Assessment of the Agricultural Impacts of Hurricane Milton in Florida

Principal Investigator:

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Please read the information below carefully before you decide to participate in this research study.

Your participation is voluntary. You can decide not to participate or later decide to stop participating at any time without penalty or lose any benefits that would normally be expected.

- 1. Purpose of the Study: The purpose of this research study is to rapidly assess the agricultural impacts resulting from natural disasters, such as hurricanes, that impact the state of Florida. Survey results will be combined with a detailed baseline database on agricultural assets in Florida to estimate production losses in support of informed local, state, and federal decision-making processes related to disaster declaration, response, and relief.
- 2. What will you be asked to do: You will be asked to enter values or estimates on total crop, livestock, or aquaculture acreages, the percentage of those totals affected by the event, and the estimated production losses associated with the event. You will also be asked if you have photos that document the impacts on your operation that you are able and willing to share. In addition, if you are interested in providing information on additional types of impacts, you will be asked for values or estimates related to losses associated with infrastructure damage, damages to stored harvested products, or damages to stored agricultural inputs.
- **3. Time Required:** Depending on the complexity of your operation, it should take about 10 20 minutes to participate in the research.
- **4. Research Benefits:** There are no direct benefits to you for being in this study. The production agriculture sector as a whole might derive indirect benefits from more detailed, accurate information on the agricultural impacts of disaster events being available to local, state, and federal level decision makers as well as the general public.
- **5. Research Risks:** There are no risks or discomforts anticipated.
- **6. Statement of Confidentiality:** Your participation in this research is confidential. Information collected about you will be stored in computers with security passwords or in locked filing cabinets. Only certain people have the legal right to review these research records, and they will protect the confidentiality of these records as much as the law allows. These people include the researchers for this study, certain University of Florida officials, and the Institutional Review Board (IRB; an IRB is a group of people who are responsible for looking after the rights and welfare of people taking part in research). Otherwise, your research records will not be released without your permission unless required by law or a court order. The researchers will not share identifiable information about you if they publish, present, or share the results of this research.
- **7. Who to contact if you have questions:** Please contact Christa Court at ccourt@ufl.edu or (352) 294-7675 with questions or concerns about this study.
- **8. Voluntary Participation:** Your decision to be in this research is voluntary. You do not have to do any study activities that you do not want to take part in. You can stop at any time. If you decide you want to stop participating in the research, you can let the research team know or call the Principal Investigator at any time at (352) 294-7675. If you choose not to take part, this will have no effect on you or your relationships with the University of Florida. If you have any questions about your rights as a research subject, you can phone the Institutional Review Board at 352-273-9600.

Participation in the research implies that you have read the information in this form and consent to take part in the research. Please save a copy of this form for your records or future reference.

Dat	e:				
Res	sponse type:				
	Farm owner/operator		Florida Cooperative Extension - UF/IFAS		
	Florida Cooperative Extensio	n - FAMU	Local Government Agency Representative		
	State Government Agency Re		Federal Government Agency Representative		
		opresentative	Todalar Covernment rigency representative		
	Other				
If C	Other, please specify:				
	l you observe losses/damages b l you consult with a farm owne (circle) Yes / No	-	d? (circle) Yes / No e regarding the losses/damages being reported?		
Sel	ect the Florida county or coun	ties in which the farm	is located and write in the ZIP code of your operation		
wit	hin each county (if known) - (c				
	Alachua	Hardee	Okeechobee		
	Baker	Hendry	Orange		
	Bay	Hernando	Osceola		
	Bradford	Highlands	Palm Beach		
	Brevard	Hillsborough			
	Broward	Holmes	Pinellas		
	Calhoun	Indian River	Polk		
	Charlotte	Jackson	Putnam		
	Citrus	Jefferson	St. Johns		
	Clay	Lafayette	St. Lucie		
	Collier	Lake	Santa Rosa		
	Columbia	Lee	Sarasota		
	DeSoto	Leon	Seminole		
	Dixie	Levy	Sumter		
	Duval	Liberty	Suwannee		
	Escambia	Madison	Taylor		
	Flagler	Manatee	Union		
	Franklin	Marion	Volusia		
	Gadsden	Martin	Wakulla		
	Gilchrist	Miami-Dade	Walton		
	Glades	Monroe	Washington		
	Gulf	Nassau			
	Hamilton	Okaloosa			
Dis	aster Type - please choose the	disaster type that best	fits the event		
	Hurricane/Tropical Storm	Excess Rain	Freeze		
	Severe Weather/Storm	Flood	Excess heat		
	Tornado	Drought	Wildfire		

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Other

Hail

Wind

If Other, please specify:

Which of the following agricultural commodity groups on this farm were affected by the disaster?

Fruits and Nuts	Vegetables, Melons, and	Field crops
	Potatoes	
Horticultural crops	Livestock	Animal Products
(greenhouse and nursery)		
Aquaculture	None of the above	

In the following tables, for each agricultural commodity or type of infrastructure affected by the disaster, provide information on farm area or number of units, percentage of that area that was damaged or destroyed, and estimated percentage of production lost on the affected acreage. There are also optional questions related to damage to stored harvested products, stored agricultural inputs, and infrastructure.

Fruit Crops - if your operation is in multiple counties, please make a note the breakdown of acreage and the difference in losses experienced across counties.

Crop	Total farm area in crop (acres)	Percentage area damaged or destroyed (%)	Estimated production loss associated with affected acreage (%)	(OPTIONAL) Amount of harvested products (not for personal use) stored on farm Note: please specify units.	(OPTIONAL) Percentage of stored products damaged (%)
Avocados					
Blackberries					
Blueberries					
Berries, Other					
Citrus, Other					
Grapes					
Lemons					
Mangoes					
Olives					
Oranges					
Papayas					
Peaches					
Pecans					
Strawberries					
Tangelos					
Tangerines					
Temples					
Other Please specify:					
Pounds per acre	· Avocados: Rla	ckherries: Blueber	ries: Rerries, other:	L Chestnuts: Granes: Ma	ngoes: Olives:

Pounds per acre:	Avocados;	Blackberries;	Blueberries;	Berries,	other; Cl	nestnuts;	Grapes;	Mangoes;	Olives;
Papayas; Peaches;	Pecans;								

Boxes per acre: Citrus, Other; Lemons; Oranges; Tangelos; Tangerines; Temples

Stored Fruit Crop Inputs (OPTIONAL)

Inputs	Quantity on farm (pre-disaster)	Quantity destroyed
Fertilizer (pounds)		
Seeds (pounds)		
Pesticides (pounds)		
Other Please specify:		

Vegetable, Melon, and Potato Crops - if your operation is in multiple counties, please make a note the breakdown of acreage and the difference in losses experienced across counties.

Crop	Total farm area in crop (acres)	Percentage area damaged or destroyed (%)	Estimated production loss associated with affected acreage (%)	(OPTIONAL) Amount of harvested products (not for personal use) stored on farm Note: please specify units.	(OPTIONAL) Percentage of stored products damaged (%)
Beans					
Broccoli					
Cabbage					
Carrots					
Cauliflower					
Cucumbers					
Peas					
Peppers					
Potatoes, white					
Pumpkins					
Spinach					
Squash					
Sweet Corn					
Sweet Potatoes					
Tomatoes					
Zucchini					
Other Please specify:					

Stored Vegetable Crop Inputs (OPTIONAL)

Inputs	Quantity on farm (pre-disaster)	Quantity destroyed
Fertilizer (pounds)		
Seeds (pounds)		
Pesticides (pounds)		
Other (please specify)		

Field Crops - if your operation is in multiple counties, please make a note the breakdown of acreage and the difference in losses experienced across counties.

Crop	Total farm area in crop (acres)	Percentage area damaged or destroyed (%)	Estimated production loss associated with affected acreage (%)	(OPTIONAL) Amount of harvested products (not for personal use) stored on farm Note: please specify units.	(OPTIONAL) Percentage of stored products damaged (%)
Corn					
Cotton					
Hay, Haylage, Silage					
Millet					
Oats					
Peanut					
Peas					
Rye					
Sorghum (grain)					
Soybeans					
Sugarcane					
Tobacco					
Wheat					
Other Please specify:					

Stored Field Crop Inputs (OPTIONAL)

Inputs	Quantity on farm (pre-disaster)	Quantity destroyed
Fertilizer (pounds)		
Seeds (pounds)		
Pesticides (pounds)		
Other Please specify:		

Horticultural Crops (Greenhouse and Nursery) - if your operation is in multiple counties, please make a note the breakdown of acreage and the difference in losses experienced across counties.

Crop	Total farm area in crop (square feet)	Percentage area damaged or destroyed (%)	Estimated production loss associated with affected acreage (%)
Aquatic Plants			
Bulbs, Corms, Rhizomes & Tubers			
Christmas Trees			
Cut Flowers & Cultivated Greens			
Floriculture, Other			
Flower or Vegetable Seeds			
Flowering Plants, Potted			
Tropical Foliage Plants			
Mushrooms			
Propagative Material			
Transplants			
Woody Ornamental Trees and Shrubs			
Other Please specify:			

Stored Horticulture/Nursery Crops Inputs (OPTIONAL)

Inputs	Quantity on farm	Quantity destroyed
Fertilizer (pounds)		
Seeds (pounds)		
Pesticides (pounds)		
Other Please specify:		

Livestock - if your operation is in multiple counties, please make a note the breakdown of animals

and the difference in injuries/losses experienced across counties.

Animal type	Number on farm	Number injured	Number lost/dead
Alpacas			
Bison			
Beef cattle 400 lbs. or less			
Beef cattle greater than 400 lbs.			
Dairy cattle 400 lbs. or less			
Dairy cattle greater than 400 lbs.			
Chickens			
Deer			
Ducks			
Elk			
Emus			
Equine (Horses, Donkeys)			
Goats			
Guineafowl			
Hogs			
Honeybee Colonies			
Ostriches			
Pheasants			
Pigeons & Squab			
Quail			
Rabbits			
Sheep			
Turkeys			
Other Please specify:			

$Stored\ Livestock\ Inputs\ (OPTIONAL)$

Inputs	Quantity on farm	Quantity destroyed
Livestock silage (pounds)		
Stored hay (pounds)		
Animal medicine (number)		
Bird scratch/feed (pounds)		
Feed Grain (pounds)		
Other Please specify:		

Animal Products - if your operation is in multiple counties, please make a note the breakdown of production and the difference in losses experienced across counties.

Product	Amount produced on farm last year	Percentage of annual production lost in disaster (%)
Eggs (number)		
Honey (pounds)		
Milk (hundredweight)		
Meat (pounds)		
Wool (pounds)		
Other Please specify:		

Aquaculture - if your operation is in multiple counties, please make a note the breakdown of number and the difference in losses experienced across counties.

Animal type	Number on farm	Number injured	Number dead
Baitfish			
Crustaceans			
Finfish			
Food fish (catfish, trout, etc.)			
Shellfish			
Mollusks (clams, oysters, etc.)			
Sport or Game Fish			
Other Please specify:			

Stored Aquaculture Products

Product	Amount stored on farm	Percentage lost in disaster (%)
Stored fish		
Stored crustaceans		
Stored Bivalves		
Other Please specify:		

Stored Aquaculture Inputs (OPTIONAL

Inputs	Quantity on farm	Percentage damaged (%)
Fish feed (pounds)		
Fingerlings (pounds)		
Aquatic medicines (number)		
Shellfish seed (pound)		
Other Please specify:		

Infrastructure (OPTIONAL) - if your operation is in multiple counties, please make a note the breakdown of infrastructure and the difference in losses experienced across counties.

Asset type	Quantity on farm	Quantity damaged or destroyed
Homes (number)		
Greenhouses and other growing structures (number)		
Other farm buildings (number)		
Irrigation system structures (number)		
Farm equipment: tractors, implements, vehicles, greenhouse heating/cooling (number)		
Fences (linear feet)		
Conservation structures: ponds, dams, culverts (number)		
Storage facilities: silos (number)		
Vineyards (number plants)		
Fruit/nut trees or bushes (number plants)		
Non-fruit trees or bushes, except Christmas trees (number plants)		
Livestock sheds (poultry, cattle, equine, etc)		
Livestock watering points		
Aquaculture structures: ponds, tanks, equipment (number)		
Boats (number)		
Bags/cages/floats (number)		
Other structures (number) Please describe:		

Briefly describe any other types of damages or losses or general comments about disaster damages observed on this farm