Sher-e-Kashmir
University of Agricultural Sciences & Technology of Kashmir
Main Campus Shalimar Srinagar - 190025

University Order No. 447 (Est.) of 2026
Dated: 07.07.2026

In the interest of administration and for smooth functioning of the IoT based Smart Irrigation System at DARS, Budgam, following Scientific, Technical and Supporting Staff shall be entrusted with the roles & responsibilities as indicated against each, for effective management, operation, maintenance, monitoring and dissemination activities under the system:

Role	Name, Designation & Place of Posting	Responsibilities
Coordinator	Prof. M. Ashraf Bhat, Prof. & Head, DARS, Budgam	Overall administrative control
Co-coodinators	Dr. Fayaz Ahmad Bahar, Professor-cum-Chief Scientist(CAS), DARS, Budgam	• Prepare layout plan of the entire system and inventory of all the items-Mechanical, Electric, Civil etc. • Prepare operational Manual in consultation with the executing agency. • All the Data to be properly curated, managed for analysis by scientists/students.
	Dr. Faisal Rasool, Assistant Professor/Junior Scientist(CAS), AICRP on Maize, DARS, Budgam	
	Dr. Sabia Akhter, Assistant Professor/Junior Scientist, AICRP on Pulse, DARS, Budgam	
Skilled Operators	Mr. Dawood Ahmad Bhat, FCLA, AICRP on Pulses, DARS, Budgam	
	Mr. Sunil Kumar, FCLA, Dean's Office FoH, Shalimar	
Supporting Staff	Mr. Manzoor Ahmad Malik, Gardener Mr. Mushtaq Ahmad, Gardener	

Mr. Sunil Kumar, FCLA, Dean's Office FoH, Shalimar (Skilled Operator) shall be deemed to have been deployed exclusively for carrying out his assignments under the project/scheme. His services shall not be diverted/utilized for any work other than the said project/scheme during the period of his deployment.

Dryland (Karewa) Agricultural Research Station shall be exclusively responsible for maintenance & functionality of the System.

Moreover, Terms of reference & responsibilities are appended herewith as Annexure to this Order.

By Order

Sd/-
(Prof. Azmat Alam Khan)
Registrar

No. Au/Adm/DARS-23/18/7469-94
Dated: 07.07.2026

Copy to the:-

- All Officers of the University
- Professor Incharge, ARIS, Shalimar for placing the Order on University website.
- Scientist Incharge, Dryland Agriculture Research Station, Budgam.
- Associate Dean, College of Agri. Engineering & Technology, Shalimar.
- All concerned
- Secretary to Vice-Chancellor, SKUAST-K, Shalimar
- University Order File (w.3.s.c.).

07/07/26
(Javaid Ahmad Bhat)
Assistant Registrar (T)

Annexure to U.O. No. 447 (Est.) of 2026
Dated: 07.07.2026

Terms of reference:

1. **Round the year crop and Plant Material Multiplication Calendar**

Crop Category

a) Pulse Crops:
Kharif: Common bean, Moong bean, Soybean, Red Gram, Urd ean
Rabi: Lentil, Broad beans
b) Maize
c) Fodder Crops: Fodder Oats

Annual Activity Chart

Activity	Major Activities	Crops/Material
Jan-Feb	Nursery raising Data on cold tolerance	Apple, Walnut Fodder and Pulse crops, Fruit Crops
March-April	Data recording on Rabi crop, Data recording of plants in Hi Tech Green Houses	Fodder oats, Lentil, Pea, broad beans, Fruit Crops
May-June	Sowing of Kharif crops, Recording of yield data on rabi crops	All Rabi crops All Kharif crops Fruit Crops
July-August	Data on Micro-irrigation for all crops	All Kharif Crops
Sep-Oct	Harvesting and recording of yield and other data on all Kharif crops Data recording of plants in Hi Tech Green Houses Sowing of Rabi crops	Kharif and Rabi Crops Fruit Crops
Nov-Dec	Data recording of Rabi and Fruit crops	All Rabi crops Fruit Crops under Protected cultivation

2. Discipline wise work plan would be as under:

I.

i. Agriculture Engineering

- Automation and control system
- AI Based Crop and Climate Intelligence
- Predictive analysis
- Robotic and Mechanization Trials
- Data utilization, Research Output

ii. Decision Support System: Integration of Climate Data

- Real Time Recommendation for:
- Irrigation and fertigation
- Climate Set points
- Crop Scheduling

II. Performance Bench marks:

- Yield per ha
- Water use efficiency
- Energy Use efficiency

Continuous Improvement through feedback loops

III. Research and Knowledge Generation:

- Multidisciplinary research outputs:
  Energy-efficient greenhouse designs AI models for Cold Climate protected farming
  Indigenous automation solutions
- Publications, patents and technology packages

IV. Technology Transfer and Scaling:

- Industry collaboration for commercialization
- Start-up support through validated prototypes

Responsibilities of DARS:

- Crop selection and planning
- Nutrient Management
- Variety evaluation and development
- Pest and disease control
- Yield and quality optimization
- Development of Cold region technologies

V. Research & Development Agenda Would Include:

- Cold climate crop physiology
- Energy-efficient greenhouse
- AI-driven crop management
- Development of Climate-resilient varieties
- Indigenous technology development

3. Training, Extension & Capacity Building would include:

- Farmer training programs
- Startup incubation
- Skill certification
- Internship programs
- Demonstration plots
- E-learning modules

4. Output & Deliverables

Area	Target
Planting Material/Seed	10,000 plant/year/ 100 quintals
Research Papers	20+ annually
Technologies	5+ per year
Start-ups	One annually
Trained Personnel	400+ per year

Sustainability & Revenue Model:

Revenue Stream:

- Sale of planting material/Seed
- Premium Seed Show