



DEPARTMENT OF FARM MACHINERY AND POWER,
COLLEGE OF AGRICULTURAL ENGINEERING AND TECHNOLOGY,
DR. BALASAHEB SAWANT KONKAN KRISHI VIDYAPEETH,
DAPOLI, DIST. RATNAGIRI (M.S.)



Faculty Strength:

Academic



Name Dr. Prashant Uddhaorao Shahare
Designation Professor and Head
Qualification M.Tech. (FMP), Ph. D. (FMP)
Experience 30 Years 10 Months
Area of Farm Machinery and Power
Specialization Engineering
Email ID shahare_prashant@rediffmail.com



Name Dr. Kishor Ganpat Dhande
Designation Associate Professor
Qualification M.Tech. (FMP), Ph. D. (FMP)
Experience 31 Years 02 Months
Area of Farm Machinery and Power
Specialization
Email ID kgdhande@gmail.com



Name Er. Vijay Vitthal Aware
Designation Associate Professor
Qualification M.E. (FMP) and Ph. D. (FMP)
Experience 22 Years 01 Months
Area of Farm Machinery and Power
Specialization Engineering, Ergonomics and
Safety in Agriculture
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Name Er. Nilesh Ashok Shirsat
Designation Assistant Professor
Qualification M.Tech.(FMP)
Experience 17 Years
Area of Farm Machinery and Power
Specialization Engineering
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Technical



Name Er. Rhutuja Nitin Palte
Designation Senior Research Assistant
Qualification M.Tech. (RES)
Experience 17 years
Area of Renewable Energy Engineering
Specialization
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Name Er. Sandeep Janardan Tambe
Designation Lab Assistant
Qualification M.Tech. (RES)
Experience 13 Years
Area of Renewable Energy Engineering
Specialization
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Supporting

Name	Shri. Satyawan Kadam	Shri. Nitin Gimhavanekar	Shri. Ravindra Suryavanshi	Shri. Sandesh Yelkar
Designation	Welder	Fitter	Carpenter	Fitter
Qualification	S.S.C, ITI (Welder), N.C.V.T.	B.A., ITI (Turner), N.C.V.T.	S.S.C, ITI (Carpenter), N.C.V.T.	H.S.C, ITI (Fitter), N.C.V.T.
Experience	20 Years	20 Years	14 Years	14 Years
Area of Specialization	Welding techniques	Machine shop handling, lathe machine, milling, drilling, shaping operations	Wood working operations	Workshop fitting operations
Email ID	mrsatya72@gmail.com	gimhavanekarsharvari@gmail.com	suryavanshiravindra45@gmail.com	sandeshyelkar4@gmail.com

Name	Shri. Sachin Mahadik	Shri. Rakesh Ruke	Shri. Harshawardhan Chogale	Shri. Mangesh Mane	Shri. Sanjay Jadhav
Designation	Fitter (Pulled from COA, Dapoli)	Black Smith (Pulled from COA, Dapoli)	Foreman Supervisor	Senior Mechanic	Smith
Qualification	H.S.C, ITI (Fitter), N.C.V.T.	9 th Std., ITI (Welder)	Diploma in Mechanical Engineering	H.S.C, ITI (Diesel Mechanic), N.C.V.T.	8 th Std.
Experience	19 Years	19 Years	17 Years	13 Years	14 Years
Area of Specialization	Workshop fitting operations	Smithy and welding operations	Machine shop practice, Workshop and Production operations	Engine repair and maintenance	Smithy operations
Email ID	sachinmahadik147@gmail.com	rakeshruke291274@gmail.com	harshawardhanchogale@gmail.com	mangeshmane@gmail.com	sanjayjadhav@gmail.com

Education:

Degree Offered	Intake Capacity	Year of Establishment
B.Tech. (Agricultural Engineering)	64	1999
M.Tech. (Farm Machinery and Power)	10	2005
Ph.D. (Farm Machinery and Power)	02	2007

Course offered:

Degree	1st Term	2nd Term
B.Tech. (Agricultural Engineering)	FMPE -111 (Engineering Drawing) FMPE -112 (Workshop Practice) FMPE-234 (Farm Power and Automotive Engine) FMPE-235 (Theory of Machines) FMPE-358 (Farm Machinery & Equipment-I) FMPE-359 (CAD Application) FMPE -3510 (Field operation & Maintenance of Tractor and Machinery) GAE-454 (10 week Industrial attachment/ Internship) GAE- 474 (10 week Experiential Learning on Campus)	FMPE- 123 (Workshop Technology) FMPE- 246 (Tractor Systems and Controls) FMPE -247 (Machine Design) GAE-241 (Inplant training- I) FMPE -3611 (Farm Machinery & Equipment-II) FMPE-3612 (Tractor and Farm Machinery Design) GAE-362 (Inplant training-II) ELE-FMPE-481 (Testing of Agril. Equipment and Machinery) ELE-FMP-482 (Human Engineering and Safety) GAE-486 (12 Week Project Planning and Report Writing)
M.Tech. (Farm Machinery and Power)	FMPE-501* (Design of farm power & machinery system) FMPE-502* (Soil dynamics in tillage & traction) FMPE-503* (Testing and evaluation of tractor and farm equipment) FMPE-504 (System simulation and computer aided problems solving in engineering) FMPE-507 (Farm machinery dynamics noise and vibration) FMPE-508 (Tractor design) FMPE-509 (Operational research in farm power and machine management) FMPE-510 (Ergonomics and safety in farm operation) FMPE-592 (Special Problem) FMPE-595 (Industry/Institute Training) FMPE-514 (Research methodology) FMPE-531 (Pesticides application techniques) FMPE-532 (Advanced manufacturing technology)	
Ph.D. (Farm Machinery and Power)	FMPE601* (Advances in Farm Machinery and Power engineering) FMPE602* (Simulation modelling in Farm Machinery and Power Engineering) FMPE603 (Energy conservation and Management in Farm Machinery and Power Engineering) FMPE604 (Computer Aided Analysis and Design of Farm Machinery) FMPE605 (Machinery for natural resource management and precision farming) FMPE606 (Advances in Hydraulics and Electro Pneumatic controls) FMPE 607 (Advances in Ergonomics) FMPE 693* (Special problem) FMPE694* (Case study) FMPE 621 (Mechanism Analysis and Synthesis) FMPE 622 (Experimental Stress Analysis)	

* Compulsory courses

Training Imparted:

S.N.	Title	Year	Beneficiaries
1.	Online training program (Zoom meeting webinar) under National Campaign on Farm Mechanization	2022	44
2.	Training cum demonstration programme under SCSP fund	2022	90
3.	Training programme for manually operated paddy transplanter	2022	28
4.	Agricultural Mechanization under SC-SP for Farmers	2021	50
5.	Sprayer handling, repairing and safety	2021	41
6.	Finger millet thresher cum pearler	2020	23
7.	Utilization of Agricultural Sprayer, handling and maintenance	2020	15
8.	Manual operated paddy transplanter training and demonstration	2019	42
9.	Farm Machinery Repair, Maintenance and Technology Demonstration Mela	2018	37
10.	Paddy transplanter training cum demonstration Mela, Dapoli	2018	60

PG and Ph.D. Students Research Projects:

M.Tech. (Farm Machinery and Power)				
S.N.	Name of the Candidate	Title of Thesis	Year of Submission	Name of the Guide/Co-guide
1.	Mr. Rajesh Tulshiram Jadhav	Development of feeding- conveyor type power operated paddy thresher	June 2007	Er. K. G. Dhande Co-guide: Dr. V. V. Aware, Er. A.V. Gajakos Er. S.V. Pathak, Er. A.G. Mohod
2.	Mr. Ravindra R. Kadam	Development of power operated tree shaker for aonla	2010	Er. S. V. Pathak Co-guide: Er. K.G. Dhande, Dr. K.P. Kolhe Er. A. A. Sawant
3.	Ms. Mugdha Ramkrushna Bhat	Development And Performance Evaluation Of Two Row Paddy Transplanter	2010	Dr. P. U. Shahare Co-guide: Er. K. G. Dhande, Er. S. V. Pathak, Er. K. P. Kolhe
4.	Ms. Patil Amruta S.	Development and performance evaluation of bullock drawn dry paddy seed cum fertilizer drill	June 2011	Er. K. G. Dhande Co-guide: Er. S. V. Pathak, Er. N. A. Shirsat, Er. A. A. Sawant

5.	Mr. Kadam Vinod B.	Ergonomic evaluation of pedal operated cashew nut desheller and self-propelled reaper for arm workers of Konkan region of Maharashtra	2012	Er. V. V. Aware Co-guide: Er. K. G. Dhande, Er. S. V. Pathak, Er. N. A. Shirsat Er. A. A. Sawant
6.	Ms. Kirti Suresh Desai	Development And Performance Testing of Two Row Paddy Transplanter	2012	Dr. P.U. Shahare Co-guide: Er. K. G. Dhande, Er. V. V. Aware, Er. S. V. Pathak
7.	Mr. Chavan Manishkumar Vijay	Development Of Pedal Operated Tree Shaker For Jamun	2014	Dr. S.V. Pathak Co-guide: Er. K. G. Dhande, Er. V. V. Aware, Dr. S. H. Sengar
8.	Ms. Suchitra Suryakant Chavan	Development of women friendly cono weeder for paddy	2014	Er. N.A. Shirsat Co-guide: Dr. P. U. Shahare, Er. K.G. Dhande, Er. V. V. Aware
9.	Mr. Pravin Balasaheb Gaikwad	Development and Performance Evaluation Of Four Row Self Propelled Paddy Transplanter	Feb., 2014	Dr. P. U. Shahare Co-guide: Dr. V. V. Aware, Er. S.V. Pathak Dr. S.H. Sengar
10.	Mr. Purushottam RamraoDeshmukh	Design And Development Of Mechanism For Separation Of Arecanut Husk And Kernels	Nov., 2014	Dr. V. V. Aware Co-guide: Dr. K.G. Dhande, Er. N. A. Shirsat, Dr. S. P. Sonawane
11.	Mr. Sachin Ramchandra Patil	Development Of Power Operated Coconut Dehusker	Nov., 2014	Dr. P.U. Shahare Co-guide: Dr. V. V. Aware, Dr. K.G. Dhande Er. N. A. Shirsat, Dr. A. G. Mohod
12.	Mr. Suraj Krishna Jadhav	Design and Development of Power Tiller Operated Dry Paddy Seed Cum Fertilizer Drill	Nov., 2014	Dr. K.G. Dhande Co-guide: Dr. P. U. Shahare, Er. N. A. Shirsat, Er. S. B. Swami
13.	Mr. Balaji Digambar Gadhe	Design, development and performance evaluation of high capacity engine operated paddy thresher	May 2016	Dr. P. U. Shahare Co-guide: Dr. V. V. Aware, Dr. K.G. Dhande

				Dr. A.G. Mohod
14.	Mr. Vinayak Shamrao Patil	Design and development of power tiller operated raised bed seed cum fertilizer drill for dry paddy	Sept., 2016	Dr. K.G. Dhande Co-guide: Dr. V. V. Aware, Er. S. B. Swami
15.	Mr. Amit Ramesh Rao Jadhav	Development and testing of urea briquette applicator	Sept., 2016	Dr. P. U. Shahare Co-guide: Dr. V. V. Aware, Dr. K.G. Dhande Dr. Y. P. Khandetod
16.	Ms. Chhaya RaghoKavitkar	Ergonomic evaluation and refinement of manually operated paddy transplanter for women workers of Konkan region	2016	Dr. V. V. Aware Co-guide: Dr. K.G. Dhande, Er. N. A. Shirsat, Dr. S. P. Sonawane
17.	Ms. Pooja Rajendra Pawar	Design and development of manually operated cashewnut deshelling machine	Aug., 2017	Dr. V. V. Aware Co-guide: Dr. P. U. Shahare, Dr. K.G. Dhande, Er. S. V. Aware, Er. N. A. Shirsat
18.	Mr. Somnath Gangaram Yamagar	Design and development of manual nutmeg (<i>Myristica fragrans Houtt.</i>) harvesting system	July 2018	Dr. K.G. Dhande Co-guide: Dr. V.V. Aware, Dr. S. V. Pathak Dr. R.G. Khandekar
19.	Mr. Ajinkya Vijay Rangbhal	Development of manually operated mulch laying machine with punching arrangement	July 2018	Dr. S. V. Pathak Co-guide: Dr. P.U. Shahare, Dr. K.G. Dhande, Mr. V.A. Rajemahadik
20.	Mr. Suyog Parasmani Urade	Development and performance evaluation of medium capacity arecanut husk fibre extraction machine	Aug., 2018	Dr. P. U. Shahare Co-guide: Dr. V. V. Aware, Dr. S.V. Pathak Dr. Y. P. Khandetod
21.	Mr. Raviraj Yuvraj More	Development and performance evaluation of two row power operated paddy transplanter for root washed seedlings	Nov., 2018	Dr. V. V. Aware Co-guide: Dr. K.G. Dhande, Er. S. V. Aware Dr. P. U. Shahare
22.	Ms. Priyanka Suhas Joshi	Development of power operated mulch laying machine with punching arrangement	Oct., 2019	Dr. S. V. Pathak Co-guide: Dr. P.U. Shahare, Dr. K.G. Dhande, Mr. V.A. Rajemahadik

23.	Mr. Jagdish Kashinath Khurdal	Development and ergonomic evaluation of fish dressing platform for women workers	Oct., 2019	Dr. V. V. Aware Co-guide: Dr. A.U. Pagarkar, Er. S. V. Aware, Dr. P. U. Shahare
24.	Mr. Vaibhav Jagannath Hage	Design and development of media mixture machine for horticultural crop nursery	Dec., 2019	Dr. K.G. Dhande Co-guide: Dr. V. V. Aware, Dr. S. V. Pathak Dr. A.G. Mohod
25.	Ms. Anusha Singh	Development of power operated cashewnutdesheller	Dec., 2019	Dr. V. V. Aware Co-guide: Dr. K.G. Dhande, Dr. S. P. Sonawane, Dr. P. U. Shahare
26.	Ms. Pranali Sambhaji Pawar	Development of Tractor operated boom type orchard sprayer	Oct., 2021	Er. N.A. Shirsat Co-guide: Dr. P. U. Shahare, Dr. S.V. Pathak, Dr. Y.P. Khandetod
27.	Mr. Sainath Bhagchand Kalamkar	Development and evaluation of fertilizer application system for mango orchard	Oct., 2021	Dr. K. G. Dhande Co-guide: Dr. P. U. Shahare, Er. N. A. Shirsat, Dr. Y.P. Khandetod
28.	Ms. Priyanka Rajendra Mali	Development of grass cutter cum paddy harvester	Oct., 2021	Dr. V. V. Aware Co-guide: Dr. P. U. Shahare, Er. N. A. Shirsat, Er. S. V. Aware
29.	Mr. Shridhar Somling Biradar	Design, development and performance evaluation of bench grafting tool	June, 2023	Dr. K. G. Dhande Co-guide: Dr.S. V. Pathak, Dr. A. G. Mohod Dr. Y. R. Parulekar, Dr. B. L. Ayare
30.	Mr. Abhijeet Kondu Warak	Development and performance evaluation of power tiller operated root crop digger for Konkan region	Feb., 2023	Dr. A. A. Deogirikar Co-guide: Dr. P. U. Shahare, Dr. V. V. Aware, Dr. A. A. Sawant

Ph. D. (Farm Machinery and Power)				
S.N.	Name of the Candidate	Title of Thesis	Year of Submission	Name of the Guide/Co-guide
1.	Mr. Prashant Sampatrao Deshmukh	Development and testing of arecanut (<i>Areca catechu L.</i>) husk fibre separation machine	Sept., 2016	Dr. P. U. Shahare Co-guide: Dr. V. V. Aware, Dr. Y. P. Khandetod, Er. D. M. Mahale, Dr. J. S. Dhekale
2.	Mr. Girishkumar Balasaheb Bhange	Development and testing of paddy stripping header mechanism	Feb., 2017	Dr. P. U. Shahare Co-guide: Dr. V. V. Aware, Dr. Y. P. Khandetod, Dr. M.S. Mane
3.	Mr. Ranjit Vasant Pawar	Design, development of finger millet thresher cum pearler	Feb., 2018	Dr. V. V. Aware Co-guide: Dr. P. U. Shahare, Dr.K. G. Dhande, Dr. Y. P. Khandetod Dr. S. P. Sonawane
4.	Mr. Suhas Bapuso Patil	Design, development and testing of power operated paddy transplanter suitable for root washed seedlings	Feb., 2018	Dr. P. U. Shahare Co-guide: Dr. V. V. Aware, Dr. Y. P. Khandetod, Dr. M.S. Mane
5.	Mr. Amit Ashokrao Deogirikar	Design and development of mechanical transplanting system for finger millet (<i>Eleusine corocana (L.) Gaertn</i>)	Aug., 2022	Dr. K. G. Dhande Co-guide: Dr. P. U. Shahare, Dr. V. V. Aware, Dr. A.G. Mohod Dr. J. S. Dhekale
6.	Ms. Pooja Rajendra Pawar	Design and development of mechanical harvester for arecanut	2023	Dr. S. V. Pathak Co-guide: Dr. P.U. Shahare, Dr. K.G. Dhande, Dr. A. G. Mohod Dr. R.G. Khandekar

3. Extension Publications (No. and Front Pages)
Booklets – 01



Booklet on - Ergonomically improved drudgery reducing agricultural tools/ machines/ equipments

Leaflets- 09



Coconut Climber in Marathi and Hindi



Arecanutdehusker in Marathi and Hindi



बीकानेरमधील सावंत शांतकृष्णराव सावंत कृषि विद्यापीठ

मनुष्यचलित मात लावणी यंत्र



अखिल भारतीय समन्वित संशोधन प्रकल्प
श्रमविज्ञान आणि शैलीतील सुरक्षितता

कृषि यंत्रे आणि शक्ती विभाग
कृषि अभियांत्रिकी आणि तंत्रज्ञान महाविद्यालय
डॉ. बाळासाहेब सावंत कोकण कृषि विद्यापीठ
दापोली - ४१५३१२, जि. रत्नागिरी (महाराष्ट्र)
साल-२०१७

Manually operated 2-row paddy transplanter in Marathi and Hindi

अखिल भारतीय समन्वित अनुसंधान परियोजना
कृषि में श्रमविज्ञान एवं सुरक्षा

मनुष्यचलित धान के पौधे लगानेवाला यंत्र



कृषि यंत्र तथा शक्ति विभाग
कृषि अभियांत्रिकी तथा प्रौद्योगिकी महाविद्यालय
डॉ. बाळासाहेब सावंत कोकण कृषि विद्यापीठ
दापोली - ४१५३१२, जि. रत्नागिरी (महाराष्ट्र)
साल-२०१६

विभाग प्रतिपत्रक - ३

कृषि अवजारे व साधने



कृषि तंत्रज्ञान माहिती केंद्र
डॉ. बाळासाहेब सावंत कोकण कृषि विद्यापीठ,
दापोली - ४१५ ३१२, जि. रत्नागिरी (महाराष्ट्र)

Agril. implements & tools

कृष्याचा नाण व काबाडकष्ट कमी करणारे
नाचणी मळणी व सडणी यंत्र



अखिल भारतीय समन्वित संशोधन प्रकल्प
श्रमविज्ञान आणि शैलीतील सुरक्षितता

कृषि यंत्रे आणि शक्ती विभाग
कृषि अभियांत्रिकी आणि तंत्रज्ञान महाविद्यालय
डॉ. बाळासाहेब सावंत कोकण कृषि विद्यापीठ
दापोली - ४१५३१२, जि. रत्नागिरी (महाराष्ट्र)

Nagli thresher cum pearler

Technologies developed by Deptt. of Farm Machinery and Power



'Vaibhav' Sickle



'Nutan' Mango Harvester



'Atul' Fruit Harvester



'Pankaj' Puddler



Stubble Remover



Coconut Dehusker



'Ankur' Toothed Spade



'Amar' Loranthus Cutter



Bullock drawn zero till drill



Conoweeder



Inverted Chain Conveyor Type Paddy Thresher



Vertical Conveyor reaper



Hand Operated Green Cashewnut Sheller



Pure Latex (Non Slip) Glove for cashew nut deshelling and scooping



Surgical Gloves (Inside) and Cotton Gloves (Outside) during fish dressing



Foldable Coconut Dehusker



Tractor Mounted Hydraulic Elevator



Women Friendly Ergo-refined Cono Weeder



Arecanut Scarifier



Arecanut Dehusker



Pedal Operated Arecanut Dehusker



Power Operated Arecanut Dehusker



Power Operated Coconut Dehusker



Manually operated two row paddy transplanter



Nagli Thresher cum Pearler



Fish dressing platform

Gallery:

Training and Demonstration Imparted

