



**TECNIA INSTITUTE OF ADVANCED STUDIES**  
**GRADE "A" INSTITUTE**

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उन्नत भारत अभियान  
 UNNAT BHARAT ABHIYAN



**UNNAT BHARAT ABHIYAN 2.0 (UBA Cell)**

शिक्षित भारत-स्वस्थ भारत- स्वच्छ भारत- स्वावलंबी भारत- संपन्न भारत

(A movement for progressive India)

A flagship programme of Ministry of Education, Government of India



**Report on Household Energy Consumption: Understanding Solar Cooking and Lighting Sources in Villages through Renewable energy**

<b>Title of Activity</b>	Household Energy Consumption: Understanding Solar Cooking and Lighting Sources in Villages through Renewable energy
<b>Activity Type</b>	Outreach Activity
<b>Values</b>	<ul style="list-style-type: none"> <li>• Sustainability</li> <li>• Efficiency</li> <li>• Affordability</li> <li>• Health</li> <li>• Empowerment</li> </ul>
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• To assess the current energy consumption patterns of households in rural areas.</li> <li>• To evaluate the feasibility and effectiveness of solar cooking technologies in village settings.</li> <li>• To promote awareness about renewable energy benefits for cooking and lighting among villagers.</li> <li>• To identify barriers to adopting solar energy solutions in rural households.</li> <li>• To develop recommendations for integrating solar technologies into everyday life for improved energy access.</li> </ul>
<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Assess the impact of solar energy on reducing household energy costs and consumption.</li> <li>• Identify effective solar cooking techniques and their benefits for rural households.</li> <li>• Analyze the health advantages of using solar energy over traditional cooking methods.</li> </ul>

	<ul style="list-style-type: none"> <li>• Understand the challenges and solutions related to the adoption of solar technologies in villages.</li> <li>• Promote awareness of renewable energy benefits among rural communities for sustainable living.</li> </ul>
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<b>Organized by</b>	Unnat Bharat Abhiyan Cell
<b>Program Theme*:</b>	"Renewable Solutions for Rural Energy"
<b>Date*</b>	14-11-2022
<b>Time*</b>	11:00 am onwards
<b>Venue</b>	Fateh Pur Jat
<b>External Expert / Internal Expert</b>	Dr. Rajnesh Kumar Pandey
<b>No. of Students*</b> (only no. to be written, list in excel or word should be maintain at department level as proof for any further requirement)	10
<b>No. of Faculty*</b> (only no. to be written, list in excel or word should be maintain at department level as proof for any further requirement)	1
<b>No. of External Participants (students + faculty)</b> [write NA if not applicable]	NA

Poster/Flyer/Notice*	<p>The poster is for an outreach activity organized by the Unnat Bharat Abhiyan Cell. It is titled "OUTREACH ACTIVITY on Household Energy Consumption: Understanding Solar Cooking and Lighting Sources in Villages through Renewable". The event is scheduled for 14 November, 2022, at Fateh Pur Jat, starting at 11:00 AM onwards. The incharge is Dr. Rajnesh Kumar Pandey. The poster also features logos for Unnat Bharat Abhiyan and TECNIA (Institute of Advanced Studies).</p>
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**Photograph**



"Empowering Rural Women through Solar Energy: A Step Towards Sustainable Living."

**Report:**

On 14th November 2022, students from TIAS (Tecnia Institute of Advanced Studies) conducted a study under the Unnat Bharat Abhiyan focusing on household energy consumption in Fateh Pur Jat village. The objective was to understand the current energy sources used for cooking and lighting and to explore the potential of solar energy as a sustainable alternative. Given the rising concerns about traditional energy sources and their impact on health and the environment, this study aimed to promote the adoption of renewable energy solutions, particularly solar cooking and lighting, in rural households. The outreach involved engaging with local families, assessing their energy usage patterns, and discussing the benefits of transitioning to solar energy. Through surveys and interactive sessions, the students aimed to gather data on energy consumption practices and the villagers' awareness of solar technologies.

The outreach program in Fateh Pur Jat underscored the critical need for sustainable energy solutions in rural areas. The findings revealed that while traditional energy sources, such as firewood and kerosene, are widely used, they pose significant health risks and environmental challenges. The villagers expressed interest in solar energy solutions but highlighted barriers such as initial costs and lack of information. Promoting solar cooking and lighting not only offers a cleaner alternative but also enhances

	energy security and reduces dependence on non-renewable resources. The insights gained from this study will contribute to future initiatives aimed at facilitating the adoption of renewable energy technologies in rural communities, ultimately leading to improved living standards and environmental sustainability. The commitment to educating and empowering villagers about the benefits of solar energy is essential for fostering a greener and more sustainable future in Fateh Pur Jat and beyond.
Resource Person Profile	NA
Report Submitted by	Dr. Rajnesh Kumar Pandey
Attendance Sheet	<i>Attached at the end of Report</i>
Feedback	<i>Sample feedback Attached at the end of Report</i>
Signature of Event Coordinator	
For Office Use	

#### List of Students

Serial No.	Enrollment No.	Name of the student	Department
1	04121302422	Sarthak A.	BAJMC
2	04221302422	Kamar Alam	BAJMC
3	04321302422	Jayesh	BAJMC
4	04421302422	Sahil	BAJMC
5	04521302422	Gagan B.	BAJMC
6	36217001722	Aysuh R.	BBA
7	36317001722	Vipul	BBA
8	36417001722	R. Kartikeyan	BBA
9	36517001722	Muskan	BBA
10	36617001722	Paesha	BBA

