



FARM DISASTER SURVEY RESULTS KILAUEA EAST RIFT ZONE ERUPTIONS, 2018

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UH-CTAHR/NREM & HDOA-ADD
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Introduction

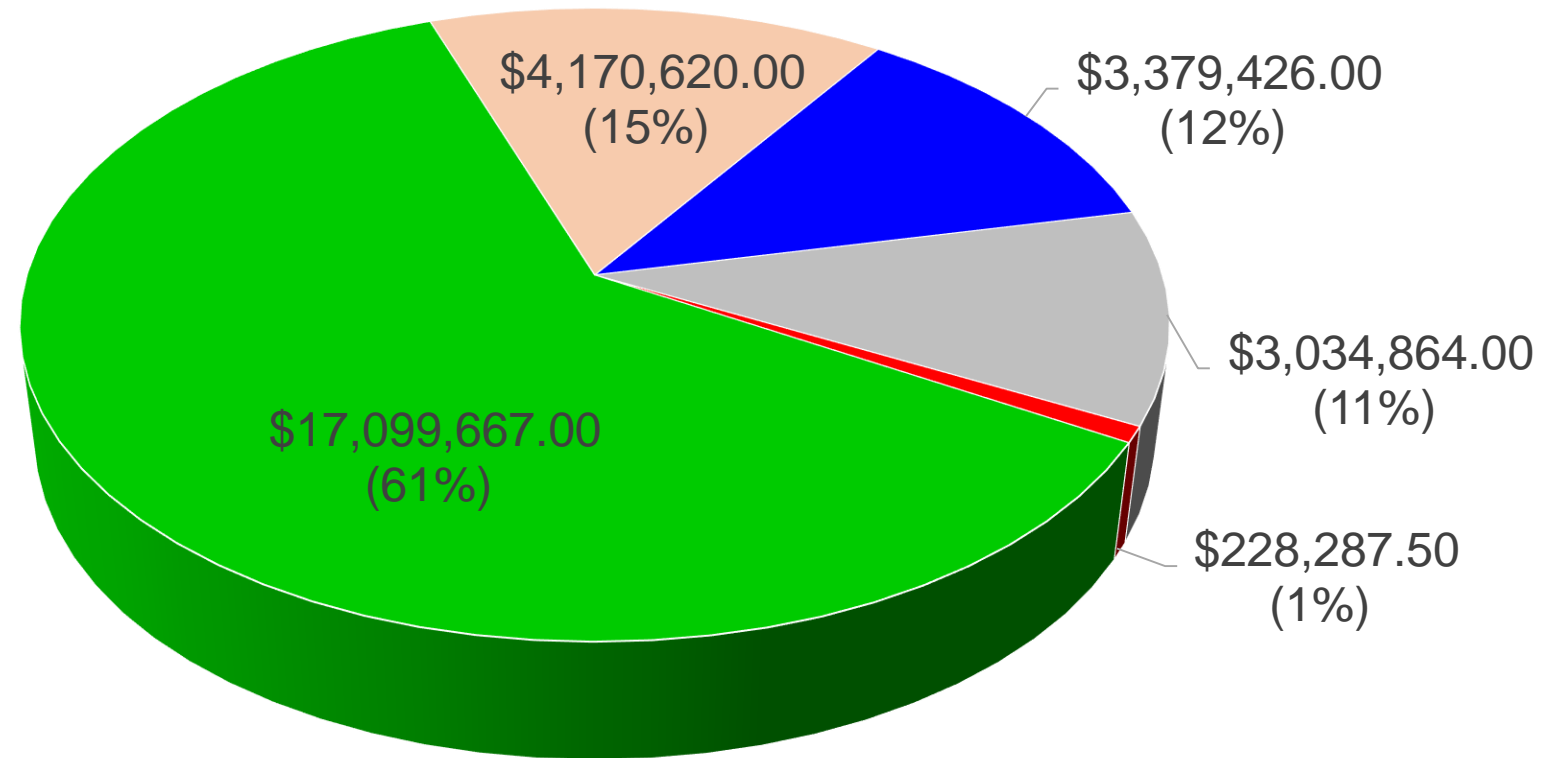
Event Background

- Kilauea East Rift Zone eruptions began from new fissures on May 3, 2018.
- Lava sent flowing over streets in the Leilani subdivision in lower Puna.
- Lava channels began flowing toward Kapoho Bay on June 2, 2018.
- In the aftermath of disaster, many local farms paved with lava, resulting in losses to crops, inventory, equipment, structures, and land.

Farm Disaster Survey

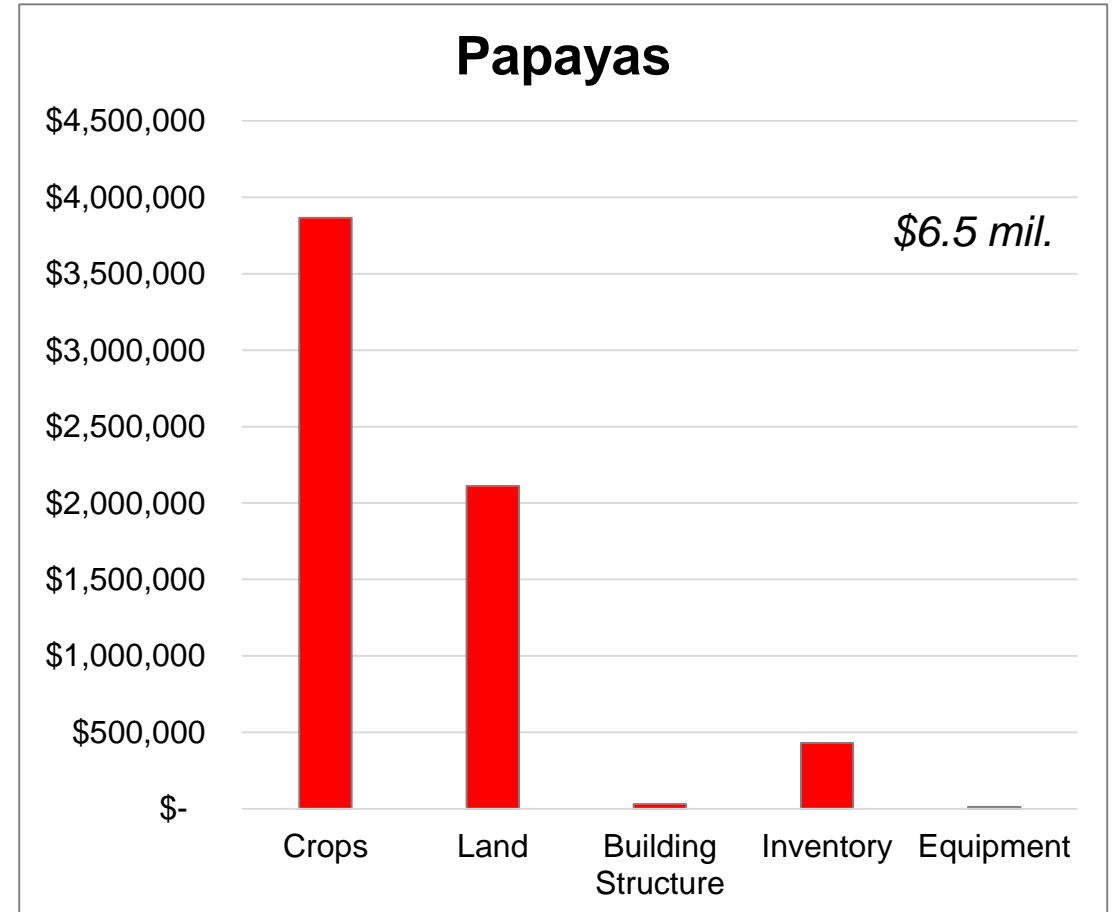
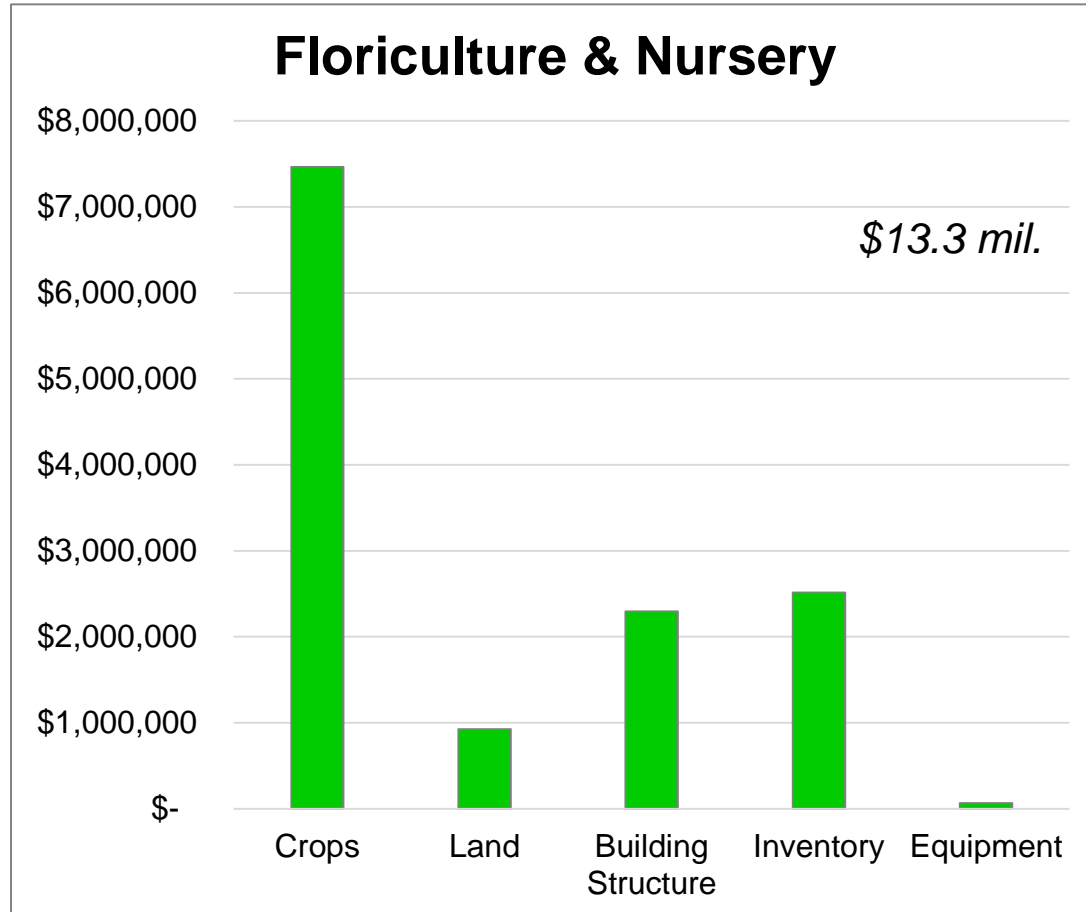
- Initial request from HFNA in late June.
- Survey instrument completed in early July and fielded by UH-CTAHR extension agents in early August.
- Survey designed to gauge losses sustained by producers arising from the eruptions.
- Survey participation voluntary and 46 responses received by mail/email.
- Survey results not “all inclusive” but provide a “convenient” sampling of farm losses arising from the disaster.
- Total farm losses reported -- \$27.9 million.

Reported Losses From Farm Disaster Survey in Kilauea East Rift Eruptions, 2018

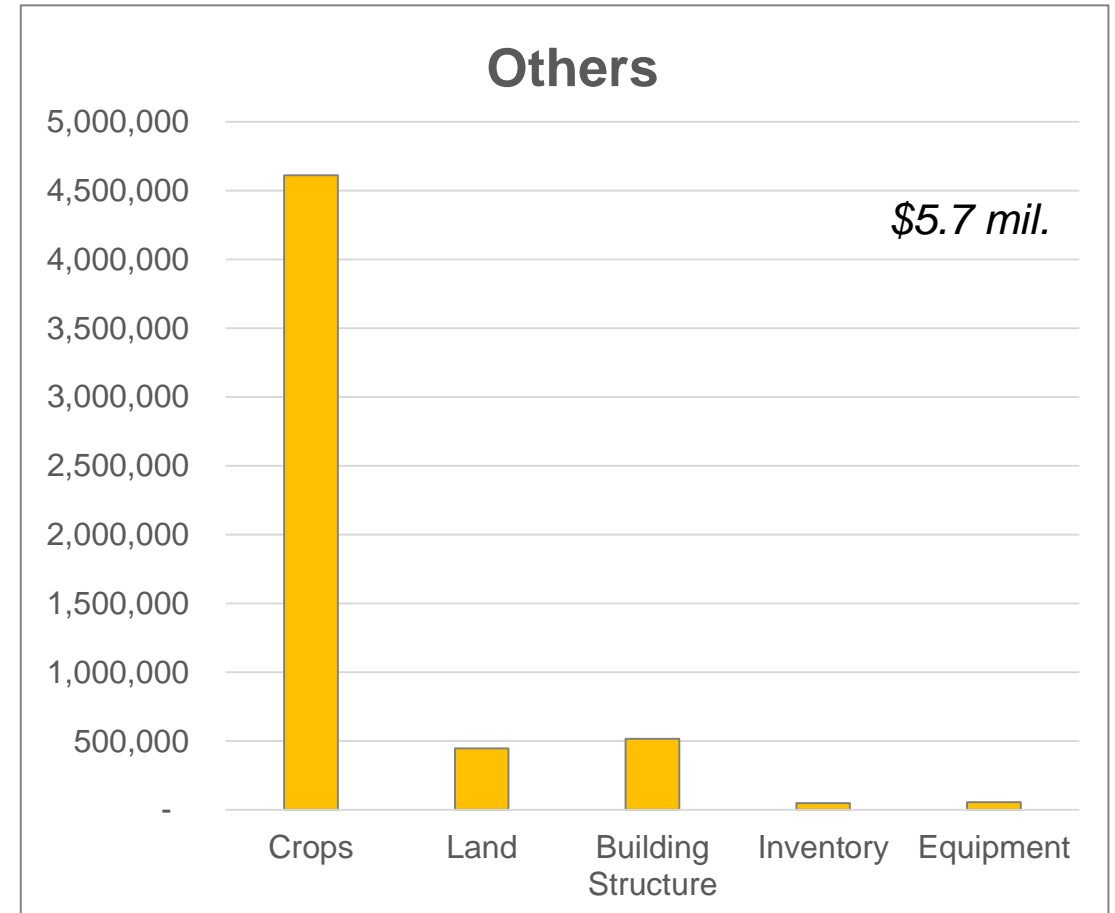
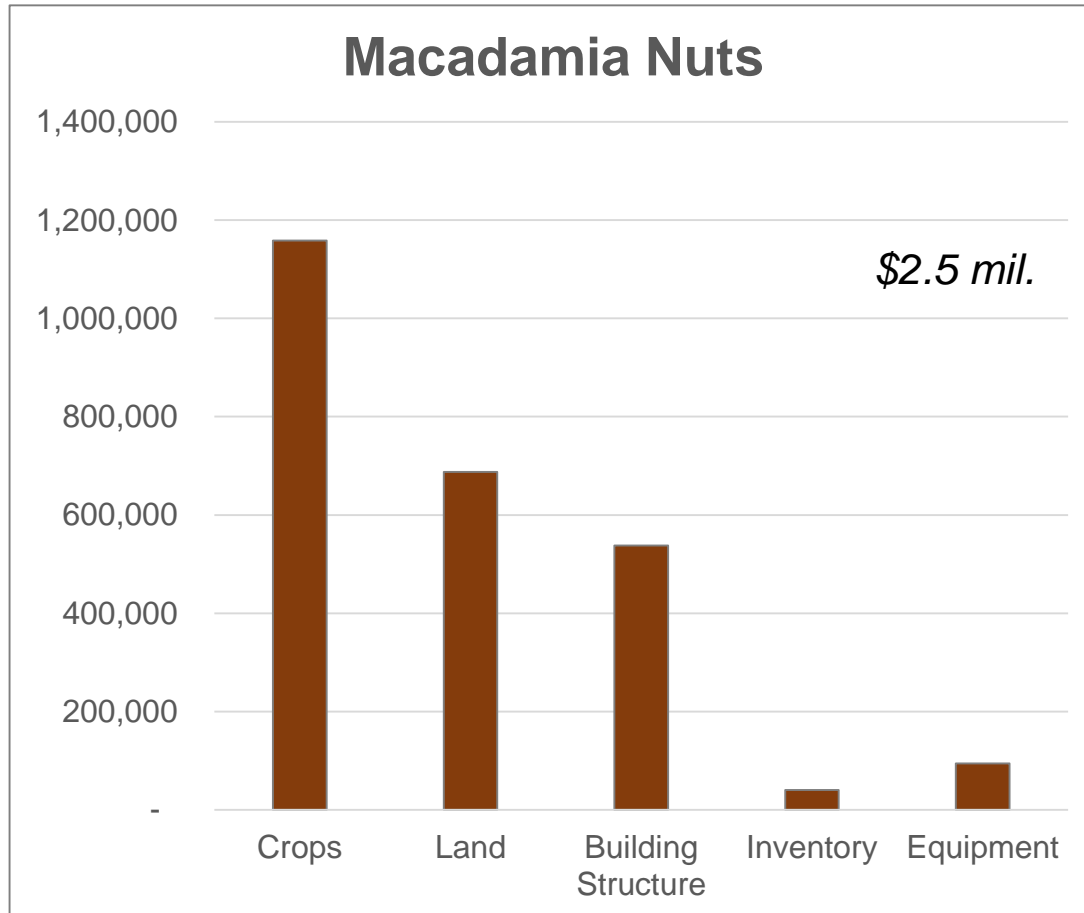


■ Crops ■ Land ■ Building Structure ■ Inventory ■ Equipment

Reported Losses by Select Industry

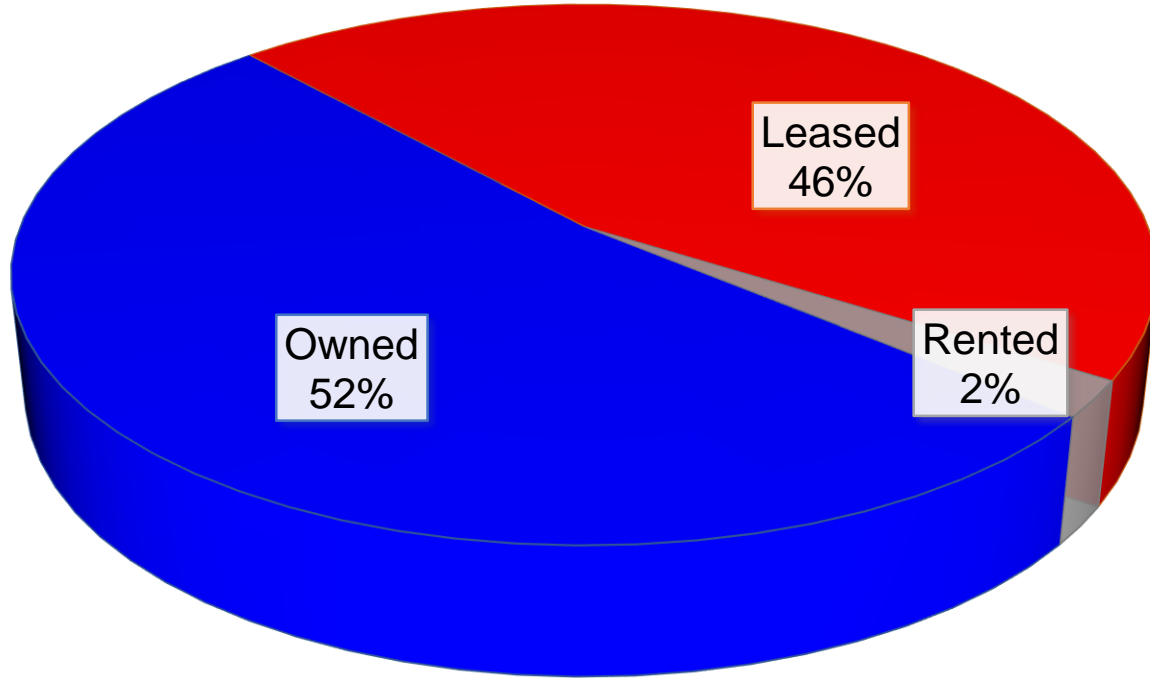


Reported Losses by Select Industry



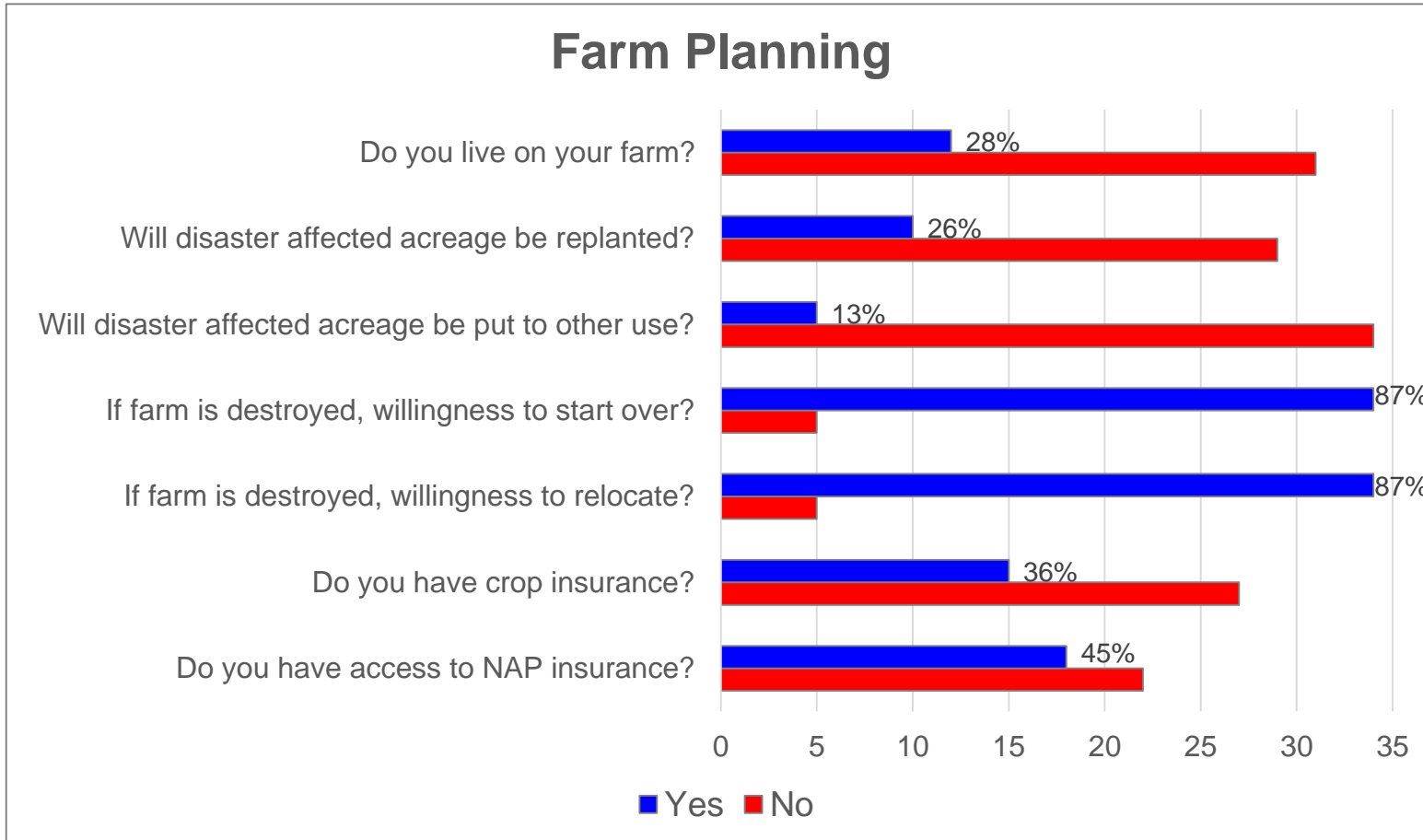
Planning Assessment

Land Tenure Status Reported



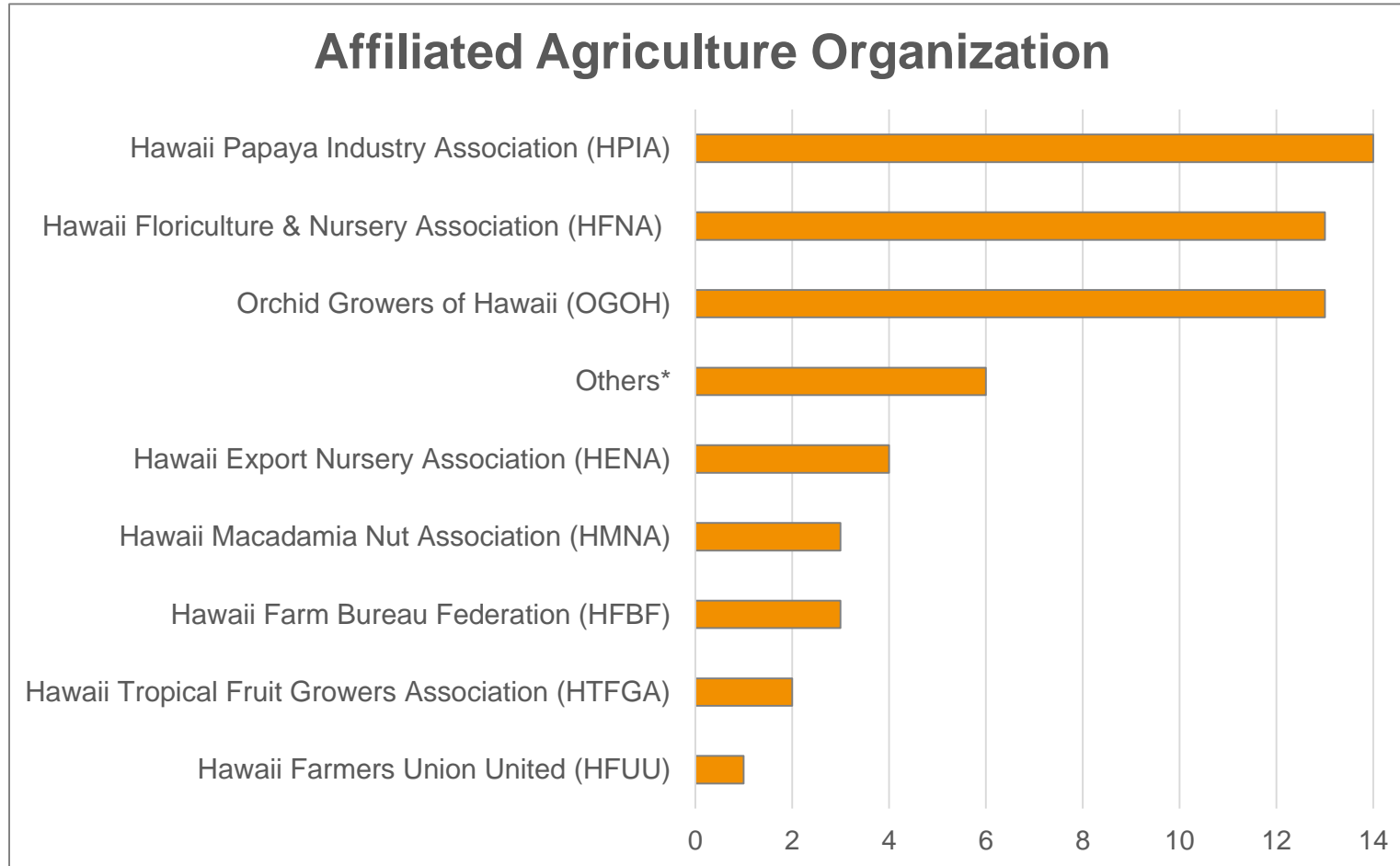
- Survey respondents reported 1,337 acres affected in the disaster.
- Most respondents (52%) reported owning their farm lands.
- A little over two-fifths of them indicated leasing land to farm.

Planning Assessment



- Most survey respondents live off-farm.
- Most producers do not plan to replant or put affected acreage to other use.
- The majority of producers with farms destroyed are willing to start over and to relocate (87%).
- A minority proportion of producers have crop insurance.

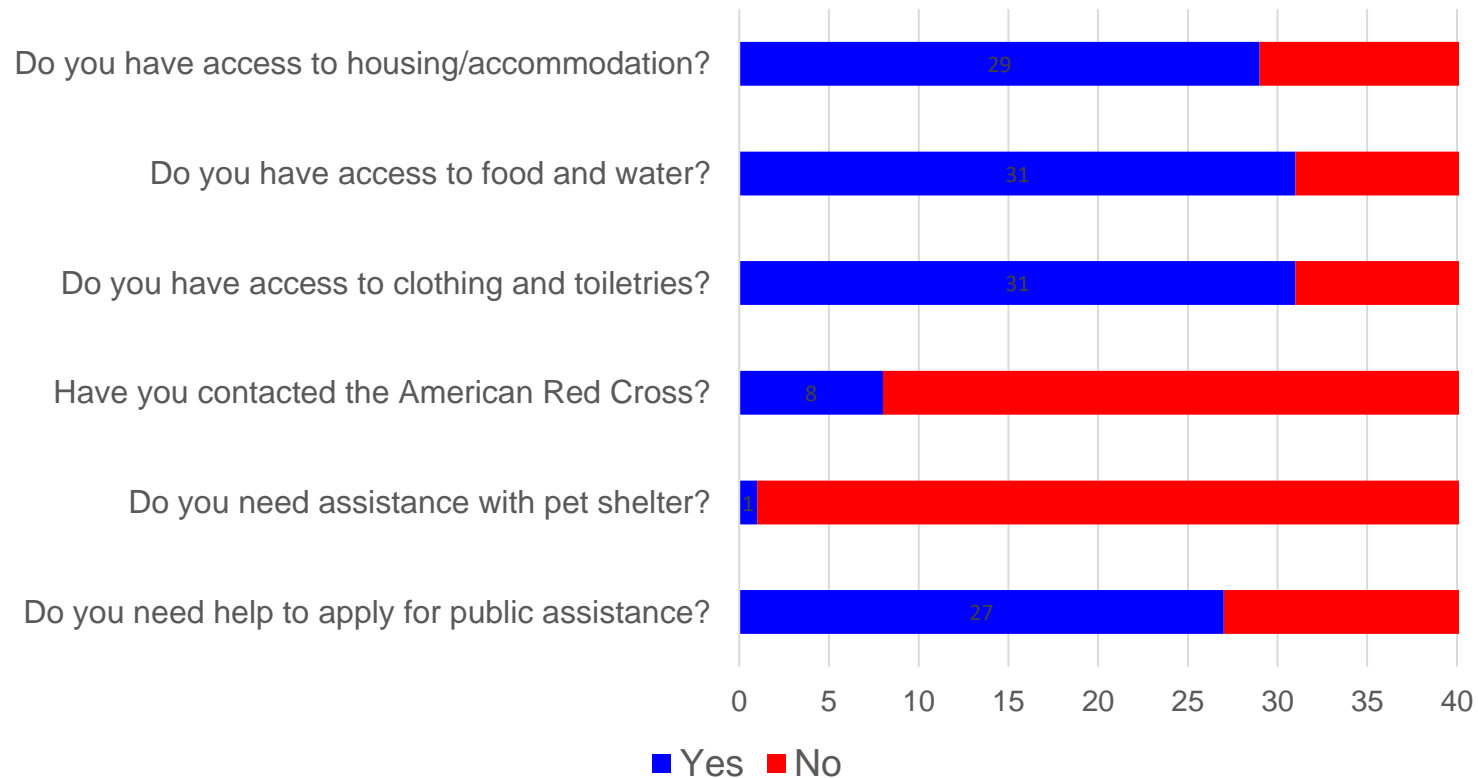
Planning Assessment



- HPIA members responded the most to this disaster survey.
- HFNA and OGOHO members followed closely behind.
- Others* comprised members of HTFC, Ulu Cooperative and Cacao Associations (East Hawaii and Kona).

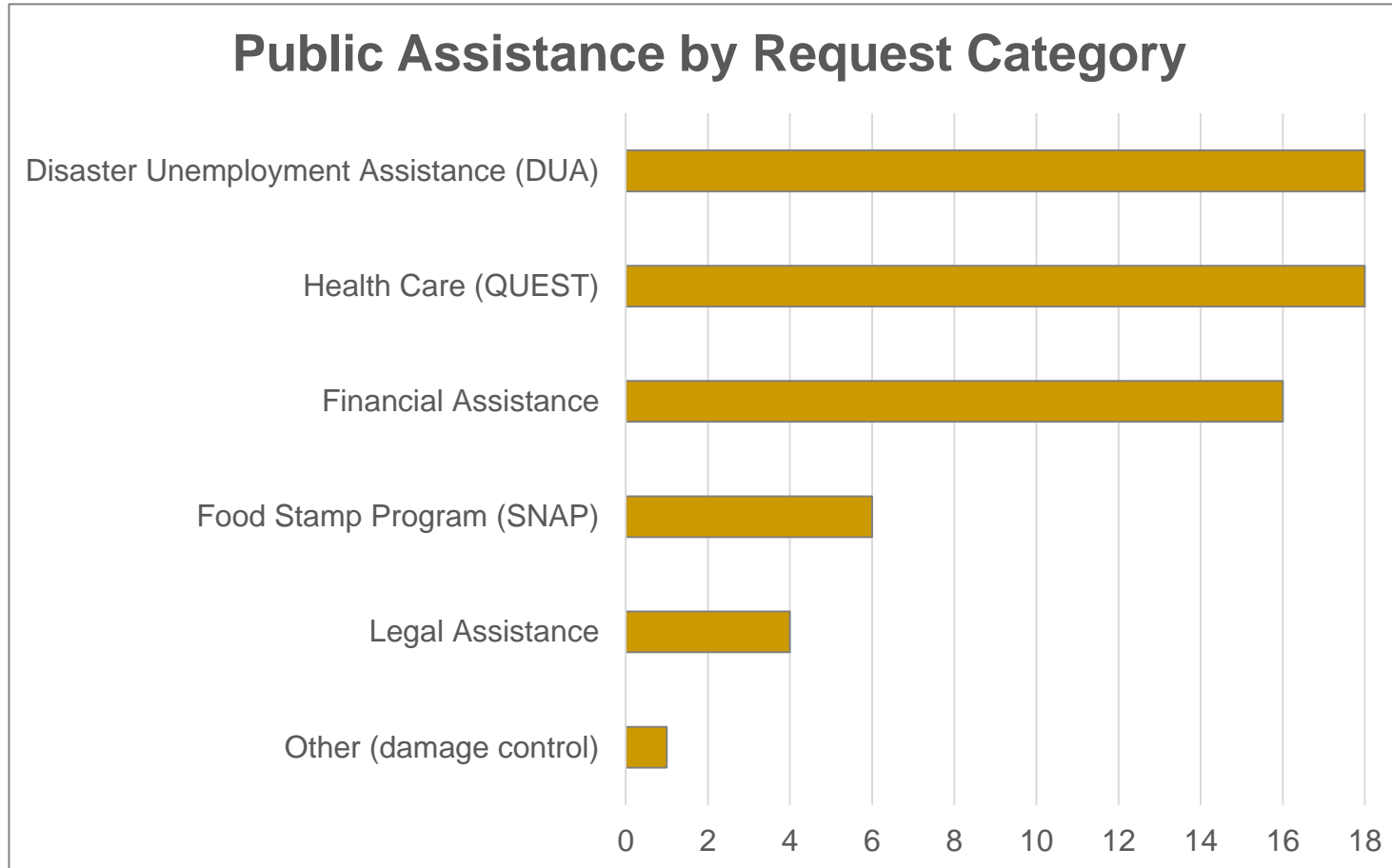
Immediate Need Assessment

Basic Need Category



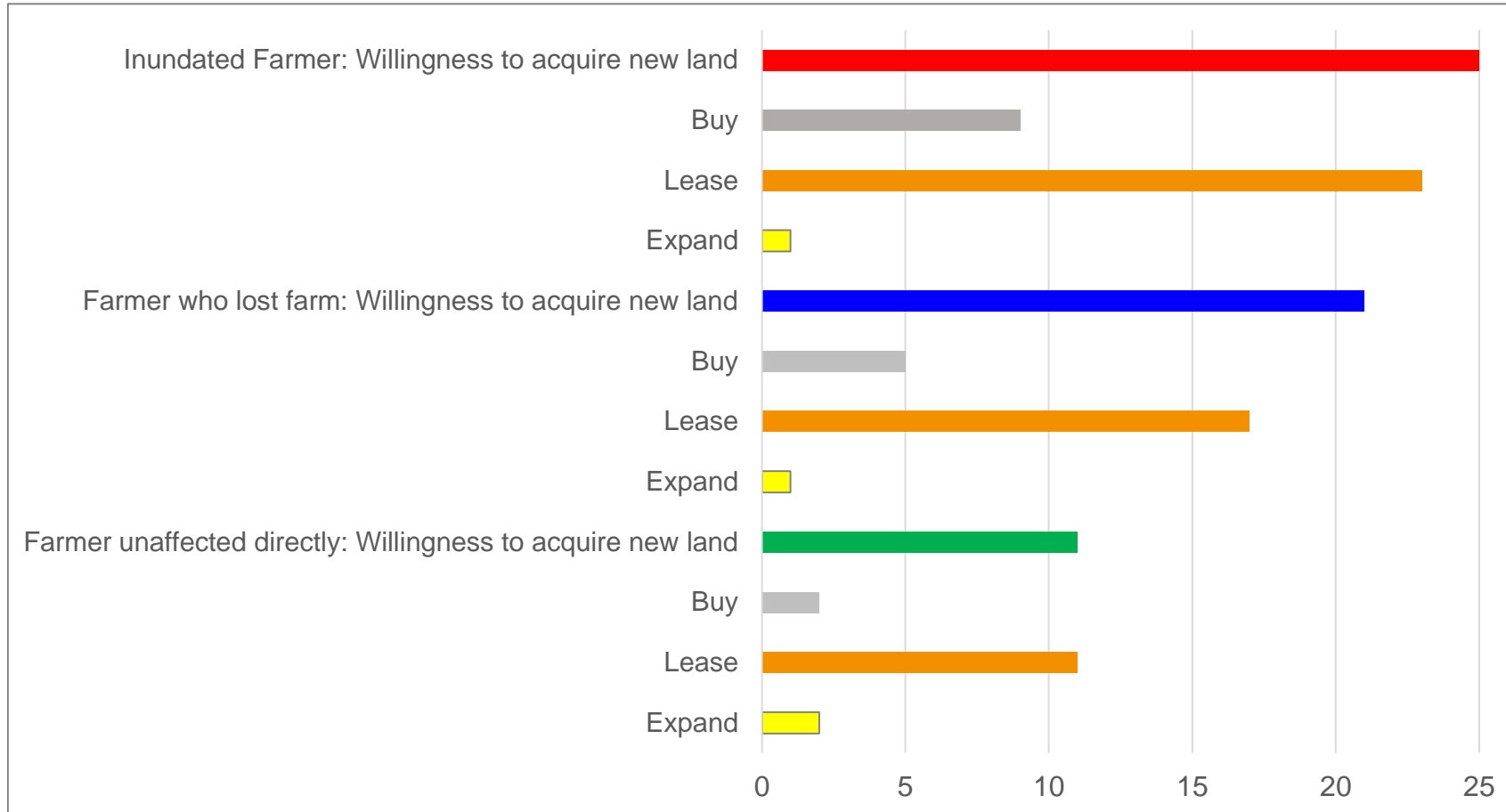
- Majority of producers have access to housing, food, water, clothing and toiletries after the disaster.
- One-fifth (20%) contacted the American Red Cross.
- Few needed assistance with pet shelter (2%).
- Most producers (63%) needed help to apply for public assistance.

Immediate Need Assessment



- DUA and health care (QUEST) attracted the most interests among different categories of public assistance.
- This was followed by financial assistance, the food stamp program (SNAP), and legal assistance.

Future Farming Plan



- Most inundated farmers and those who lost farms were willing to start over by leasing or buying new lands.
- Not many respondents were willing to expand the size of their previous farms.

Conclusion

- Kilauea East Rift Zone eruptions, beginning in May 2018, affected at least 46 farms and displaced over 1,337 acres of arable land on the Island of Hawaii.
- Total losses reported in the farm disaster survey was \$27.9 million.
- Distribution of overall losses by category were as follows:
 - Crops – 61%
 - Land – 15%
 - Building Structure – 12%
 - Inventory – 11%
 - Equipment – 1%
- Ag industries with the highest reported losses: floriculture & nurseries (\$13.3 mil.) and papayas (\$6.5 mil.).

Appendix

Farm Disaster Survey 2018Up - Word

Loke, Matthew K

CONFIDENTIAL FARM DISASTER SURVEY, KILAUEA ERUPTION 2018

Producer Name & Address:

Mobile Phone: _____

Is your farm property owned, leased or rented?
 (Check option) Owned Go to I
 Leased Go to I/II
 Rented Go to II

I. Property Assessment

Size of Farm Property Displaced (acres): _____

Location: _____

TMK Number: _____

	Assessed Value (\$)	% Damaged	Estimated Damage
A Land (use one survey per TMK)			\$
B Legal building structure (specify type):			
House			\$
Office			\$
Greenhouse			\$
Processing facility			\$
Packing facility			\$
Storage facility			\$
Outdoor catchment			\$
Irrigation			\$
Other (list)			\$
Other (list)			\$
Sub-Total			\$

II. Equipment Assessment

	Current Value (\$)	% Damaged	Estimated Damage
Tractor			\$
Truck			\$
Forklift/Lift truck			\$
ATV			\$
Refrigerator			\$
Reefer			\$
Generator			\$
Other (list)			\$
Other (list)			\$
Sub-Total			\$

III. Crop Assessment

	I	II	III
Crop Name (e.g. Flowers)			
Crop Type (e.g. Dendrobium)			
Crop Loss Date (e.g. 05-14-2018)			
Planted Acreage (e.g. 0.5 acre)			
Disaster Affected Acreage (e.g. 0.5 acre)			
A Estimated Value of Planted Crop (\$)			
Proportion Damaged (%)			
Estimated Damage (\$)	\$	\$	\$
B Estimated Value of Planted Tree/Shrub (\$)			
Proportion Damaged (%)			
Estimated Damage (\$)	\$	\$	\$
Sub-Total	\$	\$	\$

Page 1 of 4

Page 2 of 4

III. Crop Assessment (continue)

	IV	V	VI
Crop Name (e.g. Flowers)			
Crop Type (e.g. Dendrobium)			
Crop Loss Date (e.g. 05-14-2018)			
Planted Acreage (e.g. 0.5 acre)			
Disaster Affected Acreage (e.g. 0.5 acre)			
A Estimated Value of Planted Crop (\$)			
Proportion Damaged (%)			
Estimated Damage (\$)	\$	\$	\$
B Estimated Value of Planted Tree/Shrub (\$)			
Proportion Damaged (%)			
Estimated Damage (\$)	\$	\$	\$
Sub-Total	\$	\$	\$

IV. Inventory Assessment

	Estimated Value (\$)	% Damaged	Estimated Damage
Products ready for market			\$
Seed/seedling			\$
Fertilizer			\$
Herbicide			\$
Pesticide			\$
Packing material			\$
Cinder block			\$
Other (list)			\$
Other (list)			\$
Sub-Total			\$

V. Planning Assessment (Check option)

- Do you live on your farm? Yes No
- Will disaster affected acreage be replanted? Yes No
- Will disaster affected acreage be put to other use? Yes No
- If farm is destroyed, willingness to start over? Yes No
- If farm is destroyed, willingness to relocate? Yes No
- Do you have crop insurance? Yes No
- Do you have access to NAP insurance? Yes No

***Indicate your membership in agriculture organization (Please check all that apply)**

- Hawaii Floriculture & Nursery Association (HFNA) Yes No
- Orchid Growers of Hawaii (OGO) Yes No
- Hawaii Export Nursery Association (HENA) Yes No
- Hawaii Papaya Industry Association (HPIA) Yes No
- Hawaii Tropical Fruit Growers Association (HTFGA) Yes No
- Hawaii Farm Bureau Federation (HFBF) Yes No
- Hawaii Farmers Union United (HFUU) Yes No
- Hawaii Macadamia Nut Association (HMNA) Yes No
- Other (list) Yes No
- Other (list) Yes No


VI. Immediate Need Assessment (Check option)

- Do you have access to housing/accommodation? Yes No
- Do you have access to food and water? Yes No
- Do you have access to clothing and toiletries? Yes No
- Have you contacted the American Red Cross? Yes No
- Do you need assistance with pet shelter? Yes No
- Do you need help to apply for public assistance? Yes No
- Food Stamp Program (SNAP) Yes No
- Health Care (QUEST) Yes No
- Disaster Unemployment Assistance (DUA) Yes No
- Financial Assistance Yes No
- Legal Assistance Yes No
- Other (list) Yes No
- Other (list) Yes No

VII. Future Farming Plan (Check option(s))

- Inundated Farmer: Willingness to acquire new land Buy Lease Expand Farm
- Farmer who lost farm: Willingness to acquire new land Buy Lease Expand Farm
- Farmer unaffected directly: Willingness to acquire new land Buy Lease Expand Farm

Completed survey form(s) is/are due in to M. Loke at loke@hawaii.edu(scanned attachment) or mailing address at M. Loke, c/o NREM, Univ. of Hawai'i at Mānoa, 1910 East-West Road, Sherman 101, Honolulu, HI 96822 by August 31, 2018. Thank You!

A photograph of a sunset over a beach. The sun is low on the horizon, creating a bright orange and red glow. A large, vibrant rainbow arches across the sky above the sun. The foreground shows the dark silhouette of a beach and the ocean. The sky is a mix of deep blue and orange.

Mahalo Nui for your Attention!

Acknowledgements:

- Kelvin Sewake, Interim Assoc. Dean & Assoc. Director for Cooperative Extension Service, UH-CTAHR
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- Weston Yap, EDS, Hawaii Dept. of Agriculture