

GREEN RELIEF AID

concept note

relief, waste management,
products, packaging, logistics



In average, more than 350 natural disasters happen every year affecting more than 200 million people. Large amounts of waste are generated during response operations which totalled USD 24.5 billion in 2014. Estimates from Red Cross indicates that 75 % of all relief items are brought in during the operations. As an example more than 500 relief mill. items were delivered in Haiti with significant amounts of waste.

Of this, cost for logistics and waste management can easily amount to 10-15% of total costs, and every each of the operations are challenged by discard of different kinds of waste¹.

PARTNERS: DANISH RED CROSS

¹:Biodegradable (typically buried), Packaging waste (plastic, cardboard, glass and metals), Waste from the equipment delivered to the beneficiaries, e.g. tarpulins, blankets, etc. (if a blanket is wet it is discarded), medicine, food that has expired or donations that cannot be used (food that has expired or other unsolicited goods).

CREATING AN ENVIRONMENTALLY SAFE WAY TO MINIMIZE WASTE, DESTROY OR RECYCLE AND/OR REUSE MATERIALS AND PACKAGING MATERIAL AFTER INITIAL USAGE (CIRCULAR ECONOMY) IN RELIEF OPERATIONS.

Currently there is not a global waste handling standard- Local solutions are found on the go or left for Red Cross / Red Crescent National Society to solve after they have left the area.

While local contractors can be hired by deployed international staff to manage waste, sometimes a proper end destination cannot be guaranteed. Other forms of packaging waste is spread in existing settlements as recipients of relief goods cannot access proper waste management systems either.

MOTIVATION

As climate and environmental protection have become increasingly important on a global scale, it is essential that the Red Cross federations as well as other large actors in international relief operations are looking at their own impact when responding to emergencies.

Several studies have been undertaken already with different angles (*Rottier, 2014*) (*Ciceri, 2013*) into the global agenda of IFRC to reduce its overall environmental impact. On a more local scale, sourcing of materials can have a huge impact on the environment such as deforestation to support shelter programs or the impact of neglecting the full life cycle of a product is brought up in discussion about waste management.

In the humanitarian sector logistics have been identified in several previous reports and documents like “Carbon Efficiency of Humanitarian Supply Chains: “ (*Oberhofer, 2013*) as the single most significant contributor to carbon emission increase.

Many have tried to come up with solutions to this problem, but none have been scaled in any significant way.

Particularly in the early stages of a disaster response, no system has emerged that enables rapid deployment and distribution with significant reduction on the environmental impact of disasters.

Such a solution; cost effective, widely applicable and easily deployable and with potential for local markets as well that often do not have access to proper waste management systems - is in dire need.

POTENTIAL SOLUTIONS

Keywords:

Carbon neutral packaging, reusable, recyclable, biodegradable.

Packaging usable for other usages after being emptied (for instance plastic boxes that can be used as jerry cans afterwards).

WHAT IS ALREADY BEING DONE

Some suppliers for the humanitarian sector have already invented certain types of biodegradable packaging such as bags for mosquito nets. As an example Red Cross are procuring 100.000 mosquito nets per year and the ambition is to use biodegradable bags.

Others have changed cardboard box packaging to plastic containers that can be used as jerry cans or buckets.

Today, some items are made out of recycled material, such as a woolen blanket made out of recycled clothing fibres.

However, much more can be done in order to minimize waste in the production of the items, in the packaging and the waste management in the operations.

The present solution only cover a fraction of the needs for a more viable, sustainable and greener response. While the relief actors are not only looking for cost reductions, introducing recyclable or multi-use packaging materials can potentially establish a new standard for minimizing unintended negative side effects for the whole industry - which would create opportunities for first movers.

WHO COULD USE THIS

The solutions would be of obvious interest to any humanitarian organisation engaged in support to beneficiaries - be it short term emergency responses or long term development projects.

Ingenious products that are highly sustainable, carbon neutral and affordable for the humanitarian associations are likely to gain huge market shares with UN, Red Cross / Red Crescent, Save The Children and Danish Refugee Council being examples of main implementing organisations.

In the fiscal year 2014 (July 1-June 30), the UN procured more than \$17.2 billion in goods and services that covered almost everything from vaccines to air freight. The IFRC alone uses an average of \$150 mill every year on logistics - not counting ICRC and Red Cross and Red Crescent National Societies

DANISH RED CROSS CAPACITY, CONTRIBUTION AND STRATEGIC FOCUS

- Danish Red Cross will engage in and facilitate more partnerships with non Red Cross / Red Crescent actors to

promote innovation in Red Cross / Red Crescent humanitarian action;

- with a view to enhance humanitarian impact and provide sustainable solutions to address human vulnerability, Danish Red Cross will engage in co-creation by working with and drawing on expertise from the private sector, research institutions and target groups of Danish Red Cross interventions;
- being part of the World's largest network of humanitarian organisations, Danish Red Cross will support the development of such products, using its deep understanding of the relief industry and market needs as well as offer linkage opportunities through its international network and access to the wider humanitarian community, including the UN.

EXPECTATIONS TO PARTNERS

- Low unit cost;
- development of carbon neutral products and/or packaging requirements that meets product quality standards as defined in the Emergency Items Catalogue www.ifrc.org/emergency-items and also support the development of market norms for humanitarian relief organisations;
- low waste;
- solutions to waste managing and handling unsolicited donations in a safe and environmentally friendly manner; that being medicines, foods or other items.

KNÆK KODEN TIL NØDHJÆLPSPRÆKEDET deciphering the relief aid market



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A recent report from Global Humanitarian Assistance shows that the global humanitarian aid market has reached a yearly turnover of 24.5 billion USD. But the humanitarian aid organisations are increasingly challenged in providing the needed solutions. Closer collaboration with the private sector and researchers is needed in order to meet the challenges ahead.

In partnership between the Danish Industry Foundation and access2innovation the project "Knæk Koden til Nødhjælpsmarkedet" (Deciphering the Relief Aid Market) sets out to establish a Danish innovation platform enabling humanitarian organisations, private sector and academia to efficiently develop and commercialise needed solutions.

This will be accomplished by supporting Danish Red Cross, DanChurchAid and the Danish Refugee Council to map out concrete business opportunities within renewable energy, agri-business, water management and ICT as the basis to team up with private sector companies as well as the universities in Aalborg and Copenhagen in order to develop sustainable solutions for the humanitarian aid.

With financial support from the Danish Industry Foundation the project is facilitated by the access2innovation association