

# RED ALERT

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YOUR SUPPORT, OUR WORK, REAL DIFFERENCE

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**redruk**  
people and skills for disaster relief

2019 ISSUE

Dear Friends,

I'm delighted to welcome Jo de Serrano OBE DUniv to the RedR UK team. Jo joins us a Director of Enterprise and Funded Programmes, bringing a wealth of knowledge and experience of the humanitarian sector, from working on DFID's reconstruction programme in Iraq, to supporting deployments for DFID responses globally, as well as supporting secondments into the UN via the Standby Partnership and UN Disaster Assessment and Coordination (UNDAC Team).

Over the past year, RedR UK has renewed its commitment to supporting the humanitarian sector. We responded to widespread flooding in Kerala and the devastating earthquake and tsunami in Indonesia. More recently, following the destruction caused by Cyclone Idai across Southern Africa, we are working with local partners in Mozambique to give national aid workers the skills they need to rebuild and recover.

We continue to train and support aid workers worldwide, from the Rohingya refugee camps in Bangladesh to those drilling for water in South Sudan, giving them the skills and knowledge they need to save lives. None of this could be possible without your continued support, thank you.



Martin McCann  
Chief Executive

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## WHY WE PRINT RED ALERT

Red Alert is produced once a year to keep our supporters informed about RedR UK's activities and achievements, and to encourage others to support our work. All RedR UK publications, including Red Alert, are printed on FSC accredited stock.

Tell us what you think! We're always keen to hear your thoughts about issues raised in Red Alert. Letters to the editor should be sent to: [communications@redr.org.uk](mailto:communications@redr.org.uk)

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# THE CHANGING FACE OF HUMANITARIAN ENGINEERS

International Humanitarian Response is undergoing a tectonic shift, moving from giving to facilitating and from supplanting to supporting.

Western aid workers no longer dictate what they think is the best solution. We are moving towards engaging more with communities, localising response and seeking to make disaster response more ecologically and socially sustainable.

# THE CHANGING FACE OF HUMANITARIAN ENGINEERS

BY ALISON ELY

A locally-led humanitarian response has the advantage of better access to affected populations, deeper national networks, and a clearer understanding of the historical, cultural and geopolitical specificities of the area. Since local actors are often themselves affected, they also bring a personal understanding of what needs to be done.

So – does this mean that the skills of the British or, say, Australian engineer are no longer needed in disaster response? My experience at RedR UK leads me to say, no. There is still the need for highly specialised technicians to give advice and assistance in complex disasters. However, the role of the humanitarian engineer has evolved and will continue to do so.

Humanitarian crises are characterised by constantly shifting, insecure contexts. They are supported by vast numbers of personnel from a wide range of backgrounds. In these complex contexts, engineers not only have the technical knowledge to assess the structural stability of an earthquake-damaged

hospital or design large-scale water distribution networks, they also have the project and people management skills to build strong teams, create well-managed projects and thought-out exit strategies.

Founded initially as the Register of Engineers for Disaster Relief, RedR UK's mandate has developed from a focus on deploying engineers, to training those involved in humanitarian action to be more efficient and effective in all areas of their work. This includes people from private sector, local authority, international NGOs, local NGOs, individuals, UN, Red Cross/Red Crescent societies, and many more.

So, could engineers take a larger role in training their counterparts in locations vulnerable to disasters? Many companies have already exported their knowledge and expertise to offices around the world. Are the employees in these places being developed professionally to understand the needs when disasters hit? Do they understand principles of “do no harm” or “build back better”? Do they



The future of engineers in humanitarian response is in building the skills, competencies and confidence of local responders...

know how to do “good enough” engineering? RedR UK believes that the engineering sector has a vital role to play in the professionalisation of humanitarian response. The need to develop and meet standards of quality, impact and accountability, and to think about handover, operation and maintenance, are all requirements with which Engineering institutions are familiar and lessons can be shared and applied to the humanitarian context.

The future of engineers in humanitarian response is in building the skills, competencies and confidence of local responders through great management, relevant training and the sharing of expertise for appropriate guidance. This approach will ensure that skills remain in-country for the long-term, ready for future disasters. ■



Alison Ely is a Programme Manager at RedR UK. A Civil and Structural Engineer she spent seven years working for civil and structural engineering companies, before moving to the humanitarian sector in 2013. She has managed projects in the middle east and was part of the emergency response to the Nepal earthquake in 2015 and the Ecuador earthquake in 2016.

*Now at every stage of my work I think about the people we are here to help – how can we best serve them?*

**Anne Kainyu Gitari** participant in RedR UK's *Coordination for the Nutrition Cluster* training in Cox's Bazar.



# WORKING TOGETHER IN COX'S BAZAR

**Following the large-scale forced displacement of Rohingya people from Myanmar in 2017, Cox's Bazar, Bangladesh is now hosting over 900,000 Rohingya in the largest and densest refugee settlement in the world.**

The scale of the crisis is overwhelming; in 2018 it was estimated that 16 million litres of water each day and 12,200 metric tonnes of food per month were required to meet the needs of the refugee population. As of February 2018, 130 NGOs were responding to the crisis alongside the Government of Bangladesh, including at least 13 local, 45 national and 69 international NGOs, the Red Cross/Red Crescent Movement, and 12 UN agencies.

In such a large-scale response, good coordination between local and international NGOs is vital to ensure that life-saving aid reaches those who need it most. This year, RedR UK ran a series of training courses in coordination for the Nutrition Cluster in Dhaka and Cox's Bazar, Bangladesh. Anne Kainyu Gitari is a nutrition expert for Action Against Hunger (ACF) who attended the RedR UK coordination training in Cox's Bazar. She shares the challenges of

working on a large-scale response: *"I started my humanitarian career with the International Rescue Committee (IRC) in Kenya as a nutrition officer. I've worked with ACF in Afghanistan, Myanmar, Ethiopia and now Bangladesh. In between working for IRC and ACF, I worked with Medair in South Sudan. I arrived in Cox's Bazar in January 2019. Being new to the sector in Bangladesh, I needed to understand the roles of the different sector members and partners and the decision-making process. When I first arrived, it was a bit confusing because there was so much going on, but now after the training I get it, I understand."*

Action Against Hunger works in 19 camps in Cox's Bazar, carrying out nutrition and basic health activities for severely malnourished children and mothers. They also run nutrition-sensitive programmes like Water Sanitation and Hygiene (WASH) Disaster Risk Reduction, food security



Anne Kainyu Gitari checks the weight of a malnourished child in the nutrition centre in Cox's Bazar, Bangladesh.

and livelihoods. Anne explains her role and the impact of the RedR UK training

*"My role as a nutrition and health expert is to ensure that our programmes are of a high quality and that we're following the correct protocols. I work closely with our field teams, to help them meet any challenges they might be facing.*

*When the first influx of refugees happened in 2017 the sheer number of people arriving meant that the humanitarian response was focused on reaching as many people as possible, just to save lives. Now that the situation is starting to stabilise, we can go back and ensure that the services we are providing are relevant to the needs of the refugees.*

*Cox's Bazar can be a very challenging context to work in. This area is prone to cyclones and heavy monsoons which can have a devastating impact on the refugee population. The monsoon season is coming up, so we are currently preparing to ensure that we have adequate supplies to our centres, so that the programmes can still run even if we can't reach the camps.*

*When you are working at such a large scale, proper coordination is essential; in some of the camps, you can have two or more partners working on nutrition programmes. We have meetings*

*every two weeks to discuss nutrition-related issues, to identify gaps, and map out where all the stakeholders are so we can avoid duplication of activities and resources. It can sometimes be easy to miss information because a lot happens very quickly!*

*The RedR UK training was very interactive, and the facilitators brought in a wealth of knowledge from different countries and contexts. They also used a variety of different methods of training! I absorbed so much more information than if I'd just sat and listened.*

*In any humanitarian response, I think there can be a danger that you will get side-tracked by the work and the processes and forget why you are here. The RedR UK training helped remind me that the beneficiaries should be the focus of every part of our work. We need to work closely with them at every stage of the process to ensure we're meeting their needs.*

*This part of the training made a big impact on me. When I go to the refugee camp now, I don't just talk about the processes with ACF staff, I also make sure to speak with the beneficiaries. **Now at every stage of my work I think about the people we are here to help – how can we best serve them?" ■***



# HANDS-ON INDONESIA

Indonesia is a country which is regularly exposed to a huge range of natural disasters. Typhoons, earthquakes and volcanic eruptions regularly strike the country, leading to flooding, landslides, tsunamis and mudflows and directly impacting people's lives.

Together with RedR Indonesia, RedR UK organised a two-week, hands-on experience in Indonesia. Participants lived within local communities, engaged in practical exercises and met with key actors in the aid sector, giving them a unique insight into humanitarian response.



Sally Walters is a RedR UK Member, former trustee and an engineer at engineering consultancy, Stantec. She has supported RedR UK since 2007, and more recently she was closely involved in helping to set up and coordinate RedR UK's South West Regional Group. Sally took part in the trip to Indonesia and shares her experience:

*"The course was a brilliant introduction to working with vulnerable communities. We worked in three areas; Tembi Village, which was severely damaged by an earthquake in 2006, Mount Merapi, where a volcano erupted in 2010 and Pacitan Town, which affected a cyclone and landslides in 2017.*

*We had the opportunity to integrate with local communities, NGOs, and government organisations and understand how these groups work together. Working alongside local NGOs gave me an insight into how they respond to natural disasters and help build the resilience of vulnerable communities. We also discussed plans with local communities and listened to how they wanted to implement responses.*

*It was a challenge to go into disaster-prone areas with preconceived ideas of what we could do. I learnt that the solution is not always a hard engineering one and it's vital to speak to local communities about solutions because they would often have something different and better in mind.*

*The last community we went to was in Pacitan, which had been heavily*

*affected by heavy floods and cyclones in 2017, causing severe landslides. We wanted to find out how we could help the local community to be more resilient. We talked to them about how best to highlight things like early warning systems, what to do in emergencies and how to be prepared. This was information they already knew, but it had never been written down. There were no visuals. After talking to them, we put together a poster campaign which highlighted early warning systems.*

*The local community are now planning to develop the campaign further. We achieved a positive and lasting impact, even though it was only a two-week workshop. It wasn't necessarily what we expected we'd be doing, but it was actually the most rewarding part of the trip.*

*I learned a considerable amount from this experience. It showed me that the politics of humanitarian work and the social skills it requires are just as important as engineering knowledge. I now have a better understanding and appreciation of the humanitarian sector, and this will help me so much in my career." ■*

# FROM OIL TO WATER DRILLING IN SOUTH SUDAN



**In South Sudan, years of conflict and destroyed livelihoods have left more than 7 million people in need of humanitarian assistance. The escalation of violence in 2013 significantly worsened the already dire water, sanitation and hygiene (WASH) conditions in the country. RedR UK trainee Juliette de Gaultier de Laguionie is a WASH Operations Officer for the International Organization for Migration (IOM) in South Sudan. She explains her role and shares some of the challenges she and her team face:**

*"My team is mostly composed of South Sudanese assistant engineers who have a background in civil engineering. Together we run a groundwater drilling campaign across South Sudan. My role is to manage the team, make sure they have a technical understanding of drilling, are able to troubleshoot and have all the equipment they need. I usually train the local drillers, initiate the drilling and then handover to my team to continue the supervision. I also occasionally engage third party contractors and supervise their work around the country.*

*We face a lot of challenges in the implementation of our work. Many of the roads are not tarmacked, so transporting the equipment can be very challenging. You may not be able to do mechanical drilling everywhere, purely because the access is difficult. It's hard to find existing information on the geology of the country so it can be a bit of a detective job, trying to understand whether drilling in a particular area is feasible or not. We try to record every piece of data that we get, to create a database*

*which can be used in the future."*

Juliette graduated with a Master's in Mechanical Engineering then spent four years in technical and operational roles for the oil and gas drilling industry. After leaving the private sector she took part in RedR UK's Groundwater Drilling course. Led by renowned specialists, the training aims to develop knowledge of groundwater, water well-siting, well-design, drilling supervision and water quality analysis. Juliette describes her experience of the course:

*"I signed up to the course hoping for it to be a stepping stone to join the humanitarian sector but little did I know it would propel me directly to work for the IOM. I wanted to learn about hydrogeology, the methods and technology used for groundwater drilling and how it compares with oil and gas drilling. I knew there would be a lot of cross-cutting technology and techniques, and I wanted to use the course as a bridge between my knowledge and experience and groundwater drilling.*

*I thoroughly enjoyed the training; it was a good balance of theory and hands-on practical sessions. The course gave me the knowledge and confidence to go from drilling in oil and gas to groundwater.*

*During the training we were exposed to different drilling methods; we used a mechanical rig, but there were also some more manual methods and these allowed me to broaden my mind and approach. The challenges in the field are always different; geology, logistics, long distances, so by understanding different drilling methods you're able to find the best solution for that specific context.*

*In the week following the course, I received internship offers from connections I'd made through the training. My internship led me to work for IOM and now I'm managing the biggest drilling campaign in South Sudan and for the IOM.*

*Everything that I learned in the Groundwater course I have passed on to my colleagues. I usually go to the field with them and make sure they understand everything as well as troubleshooting – these are all things that I learned through the training."*

Managed by IOM, Bentiu Protection of Civilians (PoC) site is the largest refugee camp in South Sudan and is currently home to over 120,000

internally displaced people (IDPs). Conditions in the camp can be extremely harsh, especially in the dry season, when temperatures often reach 115 degrees Fahrenheit. Juliette shares her experience of working to find water in such challenging conditions:

*"I think the most valuable learning from the RedR UK course was the information about pump testing - a practical test that enables you to assess the productivity and quality of the borehole. Before the training, I had never done a pump test in my life, but since the training, I've done hundreds of tests!*

*In Bentiu camp there were over 120,000 people who urgently needed access to safe water. When we were drilling there, the pump testing was critical in understanding whether we could find and produce enough water to meet the needs of such large population.*

*Striking water is extremely emotional; from the smallest community to a large IDP camp, when you see water coming out of the ground and people have been walking hours to get unsafe water before that - there's no feeling in the world that compares. **Seeing the reaction of the community, especially the women and children who are the ones who have to walk for kilometres to fetch water, is incredible; the shout, they dance, they celebrate.**" ■*

# WEARING RED AROUND THE WORLD



**Richard Rhodes and Partners** turned their office red for the occasion!



Fundraising and games at **PCA Consulting Engineers**



**Mott MacDonald's** team in Noida, India spent their day wearing red in support of RedR UK.



**Arup's** Cardiff Office raised £711.33 during their fundraising week for Wear Red!

On Thursday 28 February, offices from London to Glasgow, Dubai to Singapore, Toronto to L.A, turned red for RedR UK!

**WEAR RED** brought together over 100 companies to support RedR UK, including AIR Worldwide, Arup, BWB Consulting, Campbell Reith, Elliott Wood, JLT, Pell Frischmann, Stantec and Tony Gee and Partners. Participants organised a range of challenges to get into the spirit of the day, including bake sales, marshmallow eating competitions, and a unique game to build cup pyramids with just elastic bands and string!

And of course, RedR UK HQ took part in London, with our red velvet cake and red Leicester cheese at the ready!

Staff at AECOM, Hewson Consulting Engineers, Laing O'Rourke, Mott MacDonald and WSP were also challenged to learn about RedR UK's work through a series of Lunch and Learns and Disaster Relief Workshops leading up to the day.

**Thank you to everyone who took part, especially our Patrons and corporate supporters around the globe.**

## ➔ GET INVOLVED



### HANDS ON WEEKEND

**September 2019 date tbc**

RedR UK's Hands on Weekend gives participants a unique insight into humanitarian work, with practical sessions and a chance to network with humanitarian professionals. The event includes practical workshops on Shelter in Emergencies and the opportunity to hear directly from experienced aid workers. These weekends are very popular, so reserve your place quickly to avoid disappointment!



### GREAT NORTH RUN

**Sunday 8 September 2019**

Over a million people have completed the Great North Run since it was first staged in 1981 - are you ready to join them? Sign up for a place with RedR UK on this year's race and you can get fit, achieve a new personal best and cross the finish line a winner - all while raising money for a great cause!



### ROYAL PARKS HALF MARATHON

**Sunday 13 October 2019**

Join us for one of the most scenic city runs in the world, through some of London's most iconic landmarks. Our fundraising team will be on-hand to support you every step of the way!

**For more information about these and other fundraising events, please get in touch with the fundraising team on 020 7840 6000 or [fundraising@redr.org.uk](mailto:fundraising@redr.org.uk)**