



**उन्नत भारत अभियान**  
**ग्रामीण विकास एवं प्रौद्योगिकी केंद्र**  
**भारतीय प्रौद्योगिकी संस्थान, दिल्ली**  
हौजखास, नयी दिल्ली- 110016



**UNNAT BHARAT ABHIYAN**  
**INDIAN INSTITUTE OF TECHNOLOGY, DELHI**  
**National Coordinating Institution**

Address: V-405, IIT Delhi Main Rd, Block 5, Hauz Khas, New Delhi, 110016

Tel: +91-11-2659 1121/1157, Fax: +91-11-2659 1121

Email: [unnatbharatabhiyaniitd@gmail.com](mailto:unnatbharatabhiyaniitd@gmail.com)

Date: January 30, 2023

To

**Dr. S.N. Topannavar**

**Hirasugar Institute of Technology, Belagavi, Karnataka**

**Subject:** Financial Sanction of Technical Intervention project (No. RP-03525G) under UBA 2.0

Dear Sir

1. This is to intimate you that Technology Intervention proposals under the category of “**Technology Development**”: Project-No: **RP-03525G** entitled, “**Advanced Community Solar Dryer for Agro Products**” submitted by you under the *Unnat Bharat Abhiyan 2.0 Program*, has been approved by **Sustainable Agriculture System SEG** and funded by the **National Coordinating Institute UBA 2.0 (IIT Delhi)** against UTR No. – **269545171** vide dated **30-12-2022**.
2. You can use the grant for fulfilling the project objectives under the approved heads as per the proposal, using the established procedure of your institute and as per the UBA guidelines, within 6 months from the date of receiving of funds. Kindly note that the utilization of funds allowed under the head “General Contingency” should not be more than 10% of the total sanctioned fund.

***Note:** TA/ Honorarium is strictly not permitted in this project.*

3. Any product/service developed under the sanctioned project must have UBA logo on it.
4. Detailed information of faculty in-charge and students/volunteers, who will be coordinating/ working under the sanctioned project, shall be shared in the project report submitted by your institution.
5. The project implementation location/site shall be selected in consideration with gram panchayat officials/ members.

6. Please take care that the position holders/Panchayat officials shall not be benefitted in person. Also, ensure that the project shall not be controversial in terms of beneficiaries. Selection of beneficiaries shall include the Marginalized communities or EWS Category as well.
7. Few videos and images shall be shared to the SEG Coordinator (for updating the status of the project), also the report shall contain good quality pictures of the project site/product/service and feedback from the villagers/beneficiaries.
8. For the projects related to training camps, awareness, rally etc., the in-charge shall share the material/posters/modules to be used in the villages, for the knowledge of SEG Coordinator and further comments, if any.

You are required to submit the completion report/5-6 photographs/3 min videos of the project within two months after the completion of the project to the competent authority of NCI-IIT Delhi, UBA2.0 cell. Without the submission of the completion report, the opportunity for funding of a new project will not be facilitated.



**Prof. Vivek Kumar**

National SEG Coordinator

Unnat Bharat Abhiyan (UBA 2.0)

National Coordinating Institute

Indian Institute of Technology, Delhi

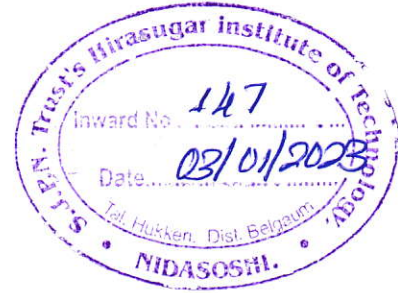
IRD IIT Delhi  
IIT CAMPUS HAUZ KHAS

PAYMENT ADVICE

To  
THE PRINCIPAL AND CHAIRMAN HIRASUGAR INSTITUTE OF TECHNOLOGY

Dear Sir/Madam,

Details of the transactions initiated through SBI CMP in favour of you are



| PAYMENT_INVOICE_FIELDS | VALUES  |
|------------------------|---|
| JOURNAL_NUMBER         | 269545171   |
| AMOUNT                 | 1,00,000.00   |
| DATE                   | 30-12-2022  |
| LINKAGE_FIELD          |   |
| AMOUNT                 | 100000  |
| TAX DEDUCTED           |   |
| PROJECT NO             |   |
| OUT REF NO             |   |
| DATE                   |   |
| GROSS AMOUNT           | 100000  |
| TOWARDS                | PAYMENT TO PARTICIPATING INSTITUTE<br>WORKING UNDER UBA VIDE GEN28593 |
| BANK NAME              | SBI   |
| ACCOUNT NO             | 31868488488   |
| IFSC CODE              | SBIN0040302   |

Your Bank Account No: 31868488488

Your Bank IFSC Code: SBIN0040302

Please acknowledge receipt of the payment  
For IRD IIT Delhi

Authorised Signatory

This is Computer generated advice and does not require any Signature



Rg SN Toppram  
31/12/22



S.N Topannavar &lt;sntopannavar.mech@hsit.ac.in&gt;

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**PROJECT PRESENTATION SEG-UBA**

1 message

**Sustainable Agriculture System SEG UBA** <segubaiari@gmail.com>

Thu, Sep 8, 2022 at 2:23 PM

To: ramar@tnfu.ac.in, jbrandhawa2@gmail.com, noor.stphilos@gmail.com, matilda <matildags@yahoo.com>, rrmssosirasa@gmail.com, nss@kce.ac.in, chemphilip27@gmail.com, drbadhunano@gmail.com, snakhtar@iul.ac.in, mathsvcew@gmail.com, srinivasan\_r@sastra.edu, hodcse@dsatm.edu.in, thakarear@rkneec.edu, jenitha@drtit.edu.in, director@glbitm.org, sangheethaa@gmail.com, principalbfcet@babafaridgroup.com, jesnaanver@tistcocin.edu.in, uba@aec.org.in, senthilar@srmsit.edu.in, uba@selvamtech.edu.in, HoD IT <hod-it@srec.ac.in>, rohit.shinde@dypiemr.ac.in, Registrar Brainware University <registrar@brainwareuniversity.ac.in>, sntopannavar.mech@hsit.ac.in, bmansj@gmail.com, rmsasiraja@gmail.com, julie.ajai@gmail.com, rbchoudhary@sasi.ac.in

Dear all,

Greetings!

We take this opportunity to express our heartfelt gratitude for your time and contribution towards SEG-UBA project proposal presentations.

Now, we are organizing presentations under SEG-UBA in next week.

There is an attached file with the final list of total proposals recommended under UBA SEG. Please prepare a presentation and share it with us within 2 days.

We will send you the link of the session soon till then please prepare your presentation and share that with us.

Thanks and Regards  
Aanchal Solanki  
Young Professional  
UBA, IARI, New Delhi.

on Behalf of  
**Dr. B.S.Tomar**  
**JDE & Head (Vegetable science)**  
Project Incharge, UBA  
IARI, New Delhi - 110012



**berief of segubaaug2022.xlsx**  
30K



S.N Topannavar &lt;sntopannavar.mech@hsit.ac.in&gt;

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**Fwd: SBI CMP ePayment Advice - THE PRINCIPAL AND CHAIRMAN HIRASUGAR INSTITUTE OF TECHNOLOGY**

1 message

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**Dr.S.C.Kamate Principal,HIT, Nidasoshi(Belagavi)** <principal@hsit.ac.in>  
To: "S.N Topannavar" <sntopannavar.mech@hsit.ac.in>

Sat, Dec 31, 2022 at 1:32 PM

**With Regards****Dr. S. C. Kamate****Professor & Principal****Hirasugar Institute of Technology****NIDASOSHI - 591236****Belgaum Dist, Karnataka, INDIA**

Cell: 9480849331; Phone: 08333-278887; Fax: 08333-278886

----- Forwarded message -----

From: &lt;support.cmpcorp@alerts.sbi.co.in&gt;

Date: Fri, Dec 30, 2022 at 5:24 PM

Subject: SBI CMP ePayment Advice - THE PRINCIPAL AND CHAIRMAN HIRASUGAR INSTITUTE OF TECHNOLOGY

To: &lt;principal@hsit.ac.in&gt;

Cc: &lt;cmpird@iitd.ac.in&gt;

Dear Sir/Madam,

The attached beneficiary payment advice is for the credit to your account . This is issued at the request of our customer. The advice is for your reference only.

Yours faithfully,

SBI CMP Services

(Please do not respond to this email)

**GEN28593 SBI 281222\_CMP00000000582908233.pdf**

2K



## The final list of selected Project Proposals under SEG of Unnat Bharat Abhiyan

| Sl No. | PI name and Institute name  | AISHE Code | Email                 | Phone      | Title of proposal   | Overview of the proposal (please cover key points in 5-6 lines)   | Funds requested |
|--------|---|------------|-----------------------|------------|---|---|-----------------|
| 1      | DR. M. RAMAR, COLLEGE OF FISHERIES ENGINEERING, NAGAPATTINAM        | C-56483    | ramar@tnfu.ac.in      | 9894919932 | DEVELOPMENT OF EDIBLE PACKAGE TECHNOLOGY FOR FISH SOUP FOR ECONOMIC EMPOWERMENT OF VADAGUDI AND MANJAKOLLAI VILLAGERS | <ul style="list-style-type: none"> <li>Based on the technology already developed by the PI, edible, economical and eco-friendly package will be prepared for packing and selling fish soup powder</li> <li>The developed edible package will serve the need of the villagers for marketing their fish soup powder.</li> <li>This technology is not available in the market. Hence the fish soup with edible package sold by the villagers will attract more customers.</li> <li>To prepare business plan and give wide publicity</li> </ul> <p>Project Justification:<br/>Conventionally, soup powders are directly mixed with hot water and boiled for some time to cook the soup. There is no commercial technology available as soup packs similar to tea bags/packs. The PI has already developed edible packaging technology for fish soup powder. By developing this technology and transferring it to the villagers it can empower the village people economically</p> | 1,00,000/-      |
| 2      | DR JASMIRKAUR B RANDHAWA, GOVERNMENT COLLEGE OF ENGINEERING, NAGPUR | C-56586    | jbrandhawa2@gmail.com | 9403588460 | BOILING OF TURMERIC USING HIGH PARABOLIC TROUGH SOLAR COLLECTOR.  | <ol style="list-style-type: none"> <li>To boil turmeric using solar energy without the use of traditional wood-fired boilers.</li> <li>To avoid environmental pollution.</li> <li>To eliminate the use of wood.</li> <li>To make the turmeric boiling process pollution-free.</li> <li>To reduce the time required for drying the cured turmeric</li> </ol>   | 1,00,000/-      |
| 3      | DR. M. RAMAR, COLLEGE OF FISHERIES ENGINEERING, NAGAPATTINAM        | C-56483    | ramar@tnfu.ac.in      | 9894919932 | SOLAR INFRARED HYBRID DRYER FOR HYGIENIC PRODUCTION OF DRY FISH   | The overall objective of this proposal is to promote the hybrid solar drier for the fishers for hygienic dry fish production and entrepreneurship development of Nagapattinam fisherwomen's/entrepreneurs/SHG's. Fishing is one of the major occupations in the Nagapattinam district. Fishes are dried when the  | 1,00,000/-      |

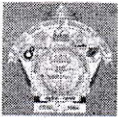


|    |  |        |  |            |  |  |            |
|----|--|--------|--|------------|--|--|------------|
|    |  |        |  |            |  | <p>propose an alternative approach to stubble management in a sustainable manner through in-situ as well as ex-situ composting using bio-decomposers. This would help in reducing environmental burden as well as improving soil health through carbon sequestration.</p> <p>Objectives</p> <ul style="list-style-type: none"> <li>v To prepare the organic fertilizer in-situ and ex-situ by using paddy straw stubble waste and bio-decomposer</li> <li>v To maintain the nutrient quality of the vermicompost as well as soil quality</li> <li>v To conduct hands-on training programme on preparation of vermicompost</li> <li>v Technological development and awareness programme to reduce environmental pollution.</li> <li>v To enhance carbon sequestration by in situ residue management.</li> </ul> |            |
| 30 | DR.S.N.TOPANNAVAR, HIRASUGAR INSTITUTE OF TECHNOLOGY | C-1409 | <a href="mailto:sntopannavar.mech@hsit.ac.in">sntopannavar.mech@hsit.ac.in</a> | 9482440235 | ADVANCED COMMUNITY SOLAR DRYER FOR AGRO PRODUCTS | <p>Ø To eliminate the unwanted and unpredictable food spoilage of the agro products. Ø To study the characteristics and performance of the solar dryer system with continuous feeding &amp; outlet mechanism. Ø To develop a solar dryer system for quality ensured products. Ø To Design &amp; Develop low cost &amp; Product based Automated (Ardunio Controlled) Solar Cabinet Dryer for the welfare of Farmers &amp; Food Processing Industries. Ø To achieve favorable temperature for various agri-products with different wetness with the help of effective Solar Tracking system.</p>   | 1,00,000/- |



30/12





S.N Topannavar &lt;sntopannavar.mech@hsit.ac.in&gt;

**Fwd: SBI CMP ePayment Advice - THE PRINCIPAL AND CHAIRMAN HIRASUGAR INSTITUTE OF TECHNOLOGY**

1 message

Dr.S.C.Kamate Principal,HIT, Nidasoshi(Belagavi) <principal@hsit.ac.in>  
To: "S.N Topannavar" <sntopannavar.mech@hsit.ac.in>

Sat, Dec 31, 2022 at 1:32 PM

**With Regards****Dr. S. C. Kamate****Professor & Principal****Hirasugar Institute of Technology****NIDASOSHI - 591236****Belgaum Dist, Karnataka, INDIA**

Cell: 9480849331; Phone: 08333-278887; Fax: 08333-278886

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To: &lt;principal@hsit.ac.in&gt;

Cc: &lt;cmpird@iitd.ac.in&gt;


Dear Sir/Madam,

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Yours faithfully,

SBI CMP Services

(Please do not respond to this email)

 GEN28593 SBI 281222\_CMP00000000582908233.pdf  
2K







S.N Topannavar &lt;sntopannavar.mech@hsit.ac.in&gt;

**Submission of Presentation PPT of AISHE Code:C-1409- Dr.S.N.Topannavar, PI & Program Coordinator-UBA, Hirasugar Institute of Technology**

1 message

**Dr.S.N.Topannavar** <sntopannavar.mech@hsit.ac.in>  
To: segubaiari@gmail.com

Sat, Sep 10, 2022 at 12:01 PM

Respected sir,  
Ref: Your E-mail dated: 8th September 2022

With reference to the above cited subject and your e-mail, I am herewith submitting the presentation PPT of my proposal in PPT and pdf forms.

I kindly request you to accept and acknowledge the same and do the needful.

Thanking you,

Yours faithfully

-Dr.S.N.Topannavar  
PI & Program Coordinator-UBA  
Dean (R&D) and Professor & Head, Mech. Engg. Dept.  
Hirasugar Institute of Technology  
At/Post:Nidasoshi-591236  
Tal:Hukkeri, Dist Belagavi  
Mobile No.:9482440235

With warm regards

**Dr.S.N.Topannavar**

Dean (Research & Development)  
Professor & Head, Mech. Engg. Dept.  
Hirasugar Institute of Technology  
At/Post:NIDASOSHI,PIN:591 236  
Tal:Hukkeri, Dist:Belagavi, State:Karnataka, INDIA  
Mobile: 9482440235

**2 attachments**

**UBA-Advanced Community Solar Dryer.pptx**  
663K

**UBA-Advanced Community Solar Dryer.pdf**  
892K



Our Project enlisted in page No. 19 of 23  
(enclosed-final selected list)  
Chop.  
10/9/22.

|                                    |   |
|------------------------------------|---|
| Applied for :                      | Technology Development                              |
| Name of the College/ Institution : | Hirasugar Institute of Technology, Nidasohsi        |
| UBA Coordinator Name :             | Dr.S.N.Topannavar                                   |
| UBA Coordinator mail id :          | sntopannavar.mech@hsit.ac.in                        |
| UBA Coordinator Contact No :       | 9482440235  |
| State :                            | Taluka: Hukkeri Dist: Belagavi Karnataka PIN:591236 |

## **PROJECT TITLE:ADVANCED COMMUNITY SOLAR DRYER FOR AGRO PRODUCTS**

### **Objectives:**

- To produce spoilage free agro-products for long term storage and export quality.
- To study the characteristics performance of the solar dryer system with continuous and flexible feeding & outlet mechanism.
- To achieve agro-product based optimum dryness and health conscious ingredients.
- To Design & Develop affordable & Product based Automated (Ardunio Controlled) Solar Cabinet Dryer for the welfare of Farmers & Food Processing Industries.
- To achieve favorable temperature for various agro-products with the help of effective Solar Tracking system.

### **Justification for the project:**

#### **i) Problem Statement:**

To study and develop a solar dryer in which the grains are dried continuously by circulating heated air from the solar air heater with the help of manual solar tracking system. The problem of low, medium & large scale processor could be alleviated, if the solar dryer is designed and constructed with the consideration of overcoming the limitation of direct & indirect type of solar dryer. So therefore, this work will be based on importance of a solar dryer which is reliable and economically viable, adoptive design. The controlled drying of the various agro products with the help of the Ardunio controlled parameters. The project will help the farmers to enhance their economy and drying problems of various agro products.

#### **ii) Priority Needs:**

1. The prime priority to the farmer for drying of grains, as they will receive benefit of this.
2. The Second Priority To Food Processing Industries To Increases The Food Quality.
3. Community and APMC level
4. Scaled-up model at Taluka and Zilla Panchayath level

#### **iii) Proposed approach/Technical Intervention/customization:**

- Conducting field surveys to study the technical, commercial and societal parameters.
- Consolidation of recommendations from survey analysis.
- Visited to farm and had conversation with farmers about what problems they are facing.
- And we pointed to main problem which they were facing that was drying of grains.
- We can to know about how farmers dry they grains. They use to dry the grains on road side.
- And then we listed the problems which they were facing Problems like: unpredictable food spoilage, more time consumption & unwanted thing mixing with grains.
- Scale-up of pilot model to the community level

#### **iv) Brief plan of activities and implementation timeline:**

Project starts from March, 2022 :

| Month | Weeks   | Tasks Completed   |
|-------|---------|---|
| March | 2 weeks | Conducting field surveys to study the technical, commercial and |

|           |         |  |
|-----------|---------|--|
|           |         | societal parameters. Consolidation of recommendations from survey analysis.<br>To figure out the problem of drying of grains |
| March     | 2 weeks | Materials Selection & modelling  |
| April     | 3weeks  | Design Thinking  |
| April-May | 4 weeks | Fabrication Work   |
| May-June  | 5 weeks | Experimentation with Raw materials &Agro-Products  |
| June-July | 4 weeks | Analysis, Results & Discussion   |
| August    | 2 weeks | Conclusion   |

## Methodology, Materials and Financial Resources:

### Methodology:

The stepwise methodology to complete our Project is as below.

Step 01: Literature and field Surveys to study the technical, commercial and societal parameters, Analysis and Recommendations

Step 02: Defining problem statement of the Project (Title)

Step 03: With the help scope defining objectives

Step 04: Material/Component selection and modelling & design of parts

Step 05: Design thinking process to achieve objectives

Step 06: Assembling and Fabrication

Step 07: Lab and field experiments of pilot model. Experimentation with raw material &Agro-Products

Step 08: Analysis, Results & Discussions and recommendations

Step 09: Feedback from the farmer and market/industry and incorporation

Step 10: Based on the resources Scaling-up/prototyping of the device to the community level and Conclusion/s

### Materials:

Fiber Glass Body, Solar Panel, Blower, Absorber Plate, Orifice meter, Glass Cover, Arduino UNO, Temperature Sensor(DHT11),Trays, Metal Beams For Body Fabrication&Fibre glass For Solar Air Heater.

### Financial Resources:

| Budget  | Amount in Rs. |
|---|---------------|
| a) Materials, Design and Development of Fiber glass body, Solar Panel, Blower, Absorber Plate, Orifice meter, Glass cover, Arduino UNO, Temperature Sensor(DHT11), Trays, Metal Beams For Body Fabrication, Fiber glass For Solar Air Heater. | 70000.00      |
| b) FabricationLabor Charge  | 8000.00       |
| c) Travelling Expenses& Running cost  | 20000.00      |
| d) Site preparation cost  | 10000.00      |
| e) Miscellaneous  | 10000.00      |
| Total cost of the Technology in Rs.   | 118000.00     |

### Outcome of the Project:

The expected outcomes of our project are as below:

- Arduinio Controlled agro-product based drying.
- Affordable Cost agro-product Solar based Dryer.
- Increased farmer income by quality product.
- Automated & Product based controlled Drying.
- Quality ensured Products Portable & Movable Farmer Friendly Dryer.

### Proposal in Online Format


|  |  |           |  |
|--|--|-----------|--|
| Applied for :  | Technology Development   |           |  |
| Name of the College/ Institution :   | Hirasugar Institute of Technology, Nidasohsi   |           |  |
| UBA Coordinator Name :   | Dr.S.N.Topannavar  |           |  |
| UBA Coordinator mail id :  | sntopannavar.mech@hsit.ac.in   |           |  |
| UBA Coordinator Contact No :   | 9482440235   |           |  |
| State :  | Taluka: HukkeriDist: BelagaviKarnataka PIN:591236  |           |  |
| SEG Name:  | Expert Group (SEG) of IIT Delhi, Rural Energy Systems  |           |  |
| RCI:   | IIT Bombay   |           |  |
| AISHE Code of the College:   | C-1409   |           |  |
| Adopted Villages are:  | Nidasoshi, Ammanagi, Kesti, Borgal&Hattarwat   |           |  |
| Title:   | ADVANCED COMMUNITY SOLAR DRYER FOR AGRO PRODUCTS   |           |  |
| Village where it is to be implemented:                                       | Nidasoshi  |           |  |
| Why this technology is required (Objective of the project maximum 200 word): | <ul style="list-style-type: none"> <li>➤ To produce spoilage free agro-products for long term storage and export quality.</li> <li>➤ To study the characteristics performance of the solar dryer system with continuous and flexible feeding &amp; outlet mechanism.</li> <li>➤ To achieve agro-product based optimum dryness and health conscious ingredients.</li> <li>➤ To Design &amp; Develop affordable &amp; Product based Automated (Ardunio Controlled) Solar Cabinet Dryer for the welfare of Farmers &amp; Food Processing Industries.</li> <li>➤ To achieve favorable temperature for various agro-products with the help of effective Solar Tracking system.</li> </ul> |           |  |
| Total Cost of the Product/Technology:  | Budget   | Amount    |  |
|  | a) Materials, Design and Development of Fiber glass body, Solar Panel, Blower, Absorber Plate, Orifice meter, Glass cover, Arduino UNO, Temperature Sensor(DHT11), Trays, Metal Beams For Body Fabrication, Fibre glass For Solar Air Heater.  | 70000.00  |  |
|  | b) Fabrication Labor Charge  | 8000.00   |  |
|  | c) Travelling Expenses & Running cost  | 20000.00  |  |
|  | d) Site preparation cost   | 10000.00  |  |
|  | e) Miscellaneous   | 10000.00  |  |
|  | Total Cost of the Technology   | 118000.00 |  |
| Fund raised from:  | NA   |           |  |
| Describe your role as PI at various stage of the project (max 500 words):    | The role of PI is to identify the needs of the village people by carrying out the survey in adopted villages. Based on the need analysis of village people, technically feasible and economically  |           |  |




|   |   |
|---|---|
|   | <p>viable system design is proposed for technological development and implementation through procurement of materials and accessories. After designing, testing of the proposed system is done.</p> <p>For smooth and safe operation of the system, necessary awareness with all information related to the project is provided to the beneficiary.</p> <ol style="list-style-type: none"> <li>1. Design and Development Stage: Suitable Human resource mobilization and laboratory supports</li> <li>2. Implementation Stage: Coordination between Gram Panchayat &amp; SEG Members</li> <li>3. Outcome Analysis Stage: Suitable human resource mobilization</li> </ol>  |
| Process of execution of the project:  | <p>The stepwise methodology to complete our Project is as below.</p> <p>Step 01: Literature and field Surveys to study the technical, commercial and societal parameters, Analysis and Recommendations</p> <p>Step 02: Defining problem statement of the Project (Title)</p> <p>Step 03: With the help scope defining objectives</p> <p>Step 04: Material/Component selection and modelling &amp; design of parts</p> <p>Step 05: Design thinking process to achieve objectives</p> <p>Step 06: Assembling and Fabrication</p> <p>Step 07: Lab and field experiments of pilot model. Experimentation with raw material &amp; Agro-Products</p> <p>Step 08: Analysis, Results &amp; Discussions and recommendations</p> <p>Step 09: Feedback from the farmer and market/industry and incorporation</p> <p>Step 10: Based on the resources Scaling-up/prototyping of the device to the community level and Conclusion/s</p> |
| Who are the beneficiaries (ST, SC, OBC, Tribal etc.) and potential impact of technology on the beneficiary and village :                        | Farmers having less farming land. The socio economic development of village farmers and Gram Panchayat level/Community level and APMC level.  |
| Duration of Project:  | 12 Months   |
| Role of stake holders in maintaining sustainability after the project duration (please mention point wise role of participating stake holders): | <ol style="list-style-type: none"> <li>1) Solar system related maintenance work</li> <li>2) Acquiring skills to operate automated system</li> <li>3) Suggesting to institute level SEGs for further improvement in design and development</li> <li>4) Addressing the grievances of the farmers and resolving</li> <li>5) Scaling of the project</li> </ol>  |
| Execution of the project along with role of all participating stakeholders (write point wise max 500 words) :                                   | <p>i) Problem Statement:</p> <p>To study and develop a solar dryer in which the grains are dried continuously by circulating heated air from the solar air heater with the help of manual solar tracking system. The problem of low, medium &amp; large scale processor could be alleviated, if the</p>   |

|  |   |
|--|---|
|  | <p>solar dryer is designed and constructed with the consideration of overcoming the limitation of direct &amp; indirect type of solar dryer. So therefore, this work will be based on importance of a solar dryer which is reliable and economically viable, adoptive design. The controlled drying of the various agro products with the help of the Arduinio controlled parameters. The project will help the farmers to enhance their economy and drying problems of various agro products.</p> <p>ii) Priority Needs:</p> <ol style="list-style-type: none"> <li>1. The prime priority to the farmer for drying of grains, as they will receive benefit of this.</li> <li>2. The Second Priority To Food Processing Industries To Increases The Food Quality.</li> </ol> <p>ii) Proposed approach/Technical Intervention/customization:</p> <ul style="list-style-type: none"> <li>➤ Conducting field surveys to study the technical, commercial and societal parameters.</li> <li>➤ Consolidation of recommendations from survey analysis.</li> <li>➤ Visited to farm and had conversation with farmers about what problems they are facing.</li> <li>➤ And we pointed to main problem which they were facing that was drying of grains.</li> <li>➤ We can to know about how farmers dry they grains. They use to dry the grains on road side.</li> <li>➤ And then we listed the problems which they were facing Problems like: unpredictable food spoilage, more time consumption&amp;unwanted thing mixing with grains.</li> <li>➤ Scale-up of pilot model to the community level</li> </ul> |
| Impact of this work on learning of students/ teachers:               | Resolving the farmers' problems related to their agro products. Using of advanced technology to enhance the value of the agro products. Technology intervention in the agriculture.   |
| Role of PI after completion of the project duration.                 | <ol style="list-style-type: none"> <li>1) Scaling of the project to reach all need people of the adopted villages</li> <li>2) Preparing DPR to the district level</li> <li>3) Automation for feeding and outlet mechanism to increase productivity</li> <li>4) Steps to increase the performance and efficiency of the project</li> <li>5) Design and development towards increasing the quality of the agro products for exporting.</li> <li>6) Steps towards to add relevant values to the agro products.</li> </ol>  |
| Enter Name and Contact details of students involved in this project: | <p>1. AMIT.P.THORAT<br/>E-mail: amitandthorat19@gmail.com<br/>Mobile No.:7337722814</p> <p>2.SHWETA.M. KUMBAR<br/>Email id:shwetakumbar1999@gmail.com<br/>Mobile No.: 8296654234</p> <p>3. AJINKAYKUMAR.S.BHOSALE<br/>Email id: bhosaleajinkya41@gmail.com<br/>Mobile No.: 6360103570</p>   |

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|  | 4. SHRIDHAR.B.MUDIGOUD<br>Emailid:shridharmudigoud1198@gmail.com<br>Mobile No.: 8105443562  |
| Enter Name and Contact details of peoples those will be involved in this project (From UBA connected / adopted village): | 1. Dr.M.M.Shivasimpi (Mobile no.:9742197173)<br>2. Prof,M,I,Tanodi (Mobile no.:9611998812)<br>3. Dr.K.M.Akkoli (Mobile no.:9739114856)<br>4. Prof.D.N.Inamdar (Mobile no.:9591208980) |

  
Dr. S.N.Topannavar  
Principal Investigator



  
Dr.S.N.Topannavar  
UBA Program Coordinator