



**INSTALLATION OF SOLAR STREET LIGHTS IN POZHIKKARAI VILLAGE OF  
KANYAKUMARI DISTRICT, TAMIL NADU**

March, 2021

**Submitted By:**



**Holy Cross College (Autonomous)**  
**(AISHE Code: C – 41177)**  
**Nagercoil – 629 004, Tamil Nadu**

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# Final Project Report of Unnat Bharat Abhiyan

<b>1</b>	<b>Name of the Institute (in Block letters)</b>	HOLY CROSS COLLEGE (AUTONOMOUS), NAGERCOIL
<b>2</b>	<b>AISHE Code</b>	C- 41177
<b>3</b>	<b>Title of the Project</b>	Installation of Solar Street Lights in Pozhikkarai village of Kanyakumari District, Tamil Nadu
<b>4</b>	<b>Name of Subject Expert Group (SEG)</b>	Rural Energy Systems
<b>5</b>	<b>Name of the Regional Coordinating Institute (RCI)</b>	Gandhigram Rural Institute, Gandhigram, Dindigul, Tamil Nadu
<b>6</b>	<b>Name of village(s) where project development activities were carried out</b>	Pozhikkarai
<b>7</b>	<b>Project Duration</b>	Three months
<b>8</b>	<b>Project Budget</b>	Rs.50000/-
<b>9</b>	<b>Brief Introduction of the Project (Minimum 100 words)</b>	Pozhikkarai is a coastal village adopted by our institute. Being coastal village, this village has a lot of solar energy resource. People in the village depend on fishing for their livelihood. The fishing activities are carried out in the midnight or early morning. Therefore the necessity aroused to have regular functioning of street lights. This issue was identified by our students during their village visit and household survey. Therefore, it was discussed in the Grama Sabha meeting held at Pozhikkarai on 26 <sup>th</sup> January, 2020. The students and the public suggested that solar street lights will be an alternate source for the regular functioning of street light. Moreover, solar lighting systems are controlled by built-in intelligence which requires no

		manual operation, making them safe and economical. The whole construction process is simple and time-saving, while maintenance is infrequent and easy.
<b>10</b>	<b>Project Objective(s) / Need of the Project</b>	<p>The objectives of the project are,</p> <ul style="list-style-type: none"> <li>• To help the villagers in their livelihood by providing lighting, as the major fishing activities are carried out in the night</li> <li>• To conserve energy resources and maximum utilisation of available natural resources by shifting to solar energy</li> <li>• To have cost efficiency as solar street light requires very less amount of maintenance cost.</li> <li>• To create awareness among the villagers on eco – friendly and non-polluting source of energy</li> </ul>
<b>11</b>	<b>(a) Current status</b>	<b>Project completed/</b> Ongoing (Date: 1 <sup>st</sup> February, 2021 to 31 <sup>st</sup> March, 2021)
	<b>(b) Achievement of the project (Minimum 150 words)</b>	<ul style="list-style-type: none"> <li>• Most of the cities around the world have installed Solar Street lights as part of the Govt. initiative for preserving the environment. Now, the villagers of Pozhikkarai village are benefiting immensely from these Solar street lights to ensure electricity during night time.</li> <li>• During the day, the attached solar panel collects the energy from the Sun and uses it to charge the solar batteries. At night, the solar battery supplies power to the LED lights that brighten the streets in the rural localities.</li> <li>• The villagers got awareness on the eco – friendly and non-polluting source of energy</li> </ul>

		<ul style="list-style-type: none"> <li>• The brighten streets during night due to the installation of solar street lights help the villagers to go for fishing activities without trouble</li> <li>• The street lights help people to walk in the street without fear</li> </ul>
12	<b>Project Outcomes</b>	<ul style="list-style-type: none"> <li>• The village is illuminated by renewable energy</li> <li>• The villagers are having the use of renewable energy due to the installation of solar street lights</li> </ul>
13	<b>Description of Project (Minimum 150 words)</b> <b>(Technology, Methodology, etc.)</b>	<p><b><u>Technology</u></b></p> <ul style="list-style-type: none"> <li>• The photovoltaic technology is used to convert the sunlight into DC electricity through solar cells.</li> <li>• Solar cells convert sunlight into electricity</li> <li>• The initial step to convert solar energy to electricity is to install Photovoltaic (PV) cells or solar cells these cells arrest the sun’s energy and convert it into electricity.</li> <li>• Photons in sunlight hit the solar panel and are absorbed by semiconducting materials, such as silicon.</li> <li>• Electrons are excited from their molecular/atomic orbital. Once excited, an electron can either dissipate the energy as heat and return to its orbital or travel through the cell until it reaches an electrode.</li> </ul> <p><b><u>Methodology</u></b></p> <ul style="list-style-type: none"> <li>• By having involvement of staff, students and the villagers, the installation process took place.</li> <li>• The awareness programme on renewable energy resource was conducted to the villagers.</li> <li>• Solar Street lights were installed in three places</li> </ul>

		<p>where the people use more during night.</p> <ul style="list-style-type: none"> <li>• The lights were dedicated to the people</li> </ul>
14	<b>Photos with captions of the project activities (maximum of 6 photographs of high resolution)</b>	Annexure - I
15	<b>Description of each photo in maximum of 25 word</b>	Annexure - II
16	<b>Impact of this project in the adopted village(s) in 100 words</b>	<ul style="list-style-type: none"> <li>• The fishermen in the village, engaged in the activities of stitching, knitting and knotting fish nets during day time in addition to fishing. They also engaged in manufacturing fish nets by hand. They used to stop the work before 6.p.m as the place was dark during evening. Now they continue to work even in the night as there is light. In this way it helps in the livelihood of the villagers.</li> <li>• Now the villagers are going for fishing activities without any trouble as the streets are brighten due to the installation of solar street lights</li> </ul>
17	<b>Number of Families benefited</b>	650 (450 families from Pozhikkarai village and 200 families from neighboring village)
18	<b>Link of feedback videos of villagers (If any)</b>	<a href="https://drive.google.com/file/d/1PpTZ7WPuGiUKv4G8Q9EozPyHCSGMSUX6/view?usp=sharing">https://drive.google.com/file/d/1PpTZ7WPuGiUKv4G8Q9EozPyHCSGMSUX6/view?usp=sharing</a>
19	<b>Other relevant information (optional) (Minimum 100 words)</b>	-
20	<b>Comments from the SEG</b>	-
21	<b>Comments from National Coordinating Institute (NCI)</b>	-
22	<b>Clarification from Participating Institute (PI)</b>	-

## Annexure – I



**OPENING OF 2<sup>ND</sup> SOLAR STREET LIGHT**



**OPENING OF 8<sup>TH</sup> SOLAR STREET LIGHT**



### SOLAR STREET LIGHTS DURING NIGHT - FOLLOW UP



## சூரிய மின் விளக்குகள் திறப்பு விழா

நாகர்கோவில், பி.பி.27-  
நாகர்கோவில் திருச்சிலுவை கல்லூரி சார்பில் தேசிய ஒருங்கிணைப்பு நிறுவனத்தின் நிதி நலவழிகள் பொழிக்கரை மற்றும் காட்டுவிளையில் சூரிய மின் விளக்குகள் அமைக்கப்பட்டது இவற்றின் திறப்பு விழா நடந்தது.

பொழிக்கரையில் நடந்த திருச்சிலுவை கருதல் கலெக்டர் மெர்சி ரம்பா, கல்லூரி செயலாளர் ஜெரார்டின் ஜெயம், முதல்வர் ஆனி பெர்பெட் சோபி, துணை முதல்வர் லீமா ரோஸ், இண்டுக்கல் காந்திராம் கிராமிய பல்கலைக்கழகம் உன்னதபாரத அபியான் திட்டத்தின் மண்டல ஒருங்கிணைப்பாளர் ரவிச்சந்திரன் ஆலியோர் சூரிய விளக்குகளை அர்ப்ப.

ணித்து வைத்தனர். பொழிக்கரை பஞ்சாயத்தின் லூனசெகரன் வாழ்ந்து பேசினார். முன்னதாக கல்லூரியின் உன்னத அபியான் திட்ட ஒருங்கிணைப்பாளர் பனிமய மெர்சி வரவேற்று பேசினார். முடிவில், பொழிக்கரை பஞ்சாயத்து தலைவி வெயின்ஷா நன்றி கூறினார். இதுபோல், காட்டுவிளையிலும் சூரிய மின் விளக்கு திறந்து வைக்கப்பட்டு அர்ப்பணிக்கப்பட்டது. இந்த திருச்சிலுவை பேராசிரியர்கள் பிரபினா, பவானி, வினி மற்றும் மாணவிகள் உள்பட பலர் கலந்து கொண்டனர்.

News Appeared in Daily  
News Paper



## Annexure – II

Photo	Description
 <p style="text-align: center; font-size: small;">DEDICATION CEREMONY OF SOLAR STREET LIGHTS</p>	<p>The solar street lights were dedicated to the people on 25th February, 2021 by Mrs.I.S.Mercy Ramya I.A.S., Addl. Collector (Dev.) &amp; Project Director, District Rural Development Agency. Secretary, Principal and Vice Principal of our college, Panchayat President of the village were graced the occasion by their presence.</p>
 <p style="text-align: center; font-size: small;">OPENING OF 1<sup>st</sup> SOLAR STREET LIGHT</p>	<p>The opening of first solar street light by Mrs.I.S.Mercy Ramya I.A.S., Addl. Collector (Dev.) &amp; Project Director, District Rural Development Agency in the presence of Mr.K.Ravichandran, Regional Coordinator, Gandhigram Rural Institute, Dindigul</p>
 <p style="text-align: center; font-size: small;">OPENING OF 2<sup>nd</sup> SOLAR STREET LIGHT</p>	<p>The opening of 2<sup>nd</sup> solar street light by a villager in the presence of Mrs. Kebinsha, Panchayat President, UBA coordinator and the members of UBA Cell.</p>
 <p style="text-align: center; font-size: small;">OPENING OF 3<sup>rd</sup> SOLAR STREET LIGHT</p>	<p>The opening of 3<sup>rd</sup> solar street light by Mrs. Kebinsha, Panchayat President in the presence of UBA coordinator and the members of UBA Cell.</p>
 <p style="text-align: center; font-size: small;">SOLAR STREET LIGHTS DURING NIGHT – FOLLOW UP</p>	<p>The brighten streets during night after the installation of solar street lights. The picture is the follow – up of the street lights.</p>
 <p style="text-align: center; font-size: small;">தூய நிதி விசேஷக் திறப்பு விழா News Appeared in Daily News Paper</p>	<p>News about the installation of solar street lights, appeared in the daily newspaper, “Daily Thanthi” on 27<sup>th</sup> February, 2021</p>