

<b>3.3.3</b> <b>Q<sub>n</sub>M</b>	<b>Number of awards / recognitions received for research/innovations by the institution/teachers/research scholars/students during the last five years</b>					<b>10</b>
	3.3.3.1: Total number of awards / recognitions received for research/innovations won by institution/teachers/research scholars/students year wise during the last five years					
	<b>Year</b>	2016-17	2017-18	2018-19	2019-20	2020-21
	<b>Number</b>	Nil	Nil	01	Nil	3
Data Requirements for the last five years: (As per Data Template)						
<ul style="list-style-type: none"> <li>Name of the Awardee</li> <li>Name of the Awarding Agency with contact details</li> <li>Year of Award</li> </ul>						
<b>File Description (Upload)</b>						
<ul style="list-style-type: none"> <li>e- copies of award letters</li> <li>Any additional information</li> <li>List of innovation and award details (Data Template)</li> </ul>						

### Data Template

Year of Award	Title of the innovation	Name of the Awardee	Name of the Awarding Agency with contact details	Category- institution/ teacher /research scholar /student
2018-19	Initiatives on forest landscape restoration and studying the impacts of Nitrogen Pollution on Forest Ecosystems which addresses Sustainable Development Goal 15	TERI SAS	UN GCNI (Global Compact Network India) <a href="https://globalcompact.in/">https://globalcompact.in/</a> (link to <a href="#">award</a> )	Institution ( <a href="#">link</a> )
2020-21	'Solar Powered Hydroponic Fodder Unit'	Souryadeep Basak	Efficiency for Access with the support of <a href="#">Engineers Without Borders UK</a> ( <a href="#">link</a> to award)	Student of M.Tech. (Renewable Energy Engineering and Management - 2019-2021) ( <a href="#">link</a> on HEI website)
2020-21	'Solar Powered Hydroponic Fodder Unit'	Lavkesh Balchandani	( <a href="#">link</a> to award)	Student of REEM
2020-21	'Solar Powered Hydroponic Fodder Unit'	Souryadeep Basak, Lavkesh Balchandani, Team 2020-12	( <a href="#">link</a> to award)	Student of REEM

### DVV requirement

#### Documents Needed

- E-copies of award letters issued by the awarding agency. [Annexure 3.3.3.A](#).

#### Specific instruction to HEI

Awards for research/innovation received by the institution/students/research scholars/students to be considered here.

The claims without certificate or award letter will not be considered.

#### Avoid the following while uploading data

Participation/presentation certificates in workshops/conferences etc., are not to be included.

Awards claimed under 2.4.4 not to be claimed here. Patents not to be included here.



## TERI SCHOOL OF ADVANCED STUDIES

**Project Name: “Sustainable livelihood activities on reclaimed open cast mines: a technology enabled integrated approach in Indian coal sector”**

Threats and pressures of development often leads to degradation of land and in the recent past, restoring degraded ecosystems to restore the ecosystem services they provide has emerged a global priority. Mining is one such developmental activity and with the support from Ministry of Coal, Govt of India, in May 2015, TERI School of Advanced studies (TERI SAS) joined hands Central Mine Planning and Design Institute Limited (CMPDI, Ranchi) and Bharat Coking Coal Limited (BCCL), Dhanbad, Jharkhand in their ongoing efforts in restoring reclaimed opencast mines. A 15 acre land was chosen for restoration at Muraidih, Barora, BCCL. TERI SAS not only attempted restoration through a plantation drive through species native to the region but also explored linking restoration to livelihood security to local communities in vicinity. TERI SAS being an institution of higher scientific learning engaged itself in the science of restoration and regenerated a forest, a micro-watershed and an agroecosystem.

### Key objectives of the program were:

- To assess, through application of systematic multi criteria evaluation framework, the suitability potential of post mining land use for ecologically beneficial and socioeconomically productive outcome.
- To develop permanent green cover on over burden dumps/backfilled mined land area using mycorrhiza and various plant species of economic importance.
- To develop entrepreneurship and vocational skill among members of the local Self Help Groups (SHGs) for community

with a focus on women and other weaker sections of the society.

The project has been a learning opportunity for the students of TERI SAS. The scholars at the institute have initiated long term ecological research on return of the ecosystem services. Soil health in terms of macro and micro nutrients and the dynamics, the microbes and biological diversity, the carbon sequestration of a regenerated forest, plant productivity, the physiological responses of a plants in stressed environment are some of the research that have been initiated. Using GIS and Remote sensing techniques assessment is being made on the restoration efforts undertaken by BCCL in the entire Jharia Coal basin. TERI-SAS's endeavors to restore degraded landscapes and develop a deeper understanding of restoration and ecosystem health shall continue. The success story has the potential to be replicated and scaled up in other degraded landscapes at reclaimed Coal Mines.

### Stakeholders benefitted:

Rural women, Local community, Rural youth, Research scholars at TERI SAS, BCCLDhanbad & CMPDI Ranchi.

It's time we focus on return of ecosystem services by restoring our degraded landscapes

- Dr. EVR Raju, HoD (Environment), BCCL



# EFFICIENCY FOR ACCESS

3.3.3.A.



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**ENGINEERS**

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## Efficiency for Access

## Design Challenge 2020–2021

### Bronze Award


3.3.3.3

**Awarded to: Lavkesh Balchandani,**

**TERISAS**

Funded by :



 IKEA Foundation

Mike Thornton , Chief Executive, Energy Saving Trust

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## Efficiency for Access

## Design Challenge 2020–2021

## People's Award


3.3.3.4

**Souryadeep Basak, Lavkesh Balchandani ,Team 2020-12,  
TERI School of Advance Studies**

Mike Thornton , Chief Executive, Energy Saving Trust

Funded by :



 IKEA Foundation

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## Efficiency for Access

## Design Challenge 2020–2021

### Bronze Award


3.3.3.5

**Awarded to: Souryadeep Basak,**

**TERISAS**

Funded by :



 IKEA Foundation

Mike Thornton , Chief Executive, Energy Saving Trust

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trust**