



# Journal of Preparedness and Recovery

Disaster Preparedness and Recovery  
Disaster Prevention Planning  
Training and Exercises  
Crisis Communications  
Resiliency

Volume 1, Issue 1

Spring 2013



# Journal of Preparedness and Recovery

Published by the Center for Preparedness and Recovery  
Arkansas Tech University

402 West O Street  
Dean Hall Room 110  
Russellville, AR 72801  
479-356-2092 ♦ Fax: 479-356-2091

**Web site:**  
[www.jopar.org](http://www.jopar.org)

**E-mail:**  
[admin@jopar.org](mailto:admin@jopar.org)  
[editor@jopar.org](mailto:editor@jopar.org)

## Editorial Review Board

### Editor In Chief

**Dr. Richard A. Ihde**  
Associate Professor

### Associate Editor

**Jamie Earls**  
Assistant Professor

### Editorial Board

**Dr. Sandy M. Smith, RN.**  
Associate Professor

**Elizabeth Gray, JD.**  
Associate Professor

**Dr. Michael Garner**  
Assistant Professor

**J.O. Bailey**  
Assistant Professor

**Dr. Jan Kallberg**  
Assistant Professor

**Edwin Leachman**

## Contents

### Research Papers

- ◆ The Evaluation of Emergency Management Systems Through Exercises  
*Richard Ihde, Ed.D.* ..... Page 4
- ◆ Central Arkansas Response to Medical Evacuations Related to Hurricane Gustav  
*Richard Ihde, Ed.D.*  
*Doug Brown, DBA(c), MS, CHEP, NREMT-B*  
*Ronald Crane, Jr.*..... Page 17

### Book Review

- ◆ Drugs and Contemporary Warfare by Paul Rexton Kan  
*Jan Kallberg, Ph.D.* ..... Page 30

### Interview

- ◆ The Role of an International Development Non-Governmental Organization (NGO) in Disaster Management: An Interview with Jo Luck, Past President and CEO of Heifer International  
*Elizabeth Gray, J.D.*..... Page 33

## **The Evaluation of Emergency Management Systems Through Exercises**

Dr. Richard Ihde, Associate Professor  
Department of Emergency Management  
Arkansas Tech University

### **Abstract**

The value of creating plans and exercising those plans to assure success in a response is a fundamental concept in emergency management. The prescribed steps or actions documented in a plan represent a thought process starting with the planner asking “what if” something happens. The planner then looks for the best strategy to prevent or lessen the impact of a disruptive event. Should that mitigation strategy fail, or be less than effective, the next step is a response to control the situation and begin to restore normalcy. Finally the post event strategy is developed building on those initial steps to recover from the disruption and move toward restoration. These actions, built upon comprehensive emergency management concepts, represent a system with the sole purpose assuring resiliency in a chaotic situation. Exercises are a way of testing the efficacy of that system and revealing gaps or weaknesses which can cause the collapse of the system and negate any efforts to achieve situational certainty.

The one true purpose and ultimate goal of any plan is to assure, to whatever extent possible, the certainty of the outcome of a series of events. The planner is attempting to bring order from chaos by remote control. His weapon of choice is an artificial construct – a plan which guides the actions of participants, both willing and unwilling, toward a pre-determined outcome. The extent to which he achieves that outcome is subjective and often a matter of interpretation in which the planner determines the criteria for success. The idea that this construct, or system, can be used to control outcomes and that one can pre-determine, to some extent, how successfully this will occur is the basis for evaluation in the exercise of emergency plans of all types.

## The Planning Process

In the world of emergency response, plans are a common tool used to aid those who respond to provide quick and effective action which can prevent the loss of life or lessen the impact of an unexpected event. Properly constructed, a plan gives an advantage by taking a proactive stance toward the elimination of the disruption of societal flow and its ongoing activities. By asking questions and looking for answers regarding possible causes of a disruption and then prescribing actions to counter that disruptive effect, the planner moves toward that ultimate goal of certainty. He does so by anticipating possible hazards and associated risks and exploring actions which can impede the onset of possibly dire consequences. Coombs (2012), in writing about this idea in terms of crisis management, states that it is “a set of factors designed to combat crises and to lessen the actual damage inflicted” (p. 5).

Consideration of these factors can lead to an understanding of the planning process. In simple terms, “planning provides the opportunity to anticipate conditions and systematically identify potential problems and workable solutions” (FEMA, 2010a, pp. 1-3). The strategy often taken is to consider the outcome desired and work backward toward formulating a series of steps designed to reach that outcome and provide the workable solution needed. It is important to note that this process cannot take place in a vacuum. A successful plan is a collaborative effort involving people at all levels and, in particular, those who have an interest in the successful execution of a plan. These are the people who must bring “their resources and strengths to the table” (FEMA, 2011b, p. 2.6) to help with the formulation of a solution with a high level of merit.

When formulating a response and documenting the steps necessary to make that response effective and predictable it is worth noting that having the foresight to, as with any such activity,

build the system with success in mind is but the first step in the process. Simply stating you will do something when prompted by circumstances is not enough as an observation by Gay and Chenault (1973) points out “it is not simply a matter of being quick on your feet – that’s how the non-professional responds to disaster. In a crisis, your effectiveness is often a result of what you have done the rest of the year” (p. iii). In other words, gathering your forces and resources to do battle against the hazard you have identified based on your analysis. The obvious next step is to try it out. Put the system in motion, practice the prescribed actions and look for the desired outcomes.

### **The Exercise Design Process**

It thus becomes necessary to work through the steps in a trial scenario and perform an evaluation of those steps and, more importantly, the final outcome of the planning work that has been done. It can be stated that, “the basic purpose of evaluation is to render judgments about the value of whatever is being evaluated” (Fitzpatrick, Sanders, & Worthen, 2004, p. 10). The authors further observe that this evaluation of any activity should be done by taking care to “identify and apply defensible criteria to determine its worth, merit or quality” (p. 10).

The principle of constant practice to achieve proficiency can be thought of as the heart of both the exercise cycle and the exercise design process. There are simple considerations that must be adhered to when designing an emergency exercise which ultimately lead to the successful completion of the prescribed steps and the determination of whether the actions taken are appropriate and will give the desired outcome. Looking toward a goal and determining the ultimate outcome of pre-determined steps to achieve that goal guide the design of an exercise. Although an exercise is often looked at as an inconvenience by some, the testing of a system through an exercise is not only worth the time and effort but necessary. The FEMA emergency

planning course IS-235, which is part of their independent study series, states, “*Emergency exercises are worth the effort*. Exercises identify areas that are proficient and those that need improvement. Lessons learned from exercises can be used to revise operational plans and provide a basis for training to improve proficiency in executing those plans” (FEMA, 2011b, p. 1).

### **The Exercise Evaluation Process**

When dealing with planning for emergencies or disruptive incidents, evaluated exercise approach is certainly the philosophical basis for the testing and, ultimately the improvement, of all emergency plans. In the field of Emergency Management, it is widely accepted practice to use the exercise evaluation process developed by the Department of Homeland Security. In Volume III of the Homeland Security Exercise Evaluation Protocol (HSEEP III) the premise is advanced that the sole purpose for an exercise is improvement, “Exercise evaluation maintains a fundamental link to improvement planning because it assesses an entity’s performance in an exercise and identifies strengths and areas for improvement” (U.S. Department of Homeland Security, 2007, p. 1).

Defining evaluation is necessary to facilitate an understanding of the “evaluation process” as applied to exercises. Fitzpatrick, Sanders and Worthen (2004) state, in a simple observation concerning the process of evaluation that it is necessary, “to identify and apply defensible criteria to determine...worth, merit or quality” (p. 10). Evaluation is generally distinguished by focusing in two different areas, formative and summative. Formative is generally focused on gathering information, “for program improvement” (p. 16). Summative evaluation generally focuses on, “judgments about the overall merit or worth of a program” (p. 18). Most evaluation of activities prompted by and evaluated within an exercise scenario are formative in nature and look for ways

to improve the entire emergency management system being examined.

### **The Systems Approach to Exercise Evaluation**

It is also useful to understand the idea of a system and how systems oriented thinking is valuable in determining the criteria needed for assessment. System thinking and analysis is a concept which is concerned not with individual parts of a mechanism or organization but its performance as a whole. The determining factor is their interrelationship, “system behavior comes about as a result of the interactions and relationships amongst the parts” (Edison, 2008, p. 5). Traditional analysis tends to break an organization down into individual components but Edison reminds that this approach can be counterproductive. This direct relationship focus, Edison says, denies the evaluator a valuable context in which greater understanding beyond the normal linear thinking can be found. “Seeing interrelationships rather than linear cause-effect chains is an integral and mandatory part of systems thinking” (p. 14). This approach gives the evaluator a view of the activity or the organization in a greater context. “In addition, systems’ thinking acknowledges the strong interactions between the system components, and the emergent behaviors and unintended consequences that may result from these interactions” (Edison, 2008, p. 5). System thinking or system analysis is truly a holistic approach to evaluation.

Peter Senge is one the most well thought of and often quoted experts in the field of system theory and its use to examine everyday situations. In his renowned volume on systems theory and application, *The Fifth Discipline*, he teaches that the examination of a scenario and determining areas of improvement can be reduced to the application of a simple principle he refers to as leverage. Senge (1990) tells us by way of definition that leverage is “seeing where actions and changes in structures can lead to significant enduring improvements” (p. 114). He refers to examination of situations in non-system terms as potentially damaging simply because

the holistic approach is ignored and the examiner and potential problem solver focuses on symptoms and not real problems. Senge refers to these efforts to ameliorate symptoms as “low leverage” actions. Close examination of a situation with an eye toward these enduring solutions which Senge states the best solution, “follows the principle of economy of means where the best results come not from large scale efforts but from small well focused actions” (p. 114).

Senge’s (1990) philosophy and systems thinking in general is reminiscent of the tale of a plant manager whose assembly line suddenly shut down. He called for a consultant to examine the technology and initiate a repair to restore the line to full operation. After a thorough examination, the consultant reached for a screwdriver, turned a single screw a half turn and immediately the line began running. He handed the manager a bill for \$10,000 dollars. The manager objected to having to pay such a large sum for the consultant to turn one screw. The consultant informed the manager it wasn’t turning the screw which resulted in the charge, it was knowing which screw to turn. An example of Senge’s idea of the well focused action in practice.

### **Examination of Real World Data: Maremoto I and II**

With the key theme of exercise outcomes being an evaluation it would be useful to examine a typical exercise to examine how the results gave the evaluators indications of the degree of success in obtaining those outcomes. The focus of this study will be two Continuity of Operations exercises conducted by FEMA Region II with their Caribbean Area Division based in San Juan, Puerto Rico. The first exercise was conducted December 7-8, 2010 and the second December 5-8, 2011. The after action report for each of these exercises with results and recommendations will be examined. The full scale exercises were dubbed Maremoto I and Maremoto II. A total of 18 agencies participated in the full scale exercise with six agencies

participating by conducting table top exercises for a total of 24 agencies involved in the overall exercise.

The scenario was predicated upon a major volcanic eruption in the Canary Islands with a subsequent tidal wave crossing the Atlantic Ocean and impacting the Caribbean. This simulated event would cause extensive damage to San Juan and its outlying areas. Objectives focused on communications, alert and notification, relocation, and the ability to reconstitute an agency's essential functions. Maremoto I was the first step in this two part scenario with the following stated objectives:

1. Evaluate alert, notification and relocation procedures.
2. Evaluate the ability to continue essential functions.
3. Evaluate continuity facility operations.
4. Evaluate communications among interagency stakeholders and external partners. (Federal Emergency Management Agency, 2010b)

With the examination of these four objectives a great deal of data was gathered and key points in the individual COOP plans were able to be analyzed. A closer look at two of these will give an example of useful information which leads to an analysis of a system constructed to accomplish a specific purpose. Under objective one, the alert and notification function was an area which yielded areas for improvement and associated recommendations. During the drill, a phone tree was used for notification of employees who were key decision makers. It was recognized by players that employee contact information was in need of updating. The evaluation process yielded two important recommendations which would work to improve the efficiency of the system in place:

- Establish a routine procedure for updating contact information.
- Begin testing of alert and notification procedures on a regular basis. (Federal Emergency Management Agency, 2010b)

The alert and notification process was successfully completed; however, it was recognized by the agencies that adjustments within the system would be necessary.

Under objective two, evaluators began to look at the heart of the continuity process which is the ability through proper planning to continue essential functions. Participants had successfully identified mission essential functions and had built their planning process around them. As with most planning elements, once these essential functions are put to the test some lessons learned begin to emerge. A few agencies recognized that, even though essential functions had been identified, actual implementation of tasking under these functions revealed a more in depth understanding of the process of defining mission essential functions. Post exercise recommendations put forth by evaluators addressed the issue in several ways:

- Review the business impact analysis process in Federal Continuity Directive 2.
- Review personnel and resources necessary to support these functions.
- Review vital records identification and access in reference to essential functions.
- Test remote access to vital records with regard to IT requirements. (Federal Emergency Management Agency, 2010b)

Thus, observation in a single area – essential functions – yielded information useful in further refining not only the identification of essential functions but the continuation of these functions in specific areas.

Maremoto II in 2011 continued the tidal wave scenario again with the participation of 28

agencies in a full scale exercise. Scenario planners identified three objectives on which to concentrate in this extended exercise:

1. Evaluate alert notification and relocation procedures.
2. Evaluate reconstitution plans and procedures.
3. Build interagency relationships. (Federal Emergency Management Agency, 2011a)

Examining objective two will again give some insight into the refinement which comes with testing critical elements of any plan. Participating agencies reported active efforts in building reconstitution plans but identified the need for more deliberate planning looking toward refinement of implementation processes. Here evaluators recommended:

- Review continuity plans with regard to the personnel and resources
- Review necessary personnel and resources to implement reconstitution. (Federal Emergency Management Agency, 2011a)

Examination of the process led evaluators to stipulate in their finding that needed adequate resources became more essential than originally planned when testing the process was undertaken.

### **Conclusions**

Through the emergence of specific outcomes in the San Juan exercises which have an effect on the total system there is some insight provided by an evaluative process. Following the underlying framework of thought behind the principle of evaluation, as per HSEEP methodology, a task level analysis was performed to examine, “specific, discrete actions...whose analysis can help entities target plans, equipment, and training resources to improve specific task performance” (Department of Homeland Security III, 2007, p. 2). By looking at procedures

associated with these tasks the next level of evaluation in the HSEEP methodology focusing on activity is accomplished. Finally, examining and evaluating both tasking and procedures, allows evaluators to determine whether an entity can be said to have the capability to, “respond to, or recover from the threat or hazard simulated in the exercise scenario” (p. 2). By evaluating capabilities as defined by HSEEP protocols, the overall capability of an emergency management system is determined. But more importantly the value of examining the connections between thoughts and actions and how they have an effect on the whole is revealed.

Senge (1990) makes a couple of observations in *The Fifth Discipline* which planners would do well to remember when building an emergency management system as well as looking at how it functions with regard to achieving its intended outcomes. First when discussing the structure of a system the tendency is to see this as an external constraint. However, Senge notes that often the interactions and relationships of humans are what control the behavior of the system, “structure includes how people make decisions and the “operating policies” whereby we translate perceptions, goals, rules and norms into actions” (p. 40). His bottom line when examining a system is the principle of leverage. Senge states that this leverage can be observed and exerted by people in the system when they understand the circumstances, “people often have potential leverage that they do not exercise because they focus only on their own decisions and ignore how their decision effect others” (p. 49).

In the San Juan example, the Maremoto I scenario listed alert and notification as an objective. This is a typical exercise objective since this function is always a key aspect of any plan initiation. The areas for improvement specified the establishment of procedures for more frequent updating of personnel listings and testing the alert and notification process on a regular basis. Sounds simple enough, however, this shows an insight on the part of the system designers

in recognizing a key leverage point within the system. Without successful alerting of personnel the plan can stumble in its initial phase. Fortifying a key task, or leverage point, to make it more robust strengthens the system design and takes a very positive step toward.

Another example of leverage can be seen in the Maremoto II exercise. A stated objective focused on the efficacy of reconstitution plans with regard to personnel and resources revealing a key leverage point within the system. As is typical in an exercise situation, following procedures as specified and looking for the planned and expected outcomes gives the opportunity to evaluate the efficacy of the procedure. Both players and evaluators in Maremoto II realized that even though careful thought had been given to availability of resources, personnel in particular, when a disruptive situation arises which stresses the system, the needs can be greater than anticipated. Not only is there evidence of good exercise design, but evidence of evaluators' recognition that a key leverage point needed to be re-examined with regard to assuring a greater availability of personnel to successfully complete reconstitution.

The simple idea of realizing that actions have consequences and raising the level of awareness of those consequences can have a huge positive effect on intended outcomes. Examining a plan, procedure, personnel or training with the idea of anticipating the position of each in an overall strategy to mitigate, prepare for, respond to or recover from a disruption can only lead to greater efficiency and levels of effectiveness when considering the goal of building community resilience.

## References

- Coombs, T. (2012). *Ongoing crisis communication*. Thousand Oaks, California: SAGE Publications, Inc.
- Edson, R. (2008). *Systems thinking. Applied. A primer*. (Version 1.0). Arlington, VA. Applied Systems Thinking Institute.
- FEMA [Federal Emergency Management Agency]. (2010a). *Developing and Maintaining Emergency Operations Plans: Comprehensive Preparedness Guide (CPG) 101*, Version 2.0. Retrieved from <http://www.fema.gov/prepared/plan.shtm>
- FEMA [Federal Emergency Management Agency]. (2010b). *MAREMOTO I: After Action Report (AAR). San Juan Continuity Working Group; Virgin Islands Continuity Working Group; FEMA Region II*.
- FEMA [Federal Emergency Management Agency]. (2011a). *MAREMOTO II: After Action Report (AAR). Caribbean Area Division (CAD); FEMA Region II*.
- FEMA [Federal Emergency Management Agency]. (2011b). *Emergency Planning: Independent Study IS-235*. Retrieved from <http://training.fema.gov/EMIWeb/IS/IS235B.pdf>
- Fitzpatrick, J., Sanders, J. & Worthen, B. (2004). *Program evaluation: Alternative approaches and practical guidelines*. Boston, MA: Pearson Education, Inc.
- Gay, W.G & Chenault, W. W. (1973). *Improving your community's emergency response: An introduction to disaster planning*. Prepared for Defense Civil Preparedness Agency (Contract No. DAHC20-72-C-0281). Retrieved from Homeland Security Digital Library [www.hsdl.org/?view&did=34685](http://www.hsdl.org/?view&did=34685)
- Senge, P. (1990). *The fifth discipline*. New York: Bantam.

U.S. Department of Homeland Security. (2007). *Homeland security exercise and evaluation program volume III: Exercise evaluation and improvement planning*. Washington, D.C.:

U.S. Government Printing Office.

## Central Arkansas Response to Medical Evacuations Related to Hurricane Gustav

Dr. Richard Ihde, Associate Professor  
Department of Emergency Management  
Arkansas Tech University

Doug Brown, MS, CHEP, NREMT-B  
Disaster Preparedness Coordinator  
Lake Norrell Fire Protection District

Ronald Crane, Jr.  
Emergency Preparedness Manager  
University of Arkansas for Medical Sciences (UAMS)

### Abstract

As the result of being activated under the auspices of the National Disaster Medical System (NDMS) following Hurricane Katrina, the Little Rock medical community received, processed and cared for numerous evacuees from the New Orleans area. Their efforts prompted the key players to form an entity called the Metropolitan Hospital Emergency Management Group (MHEMG) with the stated goal of more efficient and effective care of evacuated patients should a similar situation arise in the future. With the determination of numerous lessons learned, the MHEMG used their past experience to once again step into the breach following Hurricane Gustav. The result was a massive improvement in their NDMS role as a valued resource of national significance.

Providing adequate medical care to patients during disruptive and difficult circumstances can often be a major challenge. Hospital systems can be overwhelmed with victims in various stages of need and often find their ability to meet the immediate needs of victims hampered almost to the point of degrading to minimal levels. Care for the most critical of the unfortunate victims of disasters is often found wanting in light of what most consider the golden rule of disaster assistance. In a recent document on hospital surge issued by the Joint Commission on Accreditation of Healthcare Organizations this standard was expressed in poignant terms; “Positioning a hospital emergency room near the site of every potential disaster is impossible, yet a patient with

serious injury needs to be transported to surgery within the “golden hour” after the injury occurs for the best chances of survival” (Brick & Carlton, 2006, p. 2). This golden rule represents a best case standard of care that all health care professionals seek to provide but often find they are frustratingly unable to apply. A recent situation involving evacuees from the Gulf Coast illustrates the point.

During Hurricane Gustav the National Disaster Medical System (NDMS) was activated to facilitate the evacuation of patients from New Orleans, Louisiana to Little Rock, Arkansas where local emergency medical service providers and hospitals created a reception center to triage, treat and then transport these patients to the most appropriate facility. While the ability to coordinate and track disaster victims during an evacuation is clearly an overwhelming task at the scene as well as the reception site, there were several lessons learned during this disaster that could help enhance future evacuations from hurricane prone areas as well as from other areas. NDMS, focusing on patient movement as opposed to being comprised of response teams, was originally designed to handle catastrophic events and overwhelming military casualties. Patient tracking following a major hurricane was well within the scope of the system.

As Hurricane Gustav headed for landfall along the Louisiana coastline in late August of 2008, hospital officials in New Orleans began making preparations for what is now being called the largest pre-storm medical evacuation in American history (Fink, 2008). This began the process of bringing the NDMS online to begin supplementing local capabilities in their efforts to deal with at risk patients in areas affected by natural disasters. Under the NDMS, the Department of Health and Human Services (HHS) is tasked under the National Response Framework ESF #8 with assisting in moving patients

to unaffected areas and facilitating definitive medical care in those host areas (National Disaster Medical System, n.d.).

### **Little Rock Implements Lessons Learned**

For the second time in history, Little Rock, Arkansas became a host area for medical treatment of evacuated patients. After studying the response efforts of the local medical community as the result of Hurricane Katrina, in which the city became the first host area in the nation to be activated under the NDMS, the implementation of lessons learned brought a much quicker and more efficient response when the community was again called upon to assist in a national effort.

Efforts in the central Arkansas medical community during Hurricane Katrina prompted members of that community to organize themselves into a preparedness and response entity known as the Metropolitan Hospital Emergency Management Council. An after action review following Katrina resulted in the formation of a Hospital Liaison Officer position within the Incident Command System (ICS) organization under which they would operate. The task of the Hospital Liaison Officer was to assist the Incident Commander (IC) in the coordination and placement of disaster patients at local hospitals as well as to ensure a quick turnaround of EMS units due to limited resources. Under this position, a team of hospital representatives was deployed in advance as a hospital liaison team to the patient reception site at the Little Rock National Airport, the site selected by the NDMS Federal Coordination Center (FCC) as the reception site, and established a live communication network between all hospital reception sites and hospital command centers.

The development of the Hospital Liaison Officer position was the result of discussions within the area medical community and culminated with the development of the following set of objectives focusing on the immediate needs of the area medical facilities:

- Serve as eyes and ears of hospitals on site and, relay information between Incident Commander and a hospital command center(s).
- Update regional bed counts throughout an event (i.e. after every flight).
- Coordinate directly with the Transportation Officer to evenly distribute patient volume and resolve specialty care issues.
- Maintain the METRO Hospital Communications Net during an event.
- Advise hospital receiving sites of patients who were en-route.

Healthcare facilities in the Central Arkansas region worked intensely to develop a community response capability to disasters following Hurricane Katrina. The addition of the hospital liaison position to the local ICS structure was the direct result of feedback garnered following their first deployment under the NDMS.

### **Patient Arrival Begins**

The Little Rock response began with the Little Rock Federal Coordination Center of the National Disaster Medical System receiving an official Alert Notice from the Department of Health and Human Services of the possibility that they would need to begin preparations for the reception of evacuees from the Gulf Coast. The official Activation Notice came on Friday August 29, 2008 stating that they could possibly have inbound patients as early as noon on the 30<sup>th</sup>. In conjunction with the activation notice, it was learned that the State of Louisiana had declared an emergency and implemented their

Medical Institution Evacuation Plan. Notice went out to local partners in the Little Rock area and patient reception equipment began to be transported to the Central Flying Service Hangar at the Little Rock National Airport to begin the set up of the reception site.

As part of the initial alert, hospitals throughout the state were asked to begin updating bed availability using the statewide electronic bed status system known as EMResource. With the activation of the reception site these reports began to be made available to the Air Force Transportation Command headquartered at Scott Air Force Base, Kansas. By noon on Saturday August 30<sup>th</sup> the Little Rock NDMS reception site was fully activated with personnel from local hospitals and emergency agencies.

Metropolitan Emergency Medical Services (MEMS), the local EMS provider, posted personnel and assets at the hangar to await inbound patients. Mutual aid EMS organizations throughout the state responded to assist MEMS. Area hospitals activated additional personnel and awaited patient arrival.

The Air Force Transportation Command (USTRANSCOM) was then contacted to determine when the Little Rock NDMS Reception site could expect receipt of patient manifests and patients. Very little information was immediately available from USTRANSCOM and calls were then made to the Veteran Administrations Emergency Management Strategic Healthcare Group (EMSHG), an NDMS partner, for additional information on patient movement. There was no information available from EMSHG as well. Calls were then made directly to the Designated Regional Coordinators (DRCs) at the marshalling points in Louisiana. The DRCs information indicated that no patients had been moved and no aircraft were in place yet. The Little Rock NDMS reception

personnel and hospitals were then informed that it would be several hours before patients would arrive (Oxner, 2008).

The first flight arrived at 10:57 p.m. Saturday evening, some 11 hours after initial reports of expected arrival. The next aircraft arrival came early Sunday morning August 31<sup>st</sup> with additional flights through the day as shown in Table 1.

Table 1

*Little Rock Federal Coordinating Center Inbound Patient Data for Hurricane Gustav*

Aircraft Type	Arrive Date	Arrive Time	Litter	Ambulatory	Load Total
C – 130	8/30/08	10:57 p.m.	17	3	20
C – 130	8/31/08	4:25 a.m.	13	3	16
C – 17	8/31/08	7:48 a.m.	7	0	7
C – 130	8/31/08	10:15 a.m.	24	3	27
C – 17	8/31/08	1:00 p.m.	22	0	22
C – 130	8/31/08	2:00 p.m.	11	0	11
C – 130	8/31/08	2:30 p.m.	24	0	24
C – 130	8/31/08	4:40 p.m.	11	3	14
C – 130	8/31/08	7:50 p.m.	12	1	13
C – 17	8/31/08	7:55 p.m.	28	0	28
C – 17	8/31/08	8:10 p.m.	7	8	15
C – 130	8/31/08	9:20 p.m.	13	5	18
C – 130	8/31/08	9:21 p.m.	8	2	10
Patient Totals			197	28	225

Adapted from the minutes of the National Disaster Medical System Hurricane’s Gustav and Ike After Action Review Meeting conducted on September 18, 2008 as compiled by Rex Oxner.

A vexing issue arose with the arrival of the first flight which plagued NDMS participants throughout the active mission window. Flight manifests were many times incomplete and incorrect. The first flight manifest arrived at the reception site at 12:29 a.m., approximately 2 ½ hours after the initial flight arrived. The manifest indicated 33 patient names but only 20 patients were actually on the flight. The final total manifested

number of patients was to end up at 150 with a number of duplications on the manifests and numerous names omitted. The lack of accurate manifests made efforts to track patients extremely difficult as the manifest patient number is currently used to track the patient through the system. Flight crews from the NDMS flights were often faced with developing and providing hand written manifests whenever possible (Oxner, 2008).

Flights continued to arrive throughout the day Sunday. Each flight was met by triage teams with patients being off-loaded and moved to the triage area for assessment with subsequent handoff to transportation for routing to most appropriate facility. Operations ran routinely throughout the day up to the final flight arrival at 9:21 p.m. All patients were cleared from triage stations with transportation completed at 10:10 p.m. Sunday evening.

The Hospital Liaison team integrated with the Airport Patient Reception Group to provide a number of services. Liaison Officers provided continuously updated bed availability information to the Transport Officer and had the ability to speak directly with individual hospitals to determine specialty availability without delaying transport. Feedback from hospitals allowed the Liaison Team and Transport Officer to modify patient distribution patterns of each group of arriving patients to accommodate hospitals with temporary volume issues. The Liaison Team provided each facility with advanced notice of aircraft arrival and the type and category of patient being transported to individual facilities. Hospital Liaisons provided direct communication between the Little Rock reception site and area hospitals through the METRO Hospital Net. After action reviews included analysis of patient distribution as shown in Table 2 (Oxner, 2008).

Patient reception and distribution at the Little Rock NDMS reception site went exceptionally well according to staff members. It was described as close to a textbook patient reception effort with direction and information from the Little Rock

Table 2

*Central Arkansas Medical Facility Patient Distribution Data: Hurricane Gustav*

Medical Facility	Number of Patients
Arkansas Children’s Hospital	2
Baptist Medical Center	42
Baptist Medical Center: North	25
Conway Regional Medical Center	9
Arkansas Heart Hospital	9
Jefferson County Regional Medical Center	6
North Metro	7
Saline County Medical Center	11
St. Vincent Medical Center	46
St. Vincent Medical Center: North	16
University of Arkansas Medical Center	24
Central Arkansas Veteran’s Hospital	28
Total	225

Adapted from National Disaster Medical System Hurricane’s Gustav and Ike After Action Review Meeting on September 18, 2008 as compiled by Rex Oxner.

Federal Coordination Center (FCC) coordinator who described it as excellent. The combination of adequate staff and sufficient ambulances allowed for quick assessment and disposition to receiving hospitals. Metro Emergency Medical Service and a the Hospital Liaison Team provided by the METRO Hospital Emergency Management Council co-operated closely to ensure even patient distribution and adequate notice to each facility about the type of patient being routed to their location. Follow up post-incident inquiries demonstrated that the percentage of patient distribution per facility closely mirrored initial bed availability. In other words, if a hospital reported having 20%

of the available beds in the system, they received close to 20% of actual patients distributed. Post incident follow up demonstrated that in all cases hospitals received fewer patients than they indicated they could take based on the initial EMS system report. No facility received more patients than they indicated they could handle.

MEMS and the METRO liaison team members also worked to see that patients were distributed according to specialty availability. The current NDMS structure only identifies broad patient/bed categories. A number of patients presented with dialysis or infection control issues and were routed to appropriate hospitals. Compared with the Hurricane Katrina response, this greatly reduced the need for subsequent transfers between hospitals, although a few did occur.

### **Post Incident Analysis**

After final patient arrivals at area hospitals, NDMS support began to devolve. Repatriation was a significant concern highlighted after Katrina and was again evident following the Gustav response. The need continues to exist to extend the flow of patients through the continuum of care including Step-Down, Long Term Assisted Care, Skilled Nursing, and Alternative Care. As the relative minor damage to Louisiana hospitals became evident, facilities involved in both evacuating and receiving patients felt the need to quickly begin repatriation of patients. Some Louisiana hospitals began to contact Little Rock facilities in attempts to find patients and request their return.

Under the current NDMS structure, the lack of a policy, procedure, or vendor contract in place caused subsequent delays prompting hospitals to fill the void by seeking alternate methods to repatriate patients. Hospital case managers simply used normal discharge procedures which seemed to work well for the majority of patients.

As this situation evolved, hospitals expressed concern over the slow pace of patient movement out of their facilities and considered using a contactor such as CareFlite. This proved to be problematic due to the required documentation that must be prepared for each patient to be eligible for CareFlite travel. The primary stumbling block was the requirement for a Federal Emergency Management Agency (FEMA) number to be assigned to each patient or the lack of any pre-assignment of a FEMA number at the sending hospital. In an attempt to resolve the issue, the Arkansas Department of Emergency Management and the Arkansas Department of Health, in a joint effort with the Arkansas National Guard, arranged a repatriation flight which did result in a large number of patients being returned to New Orleans (Oxner, 2008).

### **Conclusions and Recommendations**

Current NDMS plans do not include specific interaction with the receiving state health department thus leaving a void which could be filled by capable players able to function as a key component in the hospital emergency management arena under the NDMS structure. The updating of plans to include additional resources not originally contemplated in the initial process would seem a prudent measure. State health departments across the country have developed plans and procedures for public health and safety related concerns which should be considered in a medical evacuation scenario. Updates on the state level with regard to this type of scenario would place incoming patients in a much more organized and supportive environment.

The difficulty in tracking patients in transit by providing documentation, at least on a rudimentary level, should be immediately addressed. The development of a transit document in a short form which would include basic personal information, a description

of medical condition and a list of medications would prove helpful. A document developed at the release site and given to the patient to serve as an individual manifest could be provided by using existing facility databases and a simple, standardized, electronically derived evacuation transit form. These could stay with the patient through the evacuation process into the NDMS reception site and on to the eventual placement site.

Finally, the addition of a Hospital Liaison Officer into the ICS structure for medical evacuation scenarios proved invaluable in the Little Rock response. Other cities will no doubt be tasked under the NDMS in the future and be faced with similar coordination issues. The inclusion of representatives from qualified participating entities in the planning process to include not only the operational phase but the patient reception phase at the receiving facility will no doubt prove to be helpful. This would be a major step forward in providing the means for accomplishing the original goal of the NDMS of providing effective medical care in a stressful emergency situation and “provide a faster, better coordinated, and more capable national medical response” (Center for Enterprise Modernization, 2007, p. 7).

Despite multiple deployments, it is clear that the patient movement side of NDMS remains an incomplete program. Although several major changes have occurred within the system, issues with program activation, patient collection, and patient movement to the airhead remain. These resulted in delays in patient movement and caused the reception site to incur additional expense holding staff and equipment ready long before the first patient arrived. NDMS should anticipate the need to reimburse providers for

these costs. Prolonged “standby” status tires responders and degrades performance.  
Given the nature of an evacuation, these delays may be unavoidable.

## References

- Brick, P. & Carlton, P. (2006). *Surge hospitals: Providing safe care in emergencies*. Joint Commission on Accreditation of Healthcare Organizations. Retrieved December 30, 2009 from [http://www.jointcommission.org/assets/1/18/surge\\_hospital.pdf](http://www.jointcommission.org/assets/1/18/surge_hospital.pdf)
- Center for Enterprise Modernization, (2007). *Joint review of national disaster medical system*. Retrieved December 30, 2009 from <http://www.hhs.gov/aspr/conferences/nbsb/mitre-ndms.pdf>
- Fink, S. (2008). Louisiana hospitals learning lessons from Hurricane Gustav. *Pro Publica*. Retrieved December 29, 2009 from <http://www.propublica.org/article/louisiana-hospitals-learning-lessons-from-hurricane-gustav-905>
- National Disaster Medical System* (n.d.). Retrieved December 29, 2009 from <http://www.hhs.gov/aspr/opeco/ndms/index.html>
- Oxner, J. R. (2008). *National disaster medical system Hurricane's Gustav and Ike after action review meeting*. Conducted September 18, 2008, Central Arkansas Veterans Healthcare System, Room 7E101.

## **Book Review of *Drugs and Contemporary Warfare***

Paul Rexton Kan  
Dulles, VA: Potomac Books, Inc., 2009  
194 pp. ISBN 978-1-59797-256-7. \$31.95

### **Reviewed by:**

Dr. Jan Kallberg, Assistant Professor  
Department of Emergency Management  
Arkansas Tech University

Dr. Kan's book is a comprehensive visualization of how drugs play a role in warfare, within armed forces, and as a source of funding for terrorists and illicit activities. Dr. Kan is an associate professor at the U.S. Army War College, Carlisle, PA. He has written extensively about the blurred, but important to understand, territory of irregular warfare, drugs, and criminality. My reading of "Drugs and Contemporary Warfare" coincided with a recent event. Federal authorities have uncovered an attempt to murder the Saudi ambassador which was tied to the Iranian government in co-operation with Mexican drug cartels where drugs were the currency for covert murder. The intricate web of drugs, drug trafficking, the mix of warlords, criminal and political actors, covert operations, and flow of money that paves the way is well described in Dr. Kan's book. The Iranian attempt to "hire" the Mexican drug cartel to support their political murder attempt by providing opiates to the Mexicans is an archetype for the kinds of new threats Dr. Kan displays.

Dr. Kan also shows clear linkages to terrorism. Drugs are used as monetary and resource channels for terrorists. Drugs can transfer financial resources once sold and avoid detection by the authorities as no money is transferred through the bank system. Another goal can be to make

a street profit to fund the terrorist activity. The role of drugs in terrorism and asymmetric warfare is a key theme through the book.

There are also several challenging ethical dilemmas presented in the book. As an example, in a combat zone soldiers meet a new reality when suddenly fighting drug intoxicated child soldiers who are so “high” that they are easy targets. These underage soldiers still commit atrocities and shoot at everything they confront. Are they children or combatants? One British unit faced this dilemma in Sierra Leone and was captured because they refused to gun these children down, risking their own lives in the hands of a crowd of intoxicated, undisciplined irregulars. They were extracted by Special Air Service (SAS), the British elite forces, which lost one service member but left over 150 irregulars dead.

The book has a chapter titled “Sober Lessons for the Future” (p.93 and forward) which deserves to be read twice, if not three times, because it is an eye-opener for what we as a nation, the military and law enforcement, are up against. Dr. Kan goes through our efforts to build nations out of collapsed autocracies and shows how warlords, drug-trafficking, and criminal organizations can exploit these efforts. A few myths get crushed on the way such as democratization is always the solution. Dr. Kan points out that a too-quick transformation leads to opposite results when as an example the old military elite of the failed regime serves as an institution even for the new regime. When older institutions are removed and there are no stable institutional replacements from the new regime, it creates a vacuum that drug traders, extremists using drugs as a revenue source, and the illicit economy quickly expand within.

In the chapter “Shaky Paths Forward”, the author lays out several strategies to deal with these challenges. He describes the strategies - their strengths and weaknesses. It is dependent on your general outlook on what is feasible or not. The strategies are well presented. My outlook is

that a country cannot exercise enough control over these actors, from terrorists, drug cartels, to other illicit enterprises, to fully implement strategies in that manner. There is no right or wrong, so I leave it to you as a reader to evaluate the feasibility.

The author points out clearly the danger of amphetamines in different forms, which can be domestically made and are a refined high value drug which differs from 1) marijuana that requires space to grow and is bulky to trade in a grand scale, and 2) the high value heroin that requires a border crossing where it can be intercepted by authorities. The amphetamine as a game changer was a very observant line of thought from the author.

I highly recommend “Drugs and Contemporary Warfare” because it is timely; it explores connections that are hard to see by an untrained eye and the book gives understandable examples where things can go wrong and why. The thorough explanation of the diminishing separation of warfare and drugs affects national security in several ways. Any member of the Emergency Management Community should read “Drugs and Contemporary Warfare” as it covers all levels, from policy, enemies, and terrorism, all the way down to drug usage within their own ranks.

# **The Role of a Non-Governmental Organization (NGO) in Disaster Management: An Interview with Jo Luck, Past President and CEO of Heifer International**

Beth Gray, JD, Associate Professor  
Department of Emergency Management  
Arkansas Tech University

## **Abstract**

There are many non-governmental organizations (NGOs) throughout the world with a wide variety of missions and core values. Ranging from local, state, national and international NGOs some are considered disaster relief organizations while others are long-term development organizations. It may seem that the discussion regarding a role in disaster management only involves disaster relief NGOs. However, that is not the case. While NGOs with a long-term development focus may have a very limited role in disaster response, they can have a significant role in disaster preparedness, mitigation and recovery efforts. As disaster managers, responders and organizations continue to understand the value of disaster relief NGOs it will also behoove them to consider the role and value that a development NGO can bring to overall disaster management efforts.

This article is an interview with Jo Luck about her last two decades in a leadership role at Heifer International.

## **Non-Governmental Organizations**

There are many non-governmental organizations (NGOs) throughout the world. NGOs often have similar broad characteristics such as independence from the government and private sector, subject matter expertise, and commitment to the unique mission of the particular NGO. However, there are also many differences such as size, location, funding, mission, core values and focus. Some NGOs are focused on long-term development while others are focused on disaster relief. Heifer International is an example of an established NGO guided by a mission based on long-term, sustainable development. This interview sought to present some of the issues related to such an organization's involvement in disaster management. The insightful

answers provide an interesting look at a development NGO's often implicit and sometimes explicit role in disaster management.

**QUESTION: How would you define a non-governmental organization (NGO)?**

LUCK: The definition can be quite complex, but my simple definition would be that an NGO is a not-for-profit, non-government organization that is humanitarian in nature. An NGO may deliver disaster assistance, provide development (hopefully sustainable) assistance, or advocate for a cause. The organization can be local, national, or international. NGO revenues can be from donations – direct gifts of cash or in-kind, via planned giving, foundations, trusts, grants, and government funding. Some NGOs are faith-based while others are not. NGOs establish their missions around a focus area, or areas, such as: health, education, agriculture, human rights, animal welfare, conservation, micro-finance, hunger, poverty, disaster relief, habitats, empowerment, elections monitoring, literacy, and children.

**QUESTION: Until you recently retired, you served as the President and CEO of Heifer International for 18 years. Can you please provide some basic information about the organization?**

LUCK: Heifer International (Heifer) was founded by Dan West in 1944. He was serving as a Church of the Brethren relief worker after the Spanish Civil War. As he handed out limited rations of milk to orphans and refugees, he decided that what relief needed was “a cow, not a cup” – a cow could produce milk so families would not have to rely on temporary aid such as powdered milk. Since 1944, Heifer has helped more than 15 million families – close to 80 million people – overcome poverty and become self-reliant.

Today, Heifer is a humanitarian NGO working with communities in over 50 countries to end hunger and poverty and care for the Earth by providing resources – appropriate livestock such as heifers, goats, camels, yaks, chickens, and rabbits. And with those resources Heifer

provides education and training which enables small holder farmers to improve their quality of life and that of their families and communities. Heifer's development approach is sustainable, long-term and values-based, guided by its twelve "Cornerstones": Passing on the Gift; Accountability; Genuine Need & Justice; Improving the Environment; Sharing & Caring; Full Participation; Training & Education; Sustainability & Self-Reliance; Improved Animal Management; Spirituality; Nutrition & Income; and Gender & Family Focus. Heifer's approach leads to much deserved transformation from hunger and poverty to personal dignity and entrepreneurship.

**QUESTION: As you mentioned, NGOs have focus areas. For example, some NGOs are focused mainly on disaster relief while others are focused more on long-term development while still others have a combination focus consisting of disaster relief and development. How would you describe Heifer International's involvement with disaster management?**

LUCK: I want to say that Heifer appreciates and supports the work of disaster relief NGOs. In some cases Heifer works in partnership with those NGOs as well as with first responders and the local government. However, long-term, sustainable development, rather than short-term relief, is at the core of Heifer's mission and all of its work. That being said, without changing its mission, there are a number of ways that Heifer is involved in disaster management. For organizations such as Heifer there is an ongoing balancing act between disaster and development work.

**QUESTION: If possible, can you give examples of what Heifer's involvement might be in the context of the "four phases" of the disaster management "cycle" – "preparedness, mitigation, response, and recovery?"**

LUCK: Yes, I can provide examples of Heifer's involvement in that context, keeping in mind that the areas or phases overlap and there are rarely clear lines of separation. Also, please note that Heifer International has a *Disaster Position Statement* that is available on its website

[<http://heifer.org/ourwork/our-approach/disaster-position-statement>]. First, Heifer sometimes provides short-term support to its project beneficiaries immediately after a disaster (i.e., replacing livestock loss), which would be part of response efforts. Second, Heifer's disaster rehabilitation work is clearly part of short and long-term recovery. Third, Heifer's twelve "cornerstones," which I listed earlier include "training and education" and "sustainability and self-reliance." Those cornerstones are "threads" throughout Heifer's work and contribute to mitigation, which "threads" through the disaster management phases. Fourth, Heifer works with communities that are vulnerable communities in disaster-prone areas. As part of our development methodology, they help communities at risk to prepare for the impact of disasters. Disaster preparedness is part of Heifer's training and education based on lessons learned from increased pressure on the environment, (e.g., population growth and natural disasters). Fifth, in much of Heifer's work, including each phase of disaster management, Heifer works through alliances and partnerships. Also parts of the disaster management equation are standards of conduct and funding.

**QUESTION: Now that you have provided a broad description of Heifer's potential involvement in each disaster management phase, can you provide a little more detail in terms of Heifer's work in each phase?**

LUCK: Yes, I will try to do that, and since response is the disaster management "phase" in which Heifer has the least direct involvement, I will start there. As I've mentioned previously, and want to be sure to reiterate that Heifer's focus is on long-term development rather than relief. However, if a major disaster strikes a Heifer project community and the impact exceeds the community's capacity to respond, Heifer will partner with relief and first response organizations to support the community and its surrounding region. Mostly they replace livestock lost. I also want to mention that, if clearly needed and if it is possible, Heifer sometimes can provide its

project communities support regarding basic needs such as water, food and transportation. Those disaster response efforts are coordinated through Heifer's area offices, and Heifer is careful to support and complement, rather than duplicate, the work of governments and other NGOs. And as soon as possible, Heifer will direct its efforts toward long-term rehabilitation which is part of Heifer's sustainable development path.

**QUESTION: How is Heifer International involved in mitigation efforts, which in disaster management serve to avoid or lessen the loss of lives and property that disasters cause, and as you said earlier seems to thread through the disaster management phases?**

LUCK: Mitigation is an inherent aspect of Heifer International's work. Training, education and implementation of sustainable practices are all part of Heifer's development methodology, and, as you mentioned, those practices can also serve to minimize the impact disasters have on individuals and communities. Reducing a disaster's impact is especially important for Heifer's vulnerable communities that are located in regions rife with disasters. Let me give you an example. Consider a family living in a community that has poor, unyielding soil and the area is prone to flooding and mudslides. If Heifer provides a water buffalo to that family, the family is required to properly prepare for the animal. Heifer then educates the family about how to care for the animal. Heifer also trains the family members on using the water buffalo to implement terraced farming and using its manure for fertilizer. The enriched soil is good for farming, and the terrace method of farming on a steep slope helps collect and distribute water more appropriately and prevent or lessen erosion. Or Heifer might provide the family nitrogen-fixing trees for the family to plant on hillsides to improve the soil. And the roots and foliage provide help by stabilizing the hillside.

**QUESTION: While mitigation aims to avoid or decrease disaster impact, preparedness presupposes a disaster, and aims to get individuals and communities ready to respond to and recover from a disaster.**

LUCK: First, Heifer recognizes that while mitigation can lessen, and sometimes even avoid, the impact of disasters on communities, there is also a critical need for communities to prepare for handling itself when a disaster does strike. It is important to get ownership by the local leadership of a community about importance of disaster preparedness – it is then easier to educate the rest of the community about how they can prepare themselves, their families, their livestock and their other property for a disaster. Since it is often for a significant period of time that victims of a disaster must fend for themselves, having a plan prior to the event can make self-help more manageable as well as assisting others in the community. Such preparation can save lives, and allow the community to begin “putting the pieces back together” and embarking on recovery efforts.

I also mention fundraising here since Heifer has many project communities in disaster-prone areas all over the world. An important part of Heifer’s being prepared to handle disaster situations as an organization is to have funding that is designated and readily accessible for assisting communities with post-disaster rehabilitation. Therefore, Heifer raises money for a Disaster Rehabilitation Fund so that it may support communities, regions or countries following a natural disaster. In raising this type of funding, Heifer is careful to make it clear to donors that these funds will be used should a disaster occur that impacts a Heifer recipient community at some point in the future.

**QUESTION: That definitely gives a good description of Heifer’s role in disaster response, mitigation and preparation. So, how would you describe Heifer’s role in recovery?**

LUCK: “When the cameras leave, Heifer moves in to do the work on the ground for the long term.” That comment is a pretty good one-sentence statement regarding Heifer’s involvement with a disaster. As I’ve discussed, Heifer may have a limited role in response, but

recovery and the long-term rehabilitation/reconstruction aspect of this phase are right in line with Heifer's mission. Meaning, as I mentioned in my discussion about response efforts, once Heifer communities' basic needs have been met and the disaster situation is stabilized or being handled by relief and responder organizations, Heifer turns its efforts toward working with disaster affected project communities and their surrounding region. Heifer's goal, which is also the goal of long-term recovery in disaster management, is not just to get a community back to the way things were prior to the disaster, but rather to rebuild in a way that makes that community more resilient and its growth more sustainable. Again, rebuilding in that way fits well with Heifer's mission.

I will mention funding again here for two reasons. One, fundraising for development is different than fundraising for disaster relief. Two, fundraising as part of disaster preparedness is different than fundraising as a result of a specific disaster. When I discussed disaster preparedness, I mentioned Heifer's Rehabilitation Fund and the fact that it is clearly marked as something to be used "only in case of a disaster in the existing Heifer project communities." If there is a major disaster that has a significant impact on numerous Heifer projects and communities, there may be a fundraising effort specific to that disaster. Examples of such a disaster would be the 2004 Southeast Asia tsunami and the 2010 Haiti earthquake. After the tsunami, people called Heifer saying that they wanted to donate money. However, since Heifer focuses on long-term development we capped the donations at \$1 million to be used for the reconstruction phase after the cameras left and citizens around the world moved their philanthropic attention to other needs. I recommended that donations for disaster relief should be given instead to relief organizations and first responders, of which there are so many who do great work. Heifer then focused on reconstructive efforts for tsunami-impacted communities in

the countries where they already had ongoing development work and staff in place. It is critical for me to note that during the time I was with Heifer, and I am certain the policy is still in place - Heifer will not use any disaster as a fundraising opportunity in which the funds would go to programs or work not directly related to the disaster for which funds have been raised.

As part of disaster rehabilitation and long-term recovery, one can witness three more of Heifer's cornerstones – “accountability,” “sustainability & self-reliance” and “passing on the gift.” As with any Heifer beneficiary, post-disaster recipients are required to take proper care of any resources that Heifer has provided to them. In other words, beneficiaries are fully accountable for what they receive whether it is an animals, trees or bees for example. I have mentioned sustainability throughout our discussion, and noted its importance in both Heifer's work and disaster management. The Heifer cornerstone, “sustainability & self-reliance” ensures that families and communities continue to be successful and grow even after Heifer is no longer involved. Also, before beneficiaries ever receive anything from Heifer, they agree to one day pay their “living loan” by providing a “living loan” to another family in need. So, once beneficiaries are successful and self-reliant, they will then “pass on the gift” of an animal or plant offspring for example, thereby becoming donors themselves. And that process leads to well-deserved dignity.

**QUESTION: Previously you mentioned partnerships specific to disaster response. Does Heifer have partnerships in other areas of its work?**

LUCK: Absolutely – Heifer has many partners such as other NGOs, civic groups, foundations, faith communities, multilateral organizations, governments and corporations to name just some of them. Partnerships between organizations that complement each other, whether their missions are similar or completely different, can greatly expand the positive impact

and effectiveness of humanitarian work whether it is disaster relief, development or a combination. In fact, goals can be reached through partnerships that might not be achievable independently. A specific example of an organization that brings together NGOs for beneficial partnerships is InterAction. Heifer is a member organization of InterAction which is the largest coalition of US based international NGOs that work in both development and disaster relief. For detailed information, you can see InterAction's website [<http://www.interaction.org/>]. Heifer became a member organization of InterAction in 1989 and I was elected Board Chair in 2009. There are many positive things to say about InterAction, but I can tell you two of the aspects that are critical to its positive international reputation with not only NGOs, but with governments and multilateral organizations as well - its ethical standards and guidelines with which every member must comply and the alliance's belief in transparency. Another good example is the Conrad Hilton foundation which facilitates the Hilton laureates in combining their synergies/missions to enhance their collective impact.

**QUESTION: With people and organizations involved in disaster management, in recent times there has been a pretty significant shift in opinion about NGOs from skepticism to appreciation, especially internationally. To what would you attribute that shift?**

LUCK: I have seen government, military, multilateral and private sector organizations increasingly see value in partnering with NGOs in a number of situations, including disaster relief and recovery efforts as well as long-term development. An NGO often has what it takes to gain access and effectively work in certain communities, regions and countries, including but not limited to: knowledge of language, culture and politics; long-term presence in a community, respect from local government and community leaders; and a well-established local staff. For example, in the countries where Heifer works, there is trust and respect "on the ground" in the country because of such practices as hiring only indigenous people and providing resources and

training particular to that community. Heifer workers understand cultural needs and nuances without having to check for information in a guide book, because they are already a part of the community. Heifer hires citizens of the country in which the project is located with very few exceptions. In other words, Heifer does not hire expats locally, but uses their skills for evaluation or training purposes to support the indigenous staff.

*INTERVIEWER GRAY: Thank you Jo Luck for expanding our knowledge of the role of a development-based NGO in regard to disaster management.*

LUCK: You are welcome and thank you very much for the opportunity to discuss this important topic, and of course I always enjoy discussing Heifer. I hope those who read this article will visit Heifer's website and learn more about the organization.

### **Conclusion**

In closing, the following post from the Heifer International Blog is a Heifer success story that captures many of the key aspects of the information given in this interview. Furthermore information about development work married with disaster recovery is put into the context of human dignity and a better quality of life because of assistance. And the resulting empowerment of local people is transformative. This story demonstrates the synergy of Heifer's overall development mission with the goals of long-term disaster recovery. Casey Neese wrote (2011):

Late last night – while most of us in this hemisphere were sleeping – a delegation from Heifer's US headquarters attended a Passing on the Gift ceremony in Baan Klang village in Phuket, Thailand. It was already Wednesday there, and the event was well attended with five groups of 25 villagers sharing the offspring of their plants and animals – in this case mangrove trees and oysters – with another five groups of 25.

The Passing on the Gift ceremony is the embodiment of the ever-expanding network of hope, dignity and self-reliance that's created when our project participants are given the tools to lift themselves and their communities out of poverty. This project is focused on rehabilitating areas hit by the 2004 tsunami that devastated thousands of families in Thailand's southern provinces and in neighboring Asian countries. Heifer Thailand made grants to local government offices and NGO partners to provide families with livestock, mangrove trees, fishing equipment and training to help them rebuild their incomes and move closer to self-sufficiency.

Noel Mace, our Asia and South Pacific program officer, was there to witness the ceremony. He says it was remarkable to see not only recipients being transformed into donors, but disparate groups coming together as they passed on their "love and values." "It really stood out that these inclusive groups of Buddhists, Muslims and Christians showed that community development and environmental protection takes everyone working together."

### **About Jo Luck and Heifer International**

In August 2011 Jo Luck retired from her position as president of Heifer International after 22 years with the organization. She served as the organization's president and chief executive officer from 1992 to 2010, and as director of International Programs from 1989 to 1992. Under Luck's leadership, Heifer International (Heifer) grew from a \$7 million organization to over \$130 million, thereby dramatically increasing the organization's programmatic impact.

During Luck's time at the helm, Heifer International received a number of awards such as: the Martin Luther King, Jr. Salute to Greatness Award; *Fast Company's* Copernican Award;

the Conrad N. Hilton Humanitarian Prize; the Phoenix Award; *Bon Appétit's* Humanitarian Award; Platinum Certification from the U.S. Green Building Council; and InterAction's Mildred Robbins Leet Award for the Advancement of Women.

Jo Luck herself received the 2010 World Food Prize, which is often described as the "Nobel Prize for Food and Agriculture." The award recognized her for her work through Heifer International for improving the availability and sustainability of food to people in need throughout the world. She also received other awards including: the Lions World Services for the Blind Vision Award; the *Forbes* Executive Women's Forum Trailblazer Award; the International Women's Forum Women Who Make a Difference Award; Rotary's Service Above Self Award; the LC & Daisy Bates Humanitarian Award for Global Awareness; and in 2011 President Obama appointed Luck to the U.S. Agency for International Development's Board for International Food and Agricultural Development.

Luck continues her work to end hunger through speaking presentations and service on boards and advisory committees addressing the global food security challenge of feeding nine billion people in 2050, through sustainable agricultural development. She serves as a member of the Chicago Council's Global Agricultural Development Initiative Advisory Group, the Farm Foundation's Dialogue on Food and Agriculture Steering Committee, and the DuPont Advisory Committee on Agriculture Innovation and Productivity. She is the chairperson of the Program Oversight Panel on Aquatic Agricultural Systems – a Consultative Group on International Agricultural Research (CGIAR) multi-year research initiative conducted in partnership with the WorldFish Center located in Penang, Malaysia.

Luck attended Hendrix College and earned a B.A. in education at David Lipscomb College. She attended the John F. Kennedy School of Government at Harvard University and

Harvard Business School's Executive Education Session on Governing for Nonprofit Excellence.  
She holds honorary doctorates from Clark College, Lyon College, the University of Arkansas,  
and Stephens College.

## Reference

Neese, C. (2011, May 11). Mangroves and oysters mean hope for Thailand. Retrieved from:  
<http://www.heifer.org/blog/2011/05/mangroves-oysters-mean-hope-for-thailand.html?msource=magento>