non-native species—neither he nor his source knew any better at the time—so he includes detailed instructions to help others avoid this mistake.) Now that Sharma has computerized the process, he's back-working it to turn it into an analog, paper-based system that those without computer access can use.



Courtesy Afforestt

A high level of diversity is paramount on Sharma's list of essential goals. In projects Afforestt has undertaken in India, his company so far managed to use about 336 types of native trees out of 2800 that are known to have existed in the country. And the company has started its own nursery in Rajasthan to begin to add more species to their plantings.

Sharma is adamant that the impact of even very small forests on local communities is significant enough to matter. **Research from Wageningen University** in the Netherlands, which found increased fungi, bacteria, pollinators, and amphibians on two tiny planted forest sites in urban Zaanstad that were based on Sharma's model, lends some scientific credence to this claim.

Perhaps more importantly, Sharma says he's witnessed people in resources-depleted communities change over the years, "from assuming land is bad and will stay that way, to now imagining forest." He's dedicated to making more of that verdant possibility come true, and to bringing back, he says, "everything [we can] that has been lost to agriculture, monoculture, cities, lawns. Until those small patches have been restored, the work doesn't stop."

REPORTABLE

IN THE SUPREME COURT OF INDIA

CIVIL APPELLATE JURISDICTION

CIVIL APPEAL No. 10852 OF 2017

[Arising out of SLP (C) No. 7116 of 2016]

M/S. AJAR ENTERPRISES PRIVATE LIMITED

.....APPELLANT

Versus

SATYANARAYAN SOMANI AND ORS.

.....RESPONDENTS

WITH

CIVIL APPEAL NO. 10853 2017

@SLP (C) NO. 8145 OF 2016

CIVIL APPEAL NO.10854 2017

@SLP (C) NO. 13455 OF 2016

JUDGMENT

Dr D Y CHANDRACHUD, J

1. Leave granted.

The appellant, Ajar Enterprises Private Limited ("Ajar") has called into question a judgment of a Division Bench of the Madhya Pradesh High Court, in its Bench at Indore, dated 8 February 2016. The High Court (i) set aside the renewal of a lease granted by Ujjain Development Authority (" ") to Ajar for the period from 21 December 2012 till

21 were executed between November 2015 and February 2016 after judgment has been reserved and before it was delivered by the High Court. There is an evident lack of *bona fides* on the part of Ajar.

48 A Constitution Bench of this Court has held in its decision in **re : Natural Resources** (supra) that auction is not the only permissible means for the disposal of other than auction, Justice D K Jain delivering the judgment of four judges held that :

“149...auction as a mode cannot be conferred the status of a constitutional principle. Alienation of natural resources is a policy decision, and the means adopted for the same are thus, executive prerogatives. However, when such a policy decision is not backed by a social or welfare purpose, and precious and scarce natural resources are alienated for commercial pursuits of profit maximizing private entrepreneurs, adoption of means other than those that are competitive and maximize revenue may be arbitrary and face the wrath of Article 14 of the Constitution. Hence, rather than prescribing or proscribing a method, we believe, a judicial scrutiny of methods of disposal of natural resources should depend on the facts and circumstances of each case, in consonance with the principles which we have culled out above. Failing which, the Court, in exercise of power of judicial review, shall term the executive action as arbitrary, unfair, unreasonable and capricious due to its antimony with Article 14 of the Constitution.”

Justice Jagdish Singh Khehar (as the learned Chief Justice then was) in his concurring judgment held that :

“200. I would therefore conclude by stating that no part of the natural resource can be dissipated as a matter of largess, charity, donation or endowment, for private exploitation. Each bit of natural resource expended must bring back a reciprocal consideration. The consideration may be in the nature of earning revenue or may be to

"best subserve the common good". It may well be the amalgam of the two. There cannot be a dissipation of material resources free of cost or at a consideration lower than their actual worth. One set of citizens cannot prosper at the cost of another set of citizens, for that would not be fair or reasonable."

49 Undoubtedly, disposal of natural resources by auction is not a mandatory principle for, as the Constitution Bench held, individual statutes may provide for modalities of transfer by alternate modes which subserve public interest. In the present case, as we have noted, Rule 5 of the 1975 Rules provides four modalities: (i) direct negotiations; (ii) auction; (iii) inviting tenders; and (iv) concessional terms. Where the statute has provided for several modes of disposal, the choice among one of the available methods must

requires consideration being given to all aspects of the matter including the nature and value of the land, the purpose of the allotment and the need for the authority to generate funds to facilitate the objects for which it was constituted, such as planned development. The choice of one of a range of permissible choices can never be based on the anvil of conferring an undeserved benefit on a commercial developer. The choice of methods is not left to the unbridled discretion of a public authority. Where a public authority exercises an executive prerogative, it must nonetheless act in a manner which would subserve public interest and facilitate the distribution of scarce natural resources in a manner that would achieve public good. Where a public authority implements a policy, which is backed by a constitutionally recognised social purpose intended to achieve the welfare of the community, the considerations which would govern would be different from those when it alienates natural resources for commercial exploitation. When a public body is actuated by a constitutional purpose embodied in the Directive Principles, the considerations which weigh with it in determining the mode of alienation should be such as would achieve the underlying object. In certain cases, the dominant consideration is not to

maximize revenues but to achieve social good such as when the alienation is to provide affordable housing to members of the Scheduled Castes or Tribes or to implement housing schemes for Below the Poverty Line (BPL) families. In other cases where natural resources are alienated for commercial exploitation, a public authority cannot allow them to be dissipated at its unbridled discretion at the cost of public interest.”- Unquote