



United States Department of Agriculture
National Agricultural Statistics Service



2025 Hawaii Farm Technology Use Report

In Cooperation with the Hawaii Department of Agriculture
650 Capitol Mall, Suite 6-100 · Sacramento, CA 95814
(916) 738-6600 (800) 804-9514 · Fax (844) 332-7146 · www.nass.usda.gov/hi

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Farm Technology in Demand on Hawaii Farms

Farm technology, from drones to accounting software, is used and in demand on Hawaii farms, according to a recent survey conducted by the USDA National Agricultural Statistics Service (NASS), in cooperation with the Hawaii Department of Agriculture (HDOA). The Hawaii Farm Technology Use survey was conducted during the fall of 2025 to determine the types of technology farmers use today and anticipate future needs. NASS mailed the survey questionnaire and followed-up by phone to farmers in all of Hawaii's counties. The survey was first conducted in 2019. This is the second iteration of the survey. Data was aggregated before publication to protect individual and operational information:

Table 1. Hawaii: Types of Farm Technology, Number Used, Number Wanted, 2025

Type of Technology	Number Used	Number Wanted (in addition to Number Used)
Physical Technology (hardware)		
Tablets and Smartphones		
Tablet for farm use (i.e., Apple iPad, Samsung Galaxy Tab, Android)	2,332	806
Smartphones (i.e., Apple iPhone, Samsung Galaxy, Google Pixel)	5,709	656
Satellite Phones	50	319
Drones, Unmanned Aircraft System (UAS)		
Scouting, seed dispersal, fertilization or protection applications, etc.	173	751
Dedicated for security purposes	123	429
Dedicated for bird and predator control	41	301
Other (locating livestock, inspecting fencing, irrigation, etc.)	46	96
Anti-Theft/Security		
Video Surveillance Cameras	4,791	4,490
Motion Sensor Lights	5,006	4,440
GPS anti-theft trackers for vehicles and equipment	530	2,433
GPS Livestock Tracking Devices	4,591	10,086
Other	183	229
Production Environment Monitoring-sensors		
Hand Held Sensors (moisture, plant health, etc.)	548	1,343
Field Sensors (moisture, soil conditions, etc.)	899	1,669
Other	128	301
Equipment		
GPS – Guided Equipment	133	220
Autonomous Equipment (autonomous tractors, harvesters, planters)	301	518

Table 1 (continued). Hawaii: Types of Farm Technology, Number Used, Number Wanted, 2025

Type of Technology	Number Used	Number Wanted (in addition to number Used)
Bird and Predator Control		
Stationary, uses sounds as a deterrent	379	1,141
Other (Autonomous, Robotic, ground base, laser deterrent, etc.)	832	1,377
Livestock		
RFID Livestock Identification Tags	26,580	24,942
Non-Physical Technology (software)		
Smart Phone Apps (field conditions, yield information, etc.)	1,333	575
Computer Applications		
Budgeting software or farm operation management, etc.	1,234	526
Chat bots (apps typically used on websites for customer service)	155	142
Third Party Service Application (i.e., fee for service plan)	357	137
Other	211	123

Table 2. Hawaii: Types of Farm Technology, Farm Use and Need, 2025

Farm response to tech used and needed	Yes	No	More Needed
Physical fences, electric	840	3,051	708
Physical fences, non-electric	2,817	914	1,235
Virtual fences (using GPS and collar tracking)	69	3,877	155
Netting for protection from birds or insects	608	3,246	530
Animal traps	1,308	2,524	782

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