A Catchy System for Supplies Management

A Project Designed by the Pan American Health Organization

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The big picture

Sooner or later following natural or complex disasters, humanitarian supplies start to flow into the disaster site. In many cases, the flow turns into a flood exceeding the coping capacity of the humanitarian coordinators.

The main challenge faced by those managers is to acquire **operationally useful information** on all supplies – regardless of their ownership – in the pipeline or already received at the disaster site. Their job is not to move relief stuff from point A to point B but to have the "big picture" in order to coordinate the relief efforts and avoid duplication. In the disasters (hurricanes and earthquakes) of the 1980s in Latin America and the Caribbean, great pride was taken to be able to record that a plane arrived from country X at such a date with "20 tons of blankets, medical supplies and food". While this is valuable information for the preparation of a formal letter of gratitude, it is useless in terms of humanitarian coordination and management.

Another major deficiency of external assistance in the most visible (and publicized) disasters is the uneven quality of the donations, in particular,

Capturing data on medical supplies

medical supplies. A significant part of unsolicited donations is of questionable value and therefore competes with essential items for scarce logistical resources warehouse space and transportation. For the unseasoned or unqualified local volunteers or army recruits, expired medicines are medicines and will find their way on the next helicopter! The solution is to *assign priorities to incoming supplies.*

In 1990, a Supplies Management Project (SUMA) was designed by the World Health Organization with the cooperation of the Colombian Red Cross Society and experts throughout Latin America and the Caribbean with the objective of assisting relief coordinators to **sort, classify, prioritize and inventory all supplies** converging on a disaster-affected country or community.

Political support was first secured from the Ministries of Foreign Affairs, Civil Defence, Ministries of Health, National Red Cross societies and, in some countries, Customs Offices

Then a user-friendly software for Supplies Management (SUMA) was prepared for use by local personnel unfamiliar with computers and databases. Purposely, for the first four years, the interface with the user was kept simple and undemanding in terms of required computer configuration.

Following lengthy consultations, a deceivingly simple priority classification and colour coding were developed and standardized throughout the Americas.

+ **Priority 1**
For Immediate Distribution (Red) (The supplies you were impatiently waiting for . . .)
+ **Priority 2**
Low Distribution Priority (Blue) (Nice but can wait a while)
+ **Priority 3**
Hold - Non Priority Items (Black) (Those items you wish had never

been sent in the first place).

Humanitarian supplies were divided into seven categories based on the experience gained by the United States Military in Kurdistan (DALIS supply system).

Extensive training of *national SUMA teams* to develop the local capacity rather than relying on international teams Health workers, Civil Defence professionals, custom officers, Red Cross volunteers and many others constituted the backbone of the countries' SUMA capacity.

Intercountry backup capacity (personnel, equipment from satellite communication and computers, to survival personnel items and provision of paper forms and priority stickers

A catchy system

SUMA is not a software, it is a methodology to manage information on the flow of supplies It is also an institutional building programme. part of WHO/PAHO technical cooperation. Indeed, it would have been so much simpler to develop a regional team placed on stand-by for prompt dispatching, the last resort approach in large complex disasters where local governments have collapsed or are part of the problem.

In most disasters, earthquakes, hurricanes, and conflicts such as the one between the border of Ecuador and Peru, SUMA has been activated, leading to constant updates, and improvements in the method and software.

The typical scenario is as follows:

Central level: In the coordinating centre, a SUMA capability is established to compile the information collected at the entry points (airports, harbours, etc.) on supplies arriving to the country (if internationally provided) or to the disaster "area" in national disasters. Timely reports (standard or customized) are prepared by any combination of fields (date,

place, type of supplies, e.g.: antibiotics, place of origin, for instance a donor country or agency, recipient, such as the local Red Cross, final destination, etc.).

Field level: Teams of SUMA volunteers (generally a mixture of health and non-health workers) capture the data at the arrival of the consignment (before custom clearance in the aftermath of the United Nations approved military intervention in Haiti), inventory the individual items, using, hopefully, the airway bills (if not available, by physical inspection). The level of details registered is left to the discretion of the SUMA team, subject to time pressure. After sudden and short-lived disasters such as earthquakes and hurricanes, incoming supplies are peaking in a matter of days and even short delays in the flow are out of the question. Ongoing complex disasters do present, in this regard, much less problem as a few hours of delay usually do not matter, permitting a technically more meaningful and detailed inventory.

After inventory, each parcel, box and container is marked with tapes or stickers indicating the priority level for processing and confirming that the supplies duly transited through the SUMA registration process.

A detailed form is locally printed, supplies are released to the consignee representative and the donor is informed accordingly. SUMA captures information **not** supplies!

Data are periodically rushed, by diskette, to the central level for compilation. Internet radio transmission is planned for the near future!

After a five-year operation, over 1,800 persons have been trained in Latin America and the Caribbean as well as in Japan, Bangladesh and Bosnia. SUMA is officially adopted as a standard tool in most countries. On

popular demand, a new module on stock management at peripheral level has been introduced in version 5.0 released in December 1996. The new version features a Windows compatible interface reflecting the rapidly increasing sophistication of the users in Latin America and the Caribbean, and the broad availability of 386 or higher IBM compatible computers.

Convincing partners

The nature of the problem of supplies management in large complex disasters is essentially identical to the one faced by relief personnel in the aftermath of earthquakes and hurricanes.

Based on SUMA experience in Haiti, the successful sorting inventory/prioritization of supplies in complex disasters requires some conditions:

First there should be a main user of the data compiled by SUMA.

SUMA operation in Haiti, following the military intervention, got its real start once a civilian coordinating body and authority had been established. In a free for all uncoordinated environment, SUMA data may not contribute much. The United Nations leading agency in charge of the overall coordination and WHO, the health agency, should be the natural users of this information.

There should be a consensus and understanding between all parties that better information is in the common interest: of the donors, the agencies, and above all, the victims. They will all benefit from the very early mobilization of SUMA, as was belatedly realized in Bosnia. Indeed, calling SUMA at a later stage of the relief effort could only face a situation where each NGO and agency had improvised, at great cost of time and money, their own inventory systems incompatible with each other. For the international community, it was indeed a missed opportunity!

All supplies should, however briefly, transit through a registration process. It is a difficult step for the military and/or small NGOs, who used to go their own way. Here is where the coordination mandate and negotiating skills of the leading agency come to play to convince all partners.

♦ A modest financial commitment. If 2 or 3 volunteers with backup (equipment and experts) from the PAHO/WHO SUMA Project and the help of locally recruited staff can manage "normal" disasters, a situation such as the one in Bosnia or the Great Lakes will require more investment and personnel due to the size of the humanitarian effort.

An international civilian team: Management of supplies is always sensitive and should be managed by internationally neutral experts from humanitarian agencies and donor countries, rather than the military. The SUMA seasoned countries of Latin America and the Caribbean offer a large reservoir for such a team

under the sponsorship of DHA or WHO. Political support for such a role for developing countries is rising.

What cannot be expected

♦ SUMA is not a universal tracking system where every single item can be followed from departure from the donor's warehouse to the last distribution station in the field. This can only be implemented at a high cost, *within* highly structured and sophisticated agencies, not on an interagency basis. However, SUMA 5.0 does provide the means to reconcile/compile stock inventories at various levels.

♦ The level of details (how many ampicillin pediatric 250 ml vials had been received yesterday?). In large disasters this level of detail is unlikely to be routinely recorded without paralyzing the flow at the point of entry. Pharmacists responsible for the inventory of modern university hospitals are likely to be somewhat disappointed with SUMA.

The coverage will depend on logistical arrangements and cooperation from all partners. Chaos being unavoidable, there will always be supplies sneaking in by the registration gate.

SUMA provides information intended to be widely available (transparency). Knowing that agency A has received large amounts of vaccines, in short supply everywhere else, does not solve the problem. Negotiations and deal-making remain to be done. SUMA is a tool which might not be fully used if there is no real coordination.

How to Get SUMA

Although copyrighted by PAHO/WHO to avoid commercial exploitation, SUMA is available (compiled version and manuals in English, Spanish and soon in French) at no charge. Soon, it will be downloadable from Internet (http://www.paho.org).

A nice addition is a user friendly module to translate all screens/helps/tables into any other languages.

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