



सत्यमेव जयते
Department of Science and Technology
Ministry of Science and Technology
Government of India

Sandip Foundation's
Sandip Institute of Technology and Research Centre
At & Po – Mahirawani, Trimbak Road, Tal & Dist. – Nashik
Phone: (02594) 222552, 53, 54, Fax: (02594) 222555
website : www.sandipfoundation.org, e-mail : principal@sitr.org
(Approved by AICTE, New Delhi, & Govt. of Maharashtra and Affiliated to Savitribai
Phule Pune University (Formerly Pune University), Pune.
Accredited with "A" grade by NAAC With CGPA Score of 3.11
NBA Accredited for Computer & Mechanical Engineering (UG Course) w.e.f. 2020-21 to 2022-23



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Innovation and Entrepreneurship Development Cell

Title of the Project: Eternox Innovations

(F. No. 11/10/2015-NEB (G)/01 dated 27/07/2020)

Outcome in terms of Product Development	IPR Current Status	Socially and Economically Relevance
<ul style="list-style-type: none"> Increase in efficiency in terms of product and cost in software development cycle. Increase in availability of resources for students. Reduction in error and optimization in economical terms for teams performing structural analysis 	<ul style="list-style-type: none"> In process Enroll under SANDIP TBI in Pre-incubation Segment 	<ul style="list-style-type: none"> Will provide viable market value for open source software's. Provides opportunity for the utilization of required resources in terms of e-learning for students. Provides work speed and space optimization for construction firms. Provides security for confidential data such as project cost estimation. Provides the opportunity to small businesses for getting customized softwares developed as per their requirements at affordable rates. Provides a platform for colleges to advertise to appropriate audience.

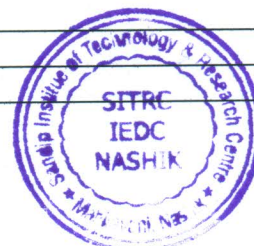
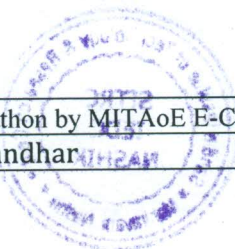
Developed By:

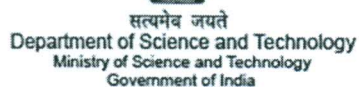
Young Innovators		Mentor	
Student SF ID	Names	Staff SF ID	Names
112018011	Pratik Nitin Dhole	1208	Prof. Jagdish A. Patel
112018212	Tushar Dinesh Sonawane		
122019104	Kalyani Jitendra Suryawanshi		

Achivements:

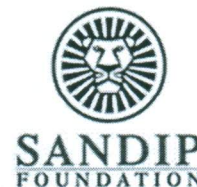
Secured "WINNER" Status in Business Model Hackathon by MITAoE E-Cell 2K21

Participated in Hackathon conducted by NIT Jalandhar





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Innovation and Entrepreneurship Development Cell

Title of the Project: Development of hybrid chaff cutter

(F. No. 11/10/2015-NEB (G)/02 dated 27/07/2020)

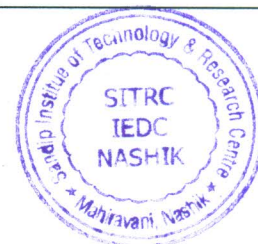
Outcome in terms of Product Development	IPR Current Status	Socially and Economically Relevance
<ul style="list-style-type: none"> Increase in quality fodder management. Reduction in human efforts and increase in quality feed for animals. Reduction in time needed for human fodder management cycle. 	<ul style="list-style-type: none"> In process Enroll under SANDIP TBI in Pre-incubation Segment 	<ul style="list-style-type: none"> Farmers, dairy farmers find it suitable as fodder management is still a issue for small scale dairy farmers. Time saving work for small scale dairy farmers and hybrid system can work in any environment irrespective of weather conditions. Provides the opportunity to small dairy farmers for getting customized machine as per their requirements at affordable rates.

Developed By:

Young Innovators		Mentor	
Student SF ID	Names	Staff SF ID	Names
112018010	Aniket Devidas Gaikwad	1417 1050	Prof. (Dr) Milind Motiram Patil Prof. Vasim A. Shaikh
112018006	Atharva Jeevan Naikwadi		
112018048	Pratik Ashok Chumbale		

Achivements:

Participated in Hackathon conducted by NIT Jalandhar





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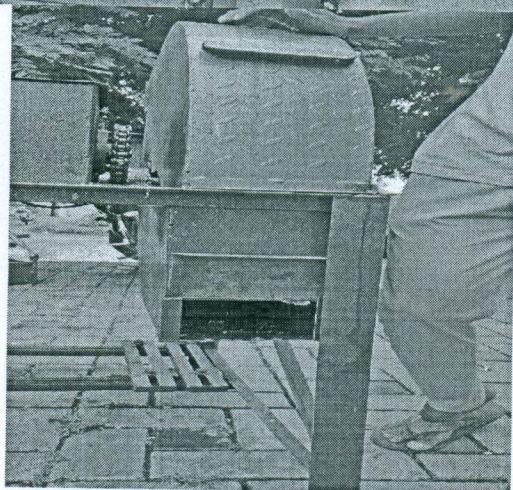
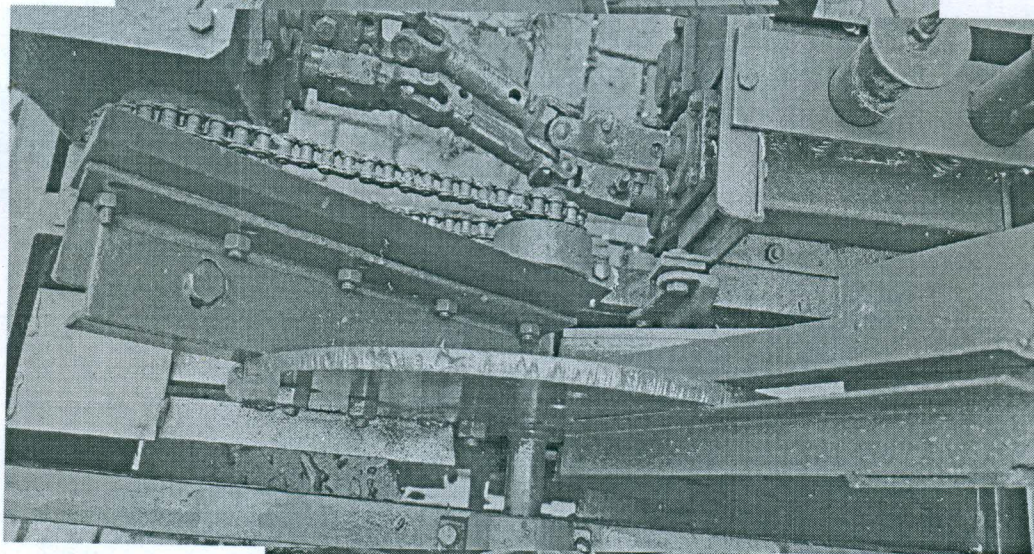
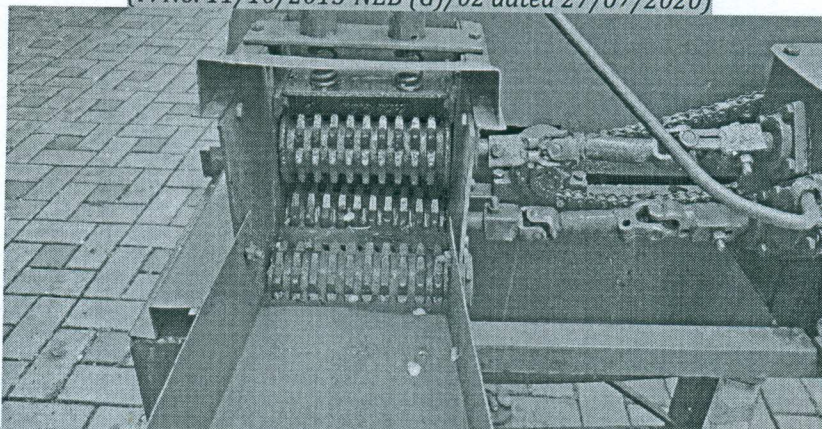


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Innovation and Entrepreneurship Development Cell

Title of the Project: Development of hybrid chaff cutter

(F. No. 11/10/2015-NEB (G)/02 dated 27/07/2020)





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Innovation and Entrepreneurship Development Cell

Title of the Project: IoT based Hi-Tech Onion Farming

(F. No. 11/10/2015-NEB (G)/03 dated 27/07/2020)

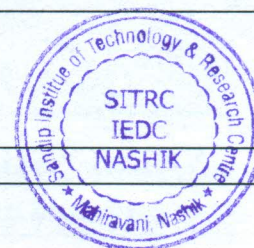
Outcome in terms of Product Development	IPR Current Status	Socially and Economically Relevance
<ul style="list-style-type: none"> It will increase the return on investment (ROI) as it will reduce inputs use and increase quality. It will reduce the production cost. It can provide better information so that we can take better management decisions. It will save time and costs. It can reduce pollution by reducing more use of chemicals. It will reduce unnecessary use of water. Early prediction of crop disease. 	<ul style="list-style-type: none"> In process Enroll Startup under SANDIP TBI in Pre-incubation Segment 	<ul style="list-style-type: none"> Will increase agriculture productivity. Will avoid soil degradation. Will reduce chemical application in crop production. Will make efficient use of water resources. Will change the socio-economic status of farmers. Will provide ease for new commerce's in agriculture.

Developed By:

Young Innovators		Mentor	
Student SF ID	Names	Staff SF ID	Names
122019025	Shaikh Shahzeb Husain Eteqad Husain	1097	Dr. Gayatri M. Phade
112017046	Anshu Sugreev Vishwakarma		
122019007	Suyog Ravindra Kangune		

Achievement:

Achieved "KRUSHI MAULI PURASKAR" at "JAGTIK KRUSHI MAHOTSAV-2020".





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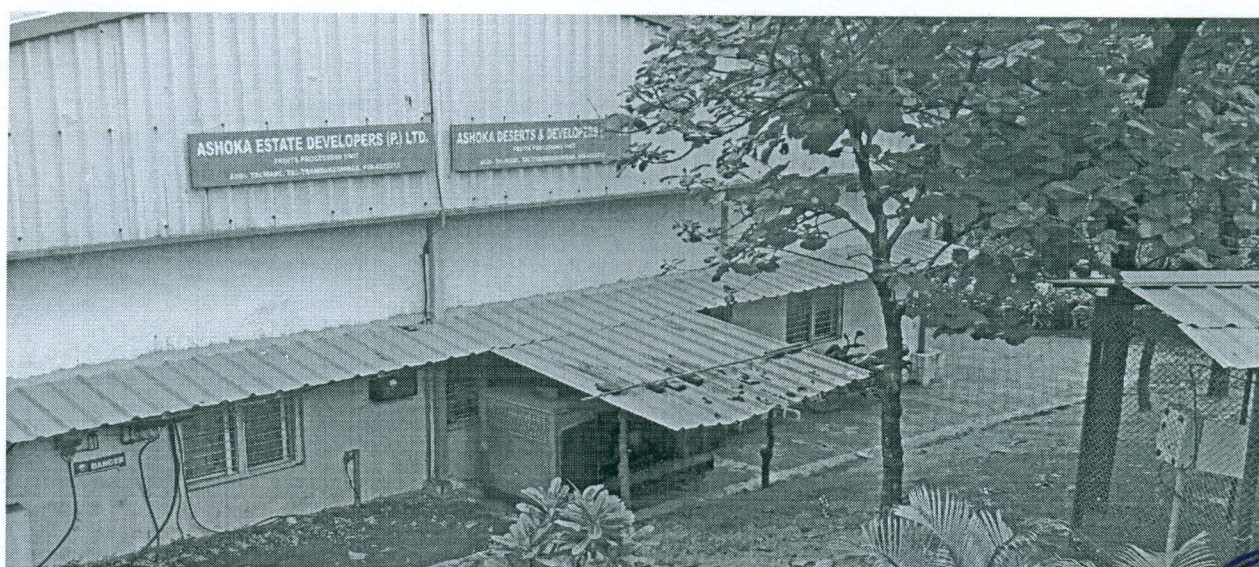
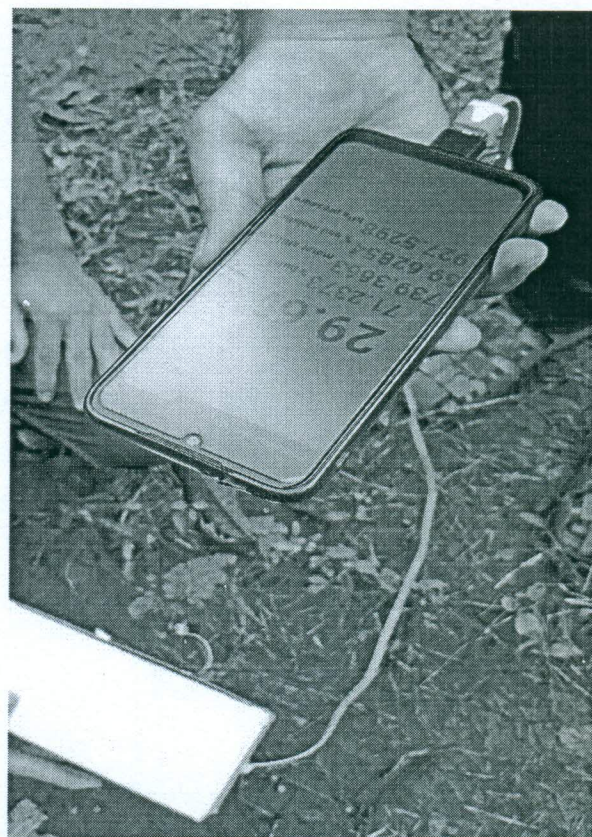
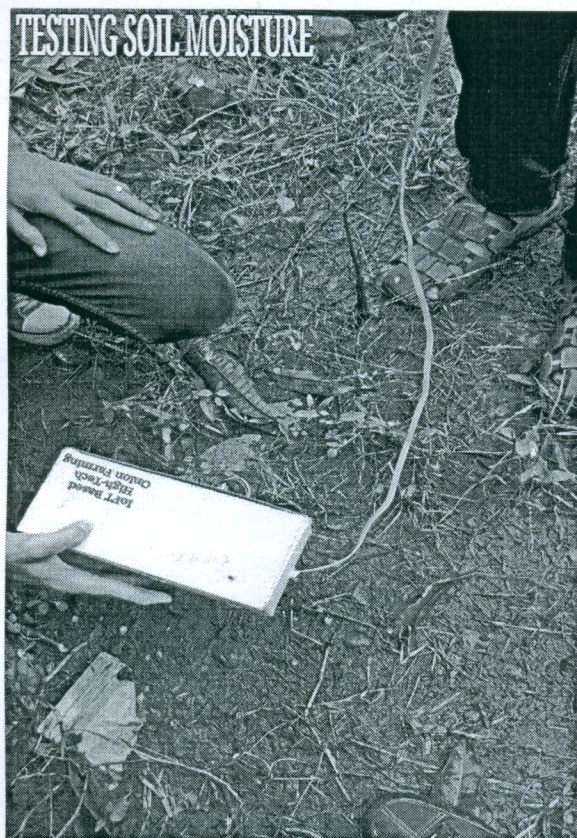


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Title of the Project: IoT based Hi-Tech Onion Farming

(F. No. 11/10/2015-NEB (G)/03 dated 27/07/2020)



Visited "Ashoka Estate Developers Pvt. Ltd." Farm for testing and to know climatic parameters for yield improvement.





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Title of the Project: LoRa base Pump Data Monitoring System

(F. No. 11/10/2015-NEB (G)/04 dated 27/07/2020)

Outcome in terms of Product Development	IPR Current Status	Socially and Economically Relevance
<ul style="list-style-type: none"> Easy to monitor status of water pump due to feedback system Easy to manage and control the whole system in single click. 	<ul style="list-style-type: none"> In process Enroll under SANDIP TBI in Pre-incubation Segment 	<ul style="list-style-type: none"> It can be used in all type of sectors especially in agricultural in sector. Due to long range operator will not need to go that particular area. Provides the opportunity to small businesses for getting customized system developed as per their needs. Water reduction for commercial farms. It saves electricity, water, human efforts as well as time.

Developed By:

Young Innovators		Mentor	
Student SF ID	Names	Staff SF ID	Names
122019067	Dhiraj Jankiram Kapure	1097	Prof. Dr. Gayatri M. Phade
122019065	Chetan Valmiki Suryawanshi	1208	Prof. Jagdish A. Patel

Achievements:

Participated in Hackathon conducted by NIT Jalandhar





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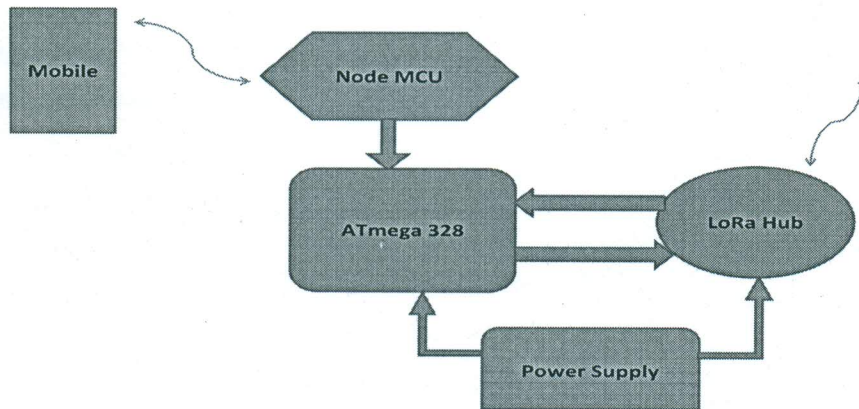


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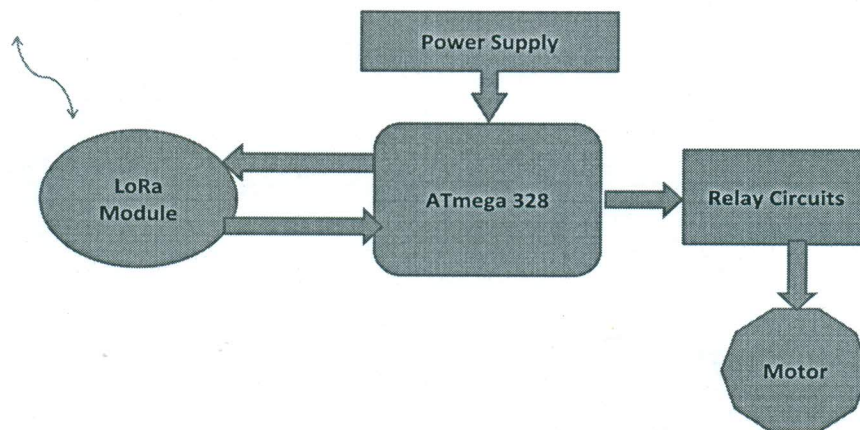
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Title of the Project: LoRa base Pump Data Monitoring System

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Sender (master) block diagram



Receiver (slave) block diagram





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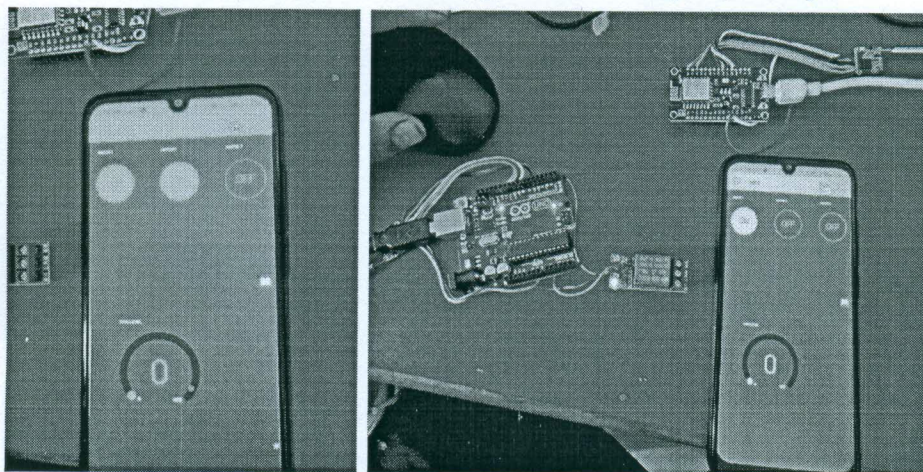


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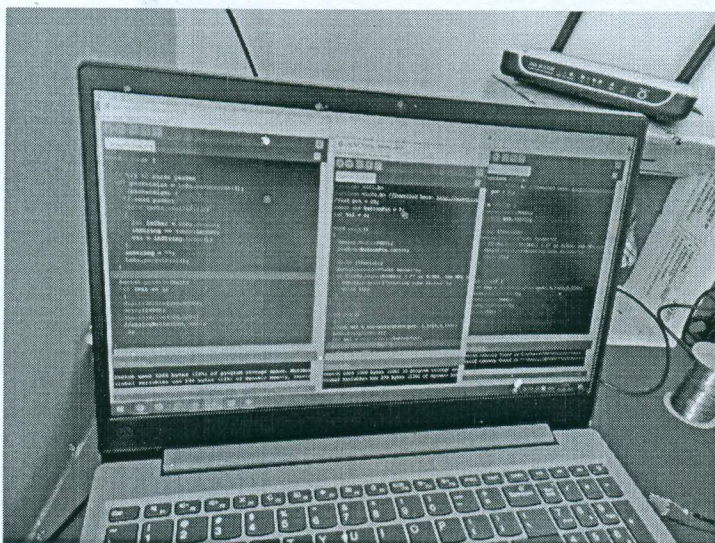
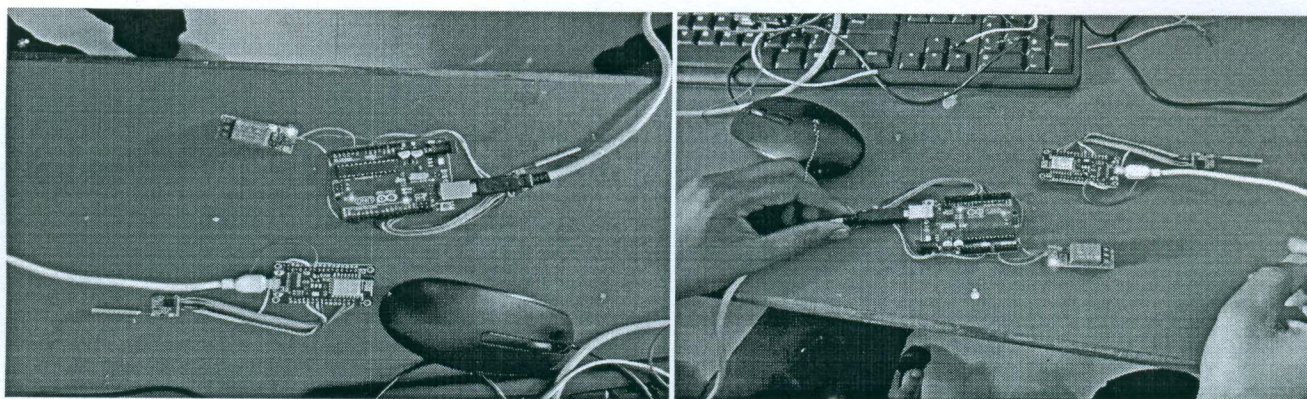
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Title of the Project: LoRa base Pump Data Monitoring System

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Application GUI





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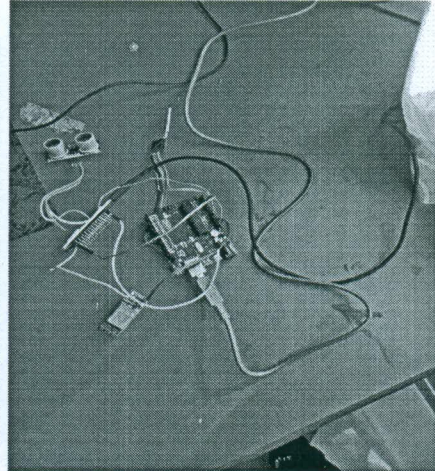
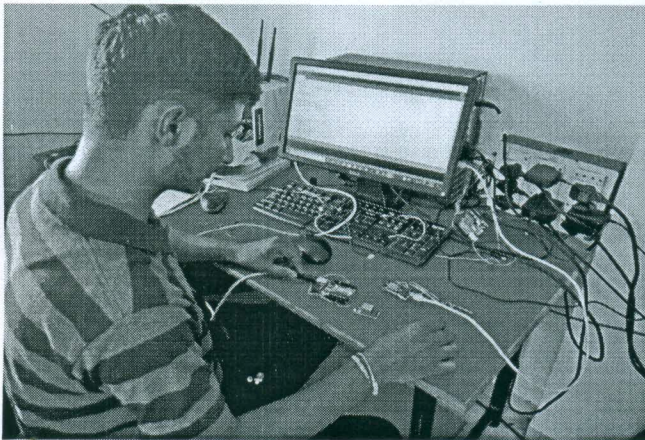


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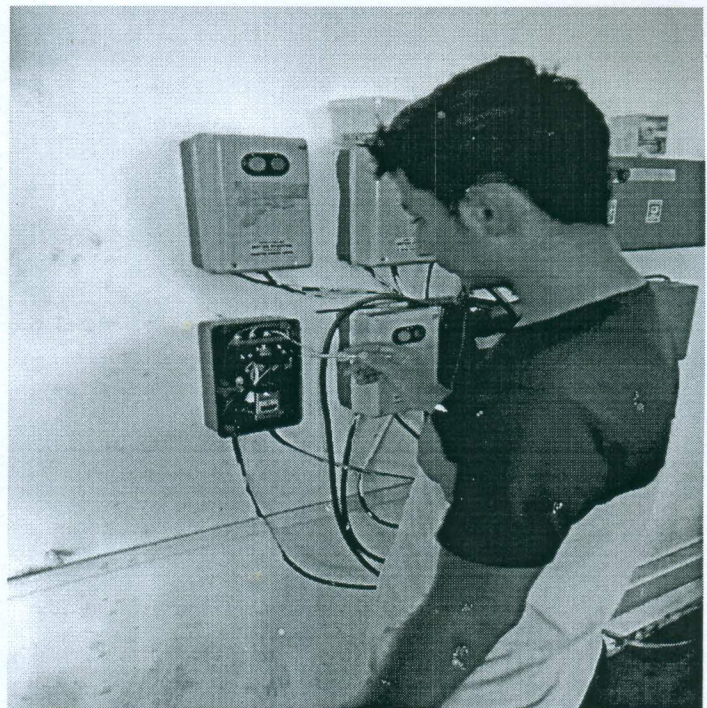
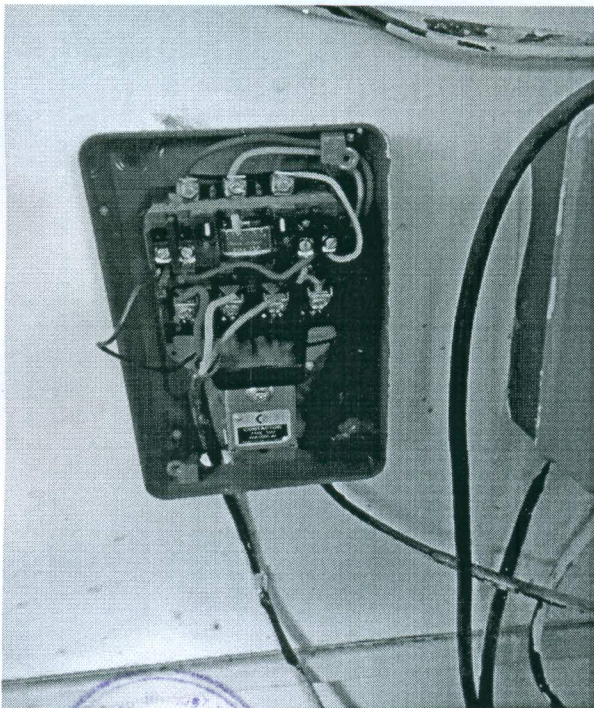
Innovation and Entrepreneurship Development Cell

Title of the Project: LoRa base Pump Data Monitoring System

(F. No. 11/10/2015-NEB (G)/04 dated 27/07/2020)



Testing Photos





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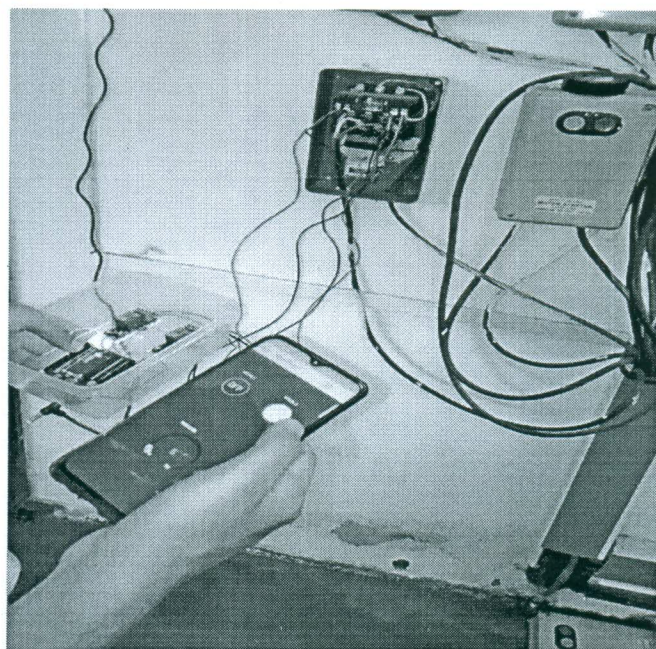
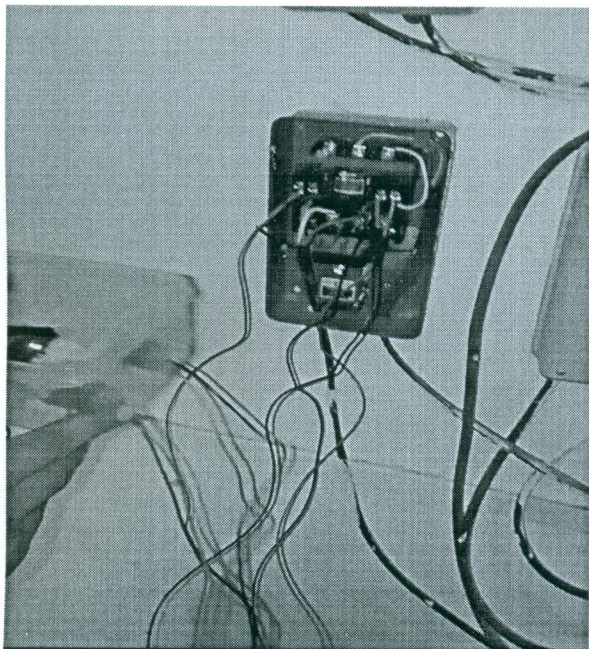


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Title of the Project: LoRa base Pump Data Monitoring System

(F. No. 11/10/2015-NEB (G)/04 dated 27/07/2020)



Actual Testing Photos





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Title of the Project: Canopy Detection and Spraying

(F. No. 11/10/2015-NEB (G)/05 dated 27/07/2020)

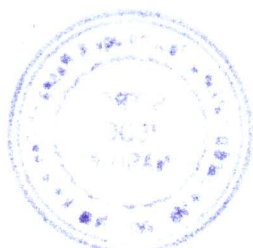
Outcome in terms of Product Development	IPR Current Status	Socially and Economically Relevance
<ul style="list-style-type: none"> To help the farmers in bringing efficiency in the process of pesticide spraying process while minimizing health issue due to the chemicals.. To develop the spraying mechanism in agriculture sector with less use of pesticides and fertilizers. To detect the sapling and canopy automatically. 	<ul style="list-style-type: none"> In process Enroll under SANDIP TBI in Pre-incubation Segment 	<ul style="list-style-type: none"> To help Farmers by easing an essential task. To maintain fertility of the soil by giving just the right amount of pesticides. To develop Agridrone sprayer which use less fertilizers and pesticides that saved financial capital. To use the open source technology helps in increasing technology access.

Developed By:

Young Innovators		Mentor	
Student SF ID	Names	Staff SF ID	Names
112018275	ABHISHEK ASHOK PATIL	1035 1097	Dr. Omkar S. Vaidya Dr. Gayatri M. Phade
112018112	SUDHIR BHAUSAHEB PAWAR		
112018384	ASIT SANJEEV BHATE		

Achivements:

Participated in National Level Competitions of Prototypes Development TECHNOVA-TION 2021 organized by Dr. B R Ambedkar National Institute Of Technology (NIT), Jalandhar and Innovation Club on 6-7 March, 2021.





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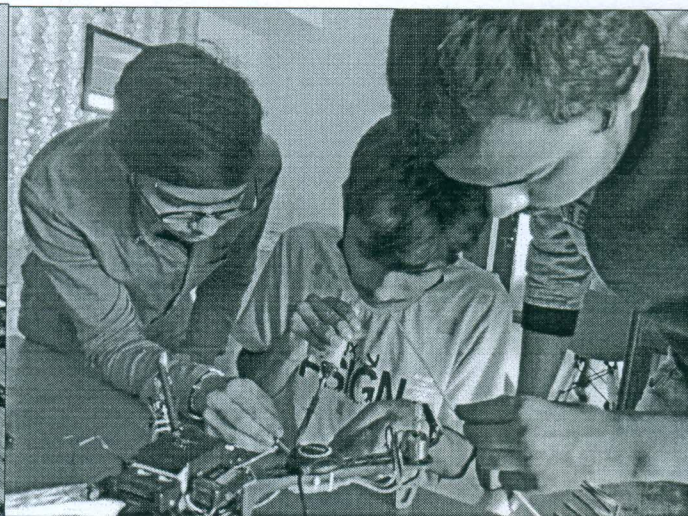
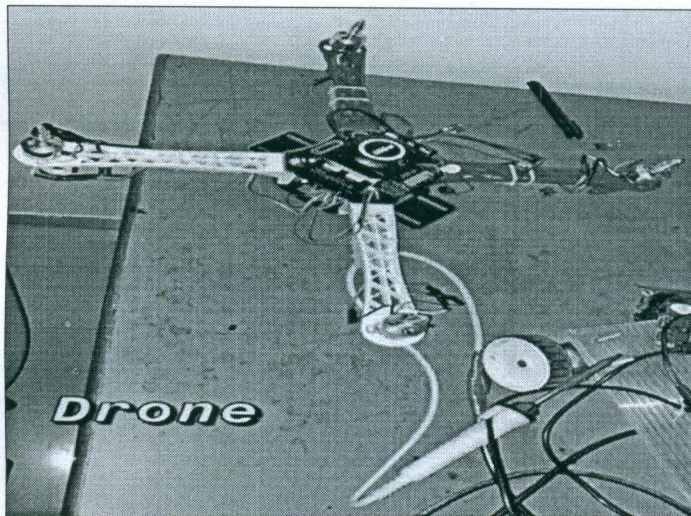
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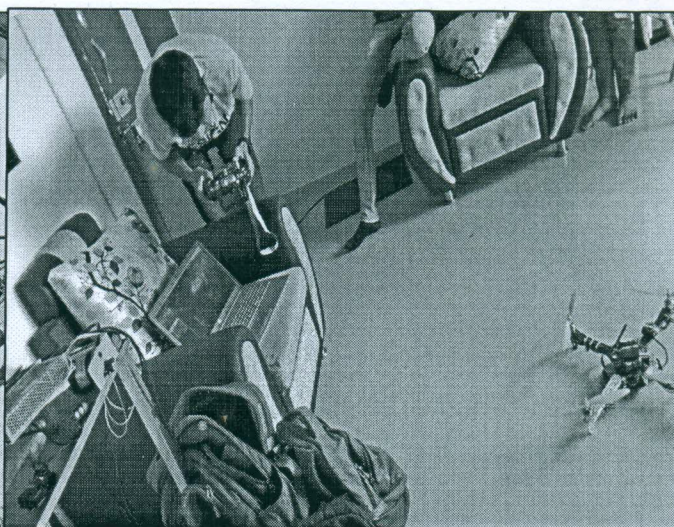
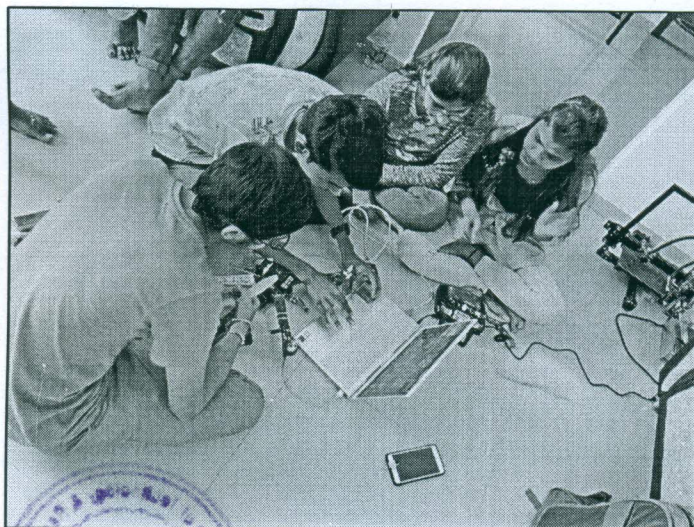
Title of the Project: Canopy Detection and Spraying

(F. No. 11/10/2015-NEB (G)/05 dated 27/07/2020)

Development Stage



Testing and Troubleshooting





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Title of the Project: Canopy Detection and Spraying

(F. No. 11/10/2015-NEB (G)/05 dated 27/07/2020)

Final Flying Stage



GPS Tracking of Drones using ArduPilot

