AGRICULTURE AND DISASTERS

Historically, the amount of disaster response support agriculture receives has varied with location demographics. Since the initial response concern for all disasters is “life safety,” in larger populations areas the percentage of resources dedicated to agriculture producers is often overshadowed by protecting towns and cities. As impacts move out to smaller population areas the emphasis becomes increasingly more cognizant to the needs and importance of agriculture. Notably, in rural areas the population is directly tied to agriculture population and it is significant that many of the law enforcement, fire and medical response systems are made up of a high number of agriculture producers.

Since agriculture assets are usually determined to be property, they are addressed second to life risk even though their integrity is crucial to the welfare, vigor, and sustainability of rural communities. Due to this factor, agriculture producers have self-deployed and responded as neighbors to mitigate impacts to both rural populations and the associated agriculture life resources.

Although some rural residents are trained and experienced, often other agriculture producers lack safety training, resources and the crucial connection to response entities such as Emergency Managers, that could provide them with enhanced safety, effectiveness and possibly mitigate impacts to crucial agricultural community assets.

FORMING AND TRAINING AG RESPONSE TEAMS

In both Incident Command System (ICS) and agriculture the common phrase, “if you are not on the inside—you are on the outside” can generate human and property losses. If ICS structure ran by emergency management authorities can develop and train an “Ag Branch,” the gaps in communication, function and safety can be resolved. The key with disaster resources and responses is to understand each other’s role and expertise in addition to being able to contact each other in times of duress.

Emergency officials usually have a pre-determined response structure which includes communication resources, authority, common operating picture and regular situational analysis updates.

Agriculture producers usually have unique in-depth expertise of land ownership, current use, relationships, crop locations, animal locations, animal handling techniques, a close relationship with each other and a wide expertise, and access to a variety of equipment across the landscape. Though producers often have intimate knowledge of land parcel access they may not understand changing conditions and risk elements during a disaster.
By forming agriculture response branches, it is possible to blend the resources of both entities bringing the strength of each to work in a coordinated manner.

**FORMATTING AN AG RESPONSE TEAM**

Authorities normally functioning within a disaster include the emergency manager, sheriff, county administrators, public health, road and bridge managers and others. To form and train an agriculture response branch which can work within the emergency management structure, consider these groups:

- livestock producers from each area,
- crop producers from each area,
- veterinarians,
- feed and equipment dealers,
- cooperative extension educators,
- brand inspectors,
- sale yard managers,
- fairgrounds managers,
- agriculture lenders,
- agriculture haulers, and
- crop sprayers.

Extension educators have access to agriculture disaster training programs which both align with the emergency management training requirements but also can be tailored to address area agriculture vulnerabilities for wildfire, flooding, disease outbreak, storms or other factors which producers will relate to and understand the need to engage.

The Extension Disaster Education Network (EDEN) (www.extensiondisaster.net) which has delegates in each state’s Extension system, has been working with the USDA National Institute of Food and Agriculture and FEMA to develop and present such courses. Trainings have been provided to over 4,000 counties in the United States.

**TRAINING TO RESPOND / RESPONDING AS TRAINED**

Once a potential group is determined to make up a County Ag Response Team (CART), one of the easiest manners to familiarize everyone as to roles, authorities, knowledge and capabilities is to have emergency entities participate in a training exercise which walks the group through a scenario realistic for the area. By providing a multi-part scenario, with discussion broke down to groups which are actually involved in a specific part of a county or parish, the parties will become familiar with each other and their respective roles and expertise.

Facets which must be reviewed are:

- What risk vulnerabilities are present for a specific disaster incident?
- Who has authority to do what actions?
- Who has expertise in different parts of response?
- Who has resources that are available?
- Who has intimate familiarity with an area?
- What capabilities are needed and which are not present?
- What actions are possible?
- How do entities organize and communicate?

These training activities will generally lead to side conversations and realizations that emergency management may have a whole new team available and agriculture producers can get some efforts dedicated to them without compromising safety. This leads to some basic training in incident command for producers as well as a variety of orientations needed by traditional emergency managers.

Training and certification of agriculture entities can also make them available as paid resources for other non-agriculture incidents which require equipment and hauling. Remember a large number of producers or their family members are often already engaged in volunteer fire departments and can help other producers work with the system.
RECOMMENDED AG BRANCH TRAINING
For an authorizing emergency manager to begin an agriculture response branch it will need some focus. It is recommended a number of teams are formed after initial ICS and safety training is completed. These include: a livestock evacuation team, an animal shelter team, a livestock transportation accident team, a disease outbreak team, a livestock mortality handling team, an emergency feeding team and a crop response team which may include crop storage response. In special circumstances the emergency manager may designate a need for additional teams operating under the Ag response branch. In Pueblo County Colorado, a team was designated to assist boat teams with livestock during flooding on the Arkansas River in 1999 and 2000. In all cases these trained team members can assist with damage assessment and sharing out media from the public information officer.

Training, which should be mandatory for agriculture response teams, including
- Incident Command System 100/200/700/800,
- Basic Wildfire Response 130/190,
- Basic radio communications,
- FEMA IS-5.A—An Introduction to Hazardous Materials,
- NOAA Weather Spotter Program,
- FEMA AWR 117—Preparing Communities for Animal, Plant And Food Incidents,
- FEMA EMI Virtual Trainings VTTX0026 and VTTX0001 on livestock disease, livestock evacuation, animal sheltering, and crop decimation,
- Penn State/USDA FSA/EDEN agriculture disaster damage documentation guidelines, and
- Other course work as needed.

STARTING A TEAM
Emergency managers with the assistance of Extension educators can advertise the first community meeting with representatives of livestock and crop organizations as well as related industry representatives. Once the initial meeting, review or training is conducted, an emergency manager can identify how many teams they need based on risks and demographics. Then it is only a matter of clarifying a certain number of team leaders, assistant team leaders and team members needed to populate a call-up contact base.

Once teams are formatted, specific training can be scheduled and delivered to participants to allow them to be “duty ready.” Emergency managers need to address expectations, liability, operating protocols and other factors with volunteers. Incident command systems’ training will provide prospective volunteers an understanding of the protocols, call-out procedures and operational guidelines.

LEADERSHIP, IDENTIFICATION AND COMMUNICATION
Crucial items to setting up agriculture response teams are identifying respected team leaders and team members so they can be recognized by other emergency agencies and providing effective communication tools for safety and effectiveness.

A good approach used by several jurisdictions is to have two to three team leaders who are on call for the emergency manager (EM). When the EM notifies a team leader a response is needed, the team can respond to a staging area to get their briefing and assignments and pick-up official radios and ID for vehicles which let officials know who they are. This approach folds them into the integrated response of an operational plan and communication network so they receive updates and emergency traffic if needed. It can also provide progress updates and location to their branch director and team leader who can update the incident command post as needed. All members should have specific call signs for tracking and safety.

Since agriculture response team members often live in remote rural segments of communities, they can serve as outposts for feeding information to the emergency manager on impacts, access, weather and other issues related to emergencies and disasters. They can often quickly delineate and identify which properties or families have been impacted since they often know them personally. Such field knowledge helps emergency managers generate a viable operating picture during an incident.

MANAGING DEPLOYMENT OF AGRICULTURE TEAMS
It is crucial agriculture team members operate within the structure of emergency management and do not self-deploy on their own initiative. Only by being in the communication loop can agriculture teams understand current risks and get timely updates to avoid safety threats and conditions. County Agricultural Response Teams (CARTs) operate under the authority of the local emergency manager or a state official.

Agricultural response teams are normally deployed for the following functions:
- Impact assessment in rural locations or impacts to agricultural resources including crops and other products.
- Movement, handling or evacuation of livestock and/or equipment.
- Sheltering livestock once evacuated.
- Conducting control or mitigation efforts with agricultural equipment.
• Assisting in containment of livestock related and zoonotic disease issues.
• Establishing supply points or delivery of emergency supplies to agriculture producers and rural residents.
• Providing rural knowledge to incident commanders and emergency operations centers.

TEAM STRUCTURE RECOMMENDATIONS
When structuring and training agriculture response teams there should always be a level of redundancy with leadership in case people in assignments are not available or are incapable of responding.

Each geographic area should have a team leader and an assistant team leader engaged with emergency management. If possible, a communication system should link each emergency management system with similar structure in adjacent areas which may be out of the impact area.

There should also be team leaders and assistant team leaders for each of the functions listed above, and several people qualified to serve as ag safety officers to watch over team functions at the 10,000 ft level.

CIVIL DISASTER VERSUS AGRICULTURE DISASTER
Civil disasters are those documented, declared and responded to under the authority of the local government structure. Agriculture disasters can be a component of civil disasters but can also occur independently if civil life threats are minimal.

Agriculture disasters are initiated by an assessment by the USDA Farm Services Local Emergency Operating Committee (LEOC) usually made up of the USDA FSA County Director, the USDA Natural Resources Resource Conservationist, the USDA Rural Development Officer, the USDA National Institute of Food and Agriculture Educator (Extension Educator), and members of the local USDA FSA County Producer Committee. Once impact is documented a local declaration can be sent to the USDA FSA State Director, then to the Secretary of Agriculture and the President for signing. This enables USDA programs, response and funding to assist impacted areas.

By dovetailing communication and training between civil disaster officials and USDA agricultural officials it allows Agriculture Response Teams to work on both platforms simultaneously for the best response and recovery.

USDA agencies including Extension already have pre-existing relationships and data concerning rural residents, producers and local issues. This combined with their extensive communication capability, expertise and skill set can be a significant resource for local emergency managers.

Extension in Wyoming and across 84 land-grant and sea-grant universities who partner as the Extension Disaster Education Network (EDEN) have access to training coursework, and over 380 people with expertise in disaster preparedness, mitigation, response and recovery who are already incorporated within states and communities. For more information, contact your local Extension office.