



HUMANITARIAN INNOVATION FUND

Large Grant Final Report

Organisation Name	Translators without Borders
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Project Title	Words of Relief (WoR)
Partner(s)	CDAC-Network, Digital Humanitarian Network, Microsoft Technology for Good and Local Language Team
Problem Addressed / Thematic Focus	Language barriers in disseminating and receiving information during a crisis.
Location	Kenya
Start Date	1-Dec-2013
End Date	31-May-2015
Reporting Period	1-Dec-2013 to 31-May-2015

Total Funding	£ 232, 242 (HIF £ 132,414)
Total Spent	£ 176,922 (HIF £ 132,414)

Innovation Stage	Pilot	
Type of Innovation	Communicating with Communities	
Project Impact Summary	Words of Relief (WoR) is the <i>first</i> translation crisis relief network intended to improve communications with communities when crisis response aid workers and affected populations do not speak the same language. It eliminates linguistic barriers that can impede vital response and relief efforts during and after a crisis:	
	 Translating key crisis and disaster messages and disseminating openly before crises occur. 	
	 Building a Spider Network of diaspora translators who can translate into regional languages and who are trained to assist right away. 	
	Creating a crowd sourced, online (and mobile)	

application that connects the translation team with aid workers and data aggregators who need immediate help (entitled the Words of Relief Digital Exchange - WoRDE).

PROJECT ACTIVITIES AND OUTPUTS

Please go to **Appendix 1** and attach the final workplan, showing all work that was actually completed.

With reference to the final workplan, what have been the key achievements of the project?

<u>Translated Material</u>: over 420,000 words translated into Swahili (target of 300,000) and 50,000 words translated into Somali (target of 40,000). The CDAC Message Library was included and was also translated into Krio, Themne and Mende for the Ebola Crisis. The cholera messages were also translated into Kirundi for Burundi refugees and the earthquake messages were translated into Nepali.

<u>Machine Translation</u>: the Swahili machine engine, Microsoft Translator, was trained with 428,000 words. The Bleu score, which is a measure of machine translation quality, improved significantly from 0.33 to 49.73 (out of 100). This score means that the machine translation can be used to assist a human translator and get a significantly faster (and equal or better quality) result. In testing, we found that to be the case.

<u>Content Disseminated</u>: translated crisis content available on CDAC Message Library and various platforms, including Reliefweb, HumanitarianResponse.Info, IAWG (Inter-Agency Working Group for Disaster Preparedness for East and Central Africa) and World Reader. The WoR team trained on editing Swahili Wikipedia and crisis content posted. The content that is openly available is also being loaded into our Words of Relief Digital Exchange (WoRDE) for immediate access by organizations that have the API.

<u>Spider Network:</u> A 3-day training for crisis translation was developed and 11 volunteers from regions prone to crisis were trained as local language rapid response translators. A 2-hour Skype version was adapted for crisis activations and 19 people were trained for Ebola, the Nigeria elections and the Burundi crisis. The Words of Relief <u>Online Orientation for Rapid Response Team</u> was developed and available in 4 languages. A Code of Conduct was developed for all TWB translators.

<u>Words of Relief Digital Exchange (WoRDE):</u> The first-ever translation Application Programming Interface (API) designed to improve immediate access to TWB rapid response teams.

WoRDE allows TWB's rapid responders, who are native speakers of local languages, to connect directly with partner aid organizations and data aggregators (such as crisis mappers and search and rescue digital teams) to provide quick translations of communications coming from or intended for communities. In its prototype form, includes the ability to send user-generated content or content developed by the aid organization directly to the team for translation and the ability to send a call for translators to a broad community of translators around the world. It also includes access to the growing TWB Words of Relief corpus of content. Not yet completed (the Microsoft grant is still being used), it also will integrate machine translation in this prototype phase. This initial iteration is being tested with two partners: Ushahidi and Standby Task Force.

<u>MEL</u>: Spider Network process was documented (recruitment, simulations, training, etc.) The Machine Translation was tested. A Focus Group Discussion in Nairobi with key partners was conducted. Nicki Baily (Research and Learning Officer, CDAC-Network) facilitated an After Action Review with key team members. *Please see Appendix 3: AAR Report* An Impact Study was conducted to measure the comprehensibility of English information posters compared with translated Swahili posters and have seen that there is a very clear difference in the levels of comprehension, in favour of the translated Swahili poster. Summary of Key Findings:

- 82% of participants would prefer to receive health-related information in spoken format.
- Apart from information leaflets, public gatherings, church and radio were listed as preferred modes of communication for health-related information.
- Prior knowledge of Ebola was low among participants, regardless of age, gender, or abode.
- Reading of the English poster did not lead to any increased comprehension of Ebola.
- Reading of the Swahili poster led to a significant increase in comprehension of Ebola.

<u>Awareness:</u>: TWB presented the WoR project at over 20 events in Kenya and internationally, targeting translators, first responders, media and communications. Words of Relief produced a short promotional film, <u>Translation Matters: The Story of our Work in Kenya</u>. The four-minute film, which communicates the effectiveness of translation in increasing communications with communities, was developed to increase awareness among aid organizations of the language gap that is prevalent in humanitarian work.

INNOVATION OUTCOMES

Whether this innovative project was successful, not successful, or a mix of both, the HIF would like you to report as much detail as possible, so that success can be built on and failures can be learned from. By 'success' we mean that the innovation has achieved the planned positive impact/outcome, or that it has performed better than the current process, product or system.

2. Has the project demonstrated the success of the innovation? (Please choose only one answer.)
☐ Completely successful
✓ Significantly successful
☐ Partially successful
☐ Completely unsuccessful
2b. Please select the successes that your project have achieved: (You may choose more than one) ✓ There is real evidence that the project achieved the planned outcome(s)
✓ There were perceived contributions or improvements to the planned outcome(s)
✓ Learning was achieved within the project cycle
✓ 'Lessons learned' were gathered and circulated to humanitarian stakeholders and actors
☐ The completion of this project has led to another innovation
☐ Other (please comment)
2c. Please select the challenges your project has encountered: (You may choose more than one)
\square The project did not complete its planned activities
☐ There is no real evidence that the project achieved the planned outcome(s)
\Box There were few perceived contributions or improvements to the planned outcome(s)
☐ Learning was not achieved within the project cycle
☐ 'Lessons learned' were not circulated to humanitarian stakeholders and actors

- ✓ Other
 - Partners required constant follow-up to get content for translation. Also it was challenging to get partners to attend Focus Group Discussions.
- ✓ Crisis messages are not necessarily pre-packaged and open-sourced.
- ✓ It was difficult to engage the Kenyan Government.
- ✓ It was difficult to keep volunteer translators motivated after the initial shock of the crisis and when the crisis was protracted.

2d. If there is any evidence for the successful performance of the innovation, please describe it further:

<u>Translated Material</u>: The word count of translations for Swahili and Somali surpassed initial targets.

<u>Machine Translation</u>: Bleu Score from 0.33 to 49.73. During testing, human translation and editing of 1,000 words of crisis content took 4h45min, but when the same work was done using the engine, (by an equally capable translator/editor), the translating and editing took only 30 minutes, with editing – a significant achievement showing the importance of training machine engines in crisis languages. This is such a significant achievement that Microsoft will fund the professional translation of the Words of Relief crisis content into 7 major languages to train the machines engines.

<u>Spider Network Training:</u> Sharon O'Brien, SALIS/CTTS, Dublin City University conducted 2 evaluation exercises for Words of Relief trainings. The internal report shows that the trainings were effective. *Please see Appendix 4: WoR Training Programme – Evaluation and Self-Evaluation, December 2014 and Appendix 5: Spider Network Summary*

<u>HIF Case Study</u>: HIF carried out a series of case studies and a synthesis of lessons from the experiences of its grantees to capture the learning around managing innovations in the 50 or so projects it has funded over the last four years. The final report will be available in September.

<u>MEL</u>: Learning from the WoR pilot in Kenya were applied to the Ebola Extension (Nov-2014 to Feb-2015) in West Africa. A Learning Review of the Project was produced. *Please see Appendix 6: WoR Ebola Crisis – Learning Review.*

Impact Study: 197 Kenyans in urban and rural areas who spoke Swahili plus some English were surveyed on what they knew about Ebola. Participants were shown a simple poster translated by TWB and used throughout West Africa after the disease took hold. Initially, only eight per cent of respondents answered simple questions about the disease correctly. When respondents were given simple information about the disease in English, correct answers rose to 16%. But when given this information in Swahili, respondents got 92% of the questions correct. Please see Appendix 7: Impact Study on Ebola Information, Does Translated Health-Related Information Lead to Higher Comprehension? A Study of Rural and Urban Kenyans. And Please see Appendix 8: Impact Study Infograph

<u>Awareness:</u> OCHA proactively requested Rapid Response Teams for the Burundi elections crisis and the Nepal earthquake. During the TWB Ignite presentation on Communicating with Communities in the right language at the CDAC Network Members Forum in July 2015, several organisations (START, UNICEF, OCHA, ICRC and others) want to deploy parts of the Words of Relief work (ex. Spider Network Training). Very strong feedback on Twitter

3.	Please show the components of the project which contributed the most to any <i>successes</i> :
	(where 1 = most influence 3 = least influence)

Component	1	2	3	N/A
Design and placement of the innovation	1			
The methodology or approach to collecting evidence	2			
Context	3			
The availability of resources and capacities (financial, human, technical etc.)	1			
Success in identifying and responding to different project and innovation risks	1			
Strength of relationships and collaborations within the team and with other stakeholders	2			
The process was flexible and responsive to emerging results	1			
Ability to draw on experience and expertise of existing practice, codes and standards	3			
Other: Flexibility to modify when needed ex. producing the awareness video when it was apparent there was a need	2			

4. Please show the components of the project which contributed the most to any unsuccessful elements of the project

Component	Yes- contributed to failures
Weaknesses in the design and placement of the innovation	
The methodology or approach to collecting evidence	
Context	
A lack of access to resources and capacities (financial, human, technical etc.)	
Difficulty in identifying and responding to different risks	
Lack of good relationships and collaboration within the team and with other stakeholders	
Having a process that was not flexible or responsive to emerging results	
No ability to draw on experience and expertise of existing practice, codes and standards	Х
Other:	X
Engagement of the Government and its agencies	
Other:	X
Coordination of aid actors during a crisis	

- **5.** What are the top three, key lessons learnt relating to the innovation? This should relate to the innovation or the sector in which it operates, rather than project implementation.
 - **1.** More advocacy and awareness on the importance of local language in communicating with communities required for first responders and donors. They need to prioritize translation and integrate it into program planning and budgets. As we advocate more, the response has been positive.
 - **2.** Although TWB was successful in recruiting and training volunteers, it is challenging to maintain engagement beyond the initial shock of a crisis or if the crisis is protracted. Words of Relief needs to further develop a model of response (Project Management and translation) for crisis activations, especially sudden on-set crises.
 - **3.** It difficult to ensure translated information is being used and reaches beneficiaries as we are not in direct contact with affected populations. WoR would like to further develop a methodology to monitor and measure impact. For example when we provide a translation, we can include an evaluation component to see if comprehension has improved.

6. Do the final outcomes support the initi	ial rationale for the innovation?
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☐ Yes, completely
✓ Yes, significantly
☐ Partially
\square No, not at all
Please describe further:

Words of Relief accomplished and even exceeded some of the target outcomes initially expected. The response from partners has been very positive and confirmed our belief that there is a real need for translation, language awareness and contextualization during a crisis.

7. How has your understanding of the innovation changed through the project period?

The pilot project of WoR confirmed the need for a translation crisis network. As we responded to various crises such as Ebola, the Earthquake in Nepal and the Burundi election crisis, we have learned that the Spider Network concept works. With each activation, we have been able to fine-tune the process further and develop tools that will enable us to better respond to crisis. For example the Spider Network evolved into creating Rapid Response Teams. We learnt through Ebola that it's challenging to maintain volunteers during a protracted crisis and have developed incentives (T-shirts and certificates of achievement) to motivate our teams. .

8. Did the innovation lead to any unexpected outcomes or results? How were these identified and managed?

The Words of Relief pilot focused on crisis material that was available by first responders. We received feedback that although translation into local language is helpful, it doesn't address the problem of illiteracy. For example during the Ebola crisis, we translated simple posters into local

languages but as one first responder (MSF) stated, people are not used to seeing their local language and cannot read the posters and actually preferred the English version. We made efforts to prioritize audio and visual materials such as the Ebola: A Poem for the Living video. Unfortunately, A/V materials are not a priority and take time to develop. For example, WoR translated the Global Health Ebola video into several local languages but they have still not been released at the time of writing this report. In future, first responders and WoR should prioritize audio and visual materials, especially radio.

As seen in our Impact Study, Kenyans (82 per cent) prefer to receive spoken messages rather than written. However, it is very important that spoken messages are reinforced by simple written messages and pictures that can help with recall.

Also, aid organizations often just take whatever they have available in English and translate it into local languages that do not have the capacity for complex language. This was evident in Nepal. Simplified messaging is important and something we would like to explore further.

METHODOLOGY

9. Was the methodology successful in producing credible evidence on the performance of t	:he
innovation?	

Ш	res,	completely
✓	Yes,	significantly
_		

☐ Partially☐ No, not at all

Please describe further:

The Swahili and Somali teams were effective and produced timely, quality translations. They were also able to respond to last minute requests and higher demand. The Machine Translation training produced significant improvements.

The Spider Network concept of recruiting and training non-professional translators (native speakers/bilinguals) was captured in a summary document, which explains the process and progress. *Please see Appendix 8.* Response times and quality of translations during in the simulation exercise allowed us to gauge the effectiveness of the Spider Network and help determine weaknesses so that we could address them, through further training.

PARTNERSHIPS AND COLLABORATION

10. How and why did the partnership change during the course of the project?

Through networking, one-on-one and group presentations, the WoR team was able to establish Translators without Borders into the aid community in Nairobi. In the beginning, we had to contact and follow-up constantly with first responders but as awareness grew, organizations began to approach us. For example during the cholera outbreak in Kenya, the WASH cluster requested help with resources. WoR was able to provide key cholera messages from the CDAC-Network Message Library that were already translated into Swahili and Somali. We were also able to refer first

responders to other resources such as the Global Health Media Project cholera video that was translated into local languages (used in Kenya and for Burundi refugees). OCHA also approached us proactively to enquire about setting up a Rapid Response Team for the Burundi Election Crisis as they were mapping out who's doing what for communicating with communities.

11.	Are there plans to continue your p	artnership,	either while s	scaling up th	is innovation o	r on
	other projects?					

✓	Yes, with this innovation
□ Y	es, with another project
□ N	Лaybe
□ N	lo
Ple	ase describe further:

TWB collaborated with OCHA during the Nepal Earthquake and Burundi Elections. The WoR team also worked closely with other partners such as the CDAC-Network, ICRC and IAWG and will continue and explore how to further develop these partnerships.

DISSEMINATION

12. Please describe any steps taken to disseminate the outcomes of the project.

Please include all completed and forthcoming, as well as all planned and unplanned products (for example, research and policy reports, journal articles, video blogs, evaluations).

TWB Video <u>Translation Matters: the Story of our Work in Kenya</u> Press release was distributed to key partner websites and the TWB community, which includes over 18,000+ on FaceBook, 12,000+ on Twitter and 3,500+ on LinkedIn. So far there have been 600 views

Impact Study: Press release will be distributed to key partner websites, press and TWB community along with the Infograph.

Ebola Learning Review: Executive Summary and Report will be distributed to key partner websites, press and TWB Community.

CDAC-N Message Library: When the large bulk of translations were added to the CDAC website last year, there was an increase of over 300% month on month in views from 125 up to 450 views a month (for the last 3 months of the year, the most the ML has ever got), and that continued for some months till it settled. When it settled it was at a larger rate and there are approximately 200 views a month of the ML. To give this perspective the old Infoasaid ML in its height had 200 views per month which decreased to 125 since 2013.

CDAC-N Members Forum: Rebecca Petras (Program Director, TWB) presented highlights of the WoR project in an <u>Ignite presentation</u> at the CDAC-N Members Forum in Geneva, 9 July.

CDAC-N Webinar: Rebecca Petras and Grace Tang hosted a webinar on <u>Communicating with Communities in the Right Language on 21-July.</u> We spoke about creating the innovative Words of Relief project and key lessons learned. When polled, 92% of respondents said they have had issues communicating with communities in the right language. Furthermore 92% said the Webinar is relevant to their work and can apply something new to their work.

DHN Storyboard: The Digital Humanitarian Network created a storyboard on the <u>Ebola Response</u>, featuring our work.

13. Has the project received any third party coverage during the project (from news media, third party blogs, researchers or academics etc.)? Yes! Here are a few:

Ebola: a crisis of language: Humanitarian Exchange Magazine

Ebola Outbreak: TWB providing translation in local language: DHN Blog

Translators without Borders: HIF Blog

Breaking Down Linguistic Barriers with Words of Relief: Innovate Development

Making Translation a Priority for Humanitarian Response: Indigo Trust Foundation

Ebola Video Has Potential Audience of 400 million Africans: Chocolate Moose Media

World Update: Translators without Borders take on Ebola, BBC World Service Radio

#MessageLibrary without Borders now in multiple languages: CDAC-Network

Translators without Borders received grant from Microsoft: Common Sense Advisory

Microsoft Grants Three Nonprofits Cash: Microsoft the Firehose

Translators without Borders: Wikipedia and Swahili Wikipedia

Quest to Spread Dignity, Born in Calcutta: The Global Calcuttan

SCALE UP AND DIFFUSION – WHAT NEXT?

☐ Other

14	. Is the project or innovation to be replicated or scaled up?
	 Yes, we will scale up in the same or similar context Yes, we will scale up within our organisation (including running more pilots or trials) ✓ Yes, we will replicate the innovation/project in another context or country Yes, the innovation/project will be replicated or scaled up by another organisation or stakeholder Yes, other No
	If you answered yes to question 14, please answer 14b:
	14b. What model are you pursuing to scale up or sustain your innovation?
	 ✓ Applying for more donor funding □ Selling the innovation or patent □ Cost recovery (for example, selling your service or being paid as a consultant to implement the innovation) □ Innovation to be taken up by organisation or government as standard and included in standard planning and core funding by them

Please describe further:

TWB is applying for funding for Phase 2 of Words of Relief with donors such as the Global Innovation Fund, the Gates Foundation and others. We are looking at different ways to fund specific components of the project and packaging pieces of WoR directly to aid organisations (ex. Rapid Response Team for OCHA in Nepal.) Also, LinkedIn has provided a small grant to further develop the WoR Trainings.

The Hewlitt Foundation has provided a grant to improve the infrastructure of the overall organization, allowing us to strengthen our programming. This will allow us to apply for more restricted funding for WoR and other sub projects such as training and language mapping.

15. If the project or innovation could be replicated or scaled up, please list the three most important issues or actions that will need to be considered:

(where 1 = most important and 3 = least important)

Suggestion/issue	1	2	3
 1 A model for response to activations, especially sudden onset crises - How do we monitor and decided which crises to respond to? - How do we engage volunteers throughout the crisis? - How do we ensure constant coverage – project management and translation? 	1		
2 Ensuring content is open-sourced and reaches affected population - How do we disseminate translations? - Prioritize audio/visual materials - Partner with radio - How can we measure impact?	2		
3 Further develop partnerships to better reach humanitarian community	3		

Appendix 1. Final Workplan

Below is a table that is the same as the workplan that you submitted with your original application. There are **three ways** to respond to this section.

- 1. If there have been no changes at all through the project you may cut and paste your original workplan here.
- 2. If there <u>have been changes</u> to the project but these changes **were previously reported to the HIF** in an *Agreement Amendment* form, please adjust your original workplan so that these changes are recorded in it here.
- 3. If there <u>have been changes</u> which were **not previously reported to the HIF,** please **also** fill in Table 2 (which is on the next page). In particular, please make sure to explain any budget various greater than 15% in Table 2.

Name of project: Words of Relief: Kenyan Pilot
Organisation: Translators without Borders
Total funds: £ 232, 242
Duration: 18 months

Expected	Main Planned	Iı	mp	len	nen	ita	tio	ı p	eri	od								Responsible	e party /		Am	ount	
Results	activities	М	ont	hs														person		2014		2015	
		1	2	3 4	4 5	6	7	8		1 0	1 1	1 1 2 3	1 4	1 5	1 6	1 7	1 8	TWB	Others	HIF	Other	HIF	Others
	Global Coordinator in place; MEL Plan developed																			9192	3666	44,971	16,484
Toom Organized	Project manager, engineer (s) and intern hired																	PD, Dir of Training,					
Team Organized	Team training; in- person MEL working group meeting																	Founder, Manager of TWBK					
	Communications systems in place per MEL Plan																						
Crisis Relief	Coordination with CDAC-N and others on content																		CDAC N				
Content in Swahili & Somali	Adaptation to various mechanisms (social media, Wikipedia, USSD)																		CDAC-N, NGOs			11,313	

	Translation of content (includes setting p and training two Somali translators) Investigate dissemination of content										
Swahili machine translation engine trained (need to investigate Somali)	Alignment of bilingual content and creation of translation memories Uploading to Bing platform Post-editing MT output to improve quality Inputting corrections into engine						Manager of TWBK	Msft		3,158	13,000
Content disseminated	Coordinate with Wikipedia Coordinate with CDACN to make content accessible Attempt to disseminate on other platforms using other vehicles (esp. mobile)						PM,GC	CDACN, all partners		2,024	984
Spider network developed and trained (incl. Somali for north Kenya)	Captain identified Network volunteers identified Training developed Team trained Code of conduct developed Diaspora identified and engaged						PM, Captain, translation team, dir of training			7,121	13,050

Table 2: Changes to Workplan

For every change in the final workplan that is different to your original worktable AND that has not already been reported to the HIF, please add a record in this table. Changes can include alterations to the methodology, project process or innovation design, for example.

Change (as referenced in workplan above)	Reason for change	Overall impact of change				
1. Team Organized						
- Project Manager had to be re-recruited	- First PM did not work out; new PM hired in May	Budget increased slightly due to additional month				
- Intern not required/PM required higher salary	- PM able to manage tasks					
- Additional month required at the end	- MEL and wrap up of activities					
2. Crisis relief content in Swahili and Somali		Exceeded targets: 125,000 additional words for				
- Coordination for content throughout project	- content not easily available and advocacy needed	Swahili and 10,000 for Somali				
- Editing and simplification of content not required	- content was ready for Kenya and usage	Budget increased approximately 10%				
3. Swahili machine translation engine trained	- Content was not readily available until later	- Small personnel fee to TWBK				
- Bulk of training at 12 months + into the project	- TWBK project management time was not					
	included in initial budget					
4. Content disseminated	- Instead of hiring a consultant to post/edit content	- TWB now able to post/edit directly on Wiki pages				
- Wiki Training provided to PM and TWBK staff	for us, we decided to build internal capacity to do	- Increase in budget by \$1,000				
	so directly on Wikipedia					
5. Spider Network developed and trained						
- 2 nd Refresher training conducted in March	- To improve response time and motivate the team					
5.0 1 11.6 (14.005)	M. 0.7 1 0 1 10	5 1 1115				
6. Crowdsourced platform (WoRDE)	- Microsoft Technology for Good grant for	- Develop continues beyond HIF grant				
	88,205GBP					
7. Project monitored and evaluated (MEL)	- Collection of data and evaluation process up until	- One month extension to include all learning from				
	the end of the project	the project				
8. Pilot Tested	- Poor initial results in first two simulations	- Spider Network Refresher training developed				
- Spider Network simulations	- TWBK administered Impact Study	- Cost significantly lower than expected				
- Impact Study	- Despite all attempts to incent participants, we	-				
- Only one Focus Group Discussion conducted	only had enough to conduct one					
9. Awareness of Words of Relief						
- Costs budgeted through other grants	- Availability of funds through Ebola crisis	- Extension by one month				
- Activities extended one month	- MEL consolidated with extra time	- Final Report in July				