No. 26(6)/2019-ESDA
Government of India
Ministry of Electronics and Information Technology
R&D in Electronics Group
(Electronics Systems Development and Application Division)

Dated: 03rd February, 2020

ADMINISTRATIVE APPROVAL

Subject: Project on "Development of IoT and Drone based Agriculture Monitoring System with Objective of Skill Development of Socially Deprived Community by Madan Mohan Malviya University of Technology (MMMUT), Gorakhpur (Nodal Agency) with Participating Institutes: Regional Engineering College-Bijnor, Regional Engineering College-Banda and Regional Engineering College-Ambedkar Nagar.

I am directed to convey the Administrative Approval of the Competent Authority to the implementation of the project "Development of IoT and Drone based Agriculture Monitoring System with Objective of Skill Development of Socially Deprived Community by MMMUT, Gorakhpur (Nodal Agency) with Participating Institutes: REC- Bijnor, REC- Banda and REC- Ambedkar Nagar at the total estimated cost of Rs. 289.50 Lakh (Rupees Two Hundred Eighty Nine Lakh and Fifty Thousand only) over a period of 24 months. The details of the project are given in the Annexure enclosed.

2. This issues with the approval of Secretary, Ministry of Electronics and Information Technology vide Dairy No.347 dated 31.01.2020 and concurrence of AS&FA, MeitY vide Dairy No. 4009 dated 28.01.2020.

(K. Bhanu Hariharan) Deputy Director

Copy to:

- The Director, office of the Director General of Audit, Post & Telecommunication, Civil Lines, Near old Secretariat, Shamnath Marg, Delhi-110054
- 2. Pay & Accounts Officer, MeitY
- 3. D&D Section, MeitY (2 Copies)
- 4. Prof. Sanjay Kumar Soni, Professor, Electronics and Comm. Engg., MMMUT, Gorakhpur (UP)
- 5. Dr. S. P. Singh, Associate Professor, Electrical Engineering, REC-Ambedkar Nagar (UP)
- 6. Dr. Anurag Chauhan, Assistant Professor, Electrical Engineering, REC-Banda (UP)
- 7. Dr. Navneet Kumar, Assistant Professor, Electrical Engineering, REC-Bijnor (UP)
- 8. GC(R&DE/SD(TS)/DD(KBH)/Scientist 'C' (OK), MeitY
- 9. Sanction Folder.

ANNEXURE TO THE ADMINISTRATIVE APPROVAL No. 26(6)/2019-ESDA dated 03.02.2020

1. Name of the Project

: "Development of IoT and Drone based Agriculture Monitoring System with Objective of Skill Development of Socially Deprived Community by MMMUT, Gorakhpur (Nodal Agency) with Participating Institutes: REC-Bijnor, REC-Banda and REC- Ambedkar Nagar.

2. Objective of the project

: Development of IoT and Drone based Agriculture Monitoring System with Objective of Skill Development of Socially Deprived Community.

3. Area of coverage

: Agriculture

4. Name of the Implementing Agency and Status

: Madan Mohan Malviya University of Technology (MMMUT), REC-Bijnor, REC-Banda and REC-Ambedkar Nagar.

5. Location

: Gorakhpur.

6. Total project duration

: 24 Months

i) Expected date of commencement

: 03.02.2020

ii) Expected date of completion

: 02.02.2022

7. i) Total Project Outlay

: Rs. 289.50 Lakh

ii) Budget details

Head				,	Years			ı	Rs. in Lakh
regardinal to a	1 st				2 nd				Total
	MMMU T Gorakhp ur	REC Ambed kar Nagar	REC Banda	REC Bijnor	MMMU T Gorakhp ur	REC Ambed kar Nagar	REC Banda	REC Bijnor	
Capital Equipment.	98.10	20.22	19.58	18.72	0.00	0.00	0.00	0.00	156.62
Consumable stores	02.75	00.75	00.75	00.75	02.75	00.75	00.75	00.75	10.00
Manpower	12.912	04.464	04.464	04.464	12.912	04.464	04.464	04.46	52.608
Training	08.00	06.00	06.00	06.00	06.00	04.00	04.00	04.00	11.00
Travel	03.00	0.75	0.75	0.75	02.00	0.75	0.75	04.00	44.00
Contingenci es	02.00	0.75	0.75	0.75	02.00	0.75	0.75	0.75	09.50 08.50
Overheads, f any	02.626	0.50	0.50	0.50	02.646	0.50	0.50	0.50	8.272
Γotal	129.388	33.434	32.794	31.934	28.308	11.214	11.214	11.21	289.50
Grand Total Rs. (a) Contribu		227.5				61.9	5	4	289.50

(a) Contribution of Project Implementing/Capital Equipment already available at & other Organisation in Total Budget Outlay:

(b) MeitY Contribution

Nil Rs. 289.50 lakh

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8. Mode and extent of funding : As indicated below

i. Budgetary support

(a) Grants-in-aid: Rs. 289 Lakh from MeitY

(b) Loan : NIL

ii. Internal Contribution : NIL

iii. Other funding Agencies : NIL

9. Stages for release of MeitY grant :

S. No.	Pre-condition/Stages of implementation	Documents to be supplied by the Implementing Agency	Amount to be released
1 st Installment	Initiation of the project	Acceptance of terms & conditions governing Grants-in-aid.	Rs. 227.55 Lakhs.
2 nd Installment	Recommendations of the PRSG & satisfactory progress report of the project	 a) Utilization Certificate for the previous grants. b) Technical & Financial Progress Report. c) Audited Statement of Accounts. 	Rs. 61.95 Lakhs.

The fund will be released to MMMUT, Gorakhpur the nodal agency in the project. MMMUT, Gorakhpur will further provide funds to REC- Bijnor, REC- Banda and REC- Ambedkar Nagar. UCs of the released amount will be submitted by MMMUT, Gorakhpur.

10. Milestones/ deliverables:

Quater	Outcome/ Milestone			
1 st	Procurement of Capital Equipments and infrastructure set-up.			
2 nd	Recruitment of Manpower and training to SRF/RA/JRF			
3 rd	Training to students on Embedded system and Smart Band.			
4 th	Completion of AI algorithm.			
5 th	Design and Development of Smart Board and Drone.			
6 th	Database management Software.			
7 th	Integration of AI, Drone and IoT enabled board.			
8 th	Training and AI and machine learning.			
	Training on Smart board and Drone.			
	Deployment of integrated System.			

(K. Bhanu Hariharan) Deputy Director