**HUMANITARIAN INNOVATION FUND**  
*Final Report*  
- Please try not to exceed 5 pages (Arial, 12pts) excluding attachments –

<table>
<thead>
<tr>
<th>Reference Number</th>
<th>HIF/L/2012/3-113</th>
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<tbody>
<tr>
<td>Organisation Name</td>
<td>Motivation Charitable Trust</td>
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<table>
<thead>
<tr>
<th>Project Title</th>
<th>The rapid provision of appropriate wheelchairs in emergency situations</th>
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<tbody>
<tr>
<td>Location</td>
<td>Nepal and two other locations to be confirmed</td>
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<tr>
<td>Start Date</td>
<td>September 2012</td>
</tr>
<tr>
<td>Duration</td>
<td>22 months</td>
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<tr>
<td>Total Funding Requested</td>
<td>£149,640</td>
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<thead>
<tr>
<th>Partner(s)</th>
<th>Handicap International, Johanniter International Assistance</th>
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<tbody>
<tr>
<td>Total Funding</td>
<td>£191,370 (£4,000 JUH, £29,730 HI, £8,000 MDL)</td>
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<table>
<thead>
<tr>
<th>Innovation Stage</th>
<th>Implementation</th>
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<tbody>
<tr>
<td>Type of Innovation</td>
<td>This innovation involves the development of a new product, concept of service delivery and paradigm.</td>
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<tr>
<td>One sentence description of the innovation</td>
<td>The development of an innovative package to ensure the rapid and appropriate provision of emergency wheelchairs to injured and disabled people in humanitarian crises.</td>
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<tr>
<td>Project Impact Summary</td>
<td>Humanitarian organisations and workers now have an innovative solution to address the need for wheelchairs after an emergency without compromising the quality of the product and services provided.</td>
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<thead>
<tr>
<th>Reporting Period</th>
<th>Final report</th>
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<tr>
<td>Total Spent</td>
<td>£149,640</td>
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ACTIVITIES CARRIED OUT
The project covered the period September 2012 – June 2014, and followed a HIF funded innovation project where the emergency response wheelchair was designed, tested to relevant ISO standards and subjected to field trials. Activities carried out during this project period were as follows:

Product
- Completion of a second round of field trials in Kenya
- Completion of technical documentation and production documents
- Moving the Emergency Wheelchair into production
- Manufacture of 300 wheelchairs for pilot implementation.

Training
- Design, development and finalisation of training package
- Delivery of training package to Handicap International (HI) and Johanniter International Assistance (JUH)

Emergency Preparedness
- Delivery of 50 wheelchairs to Nepal for emergency preparedness programme
- Agreement of preparedness strategy
- Delivery of 13 wheelchairs to the UK International Emergency Trauma Register (UKITER) emergency field hospital
- Delivery of training to UKIETR volunteers.

Implementation
- Delivery of wheelchairs to Philippines by HI and JUH for emergency response
- Distribution of 50 emergency wheelchairs during emergency response by HI and JUH
- Monitoring of wheelchair implementation
- Implementation of design, service and training monitoring recommendations.
Sustainability
- Development of wheelchair stock plan for ongoing sustainability
- Production of stock wheelchairs
- First sales of stock wheelchairs.

ACHIEVEMENTS
The main achievements during the project period were as follows:

1. **Product suitable for use in emergency response available**
   Following the initial project where Motivation designed a wheelchair specifically for emergency settings meeting WHO Wheelchair Guidelines and relevant parts of ISO 7176, we have conducted further field trials and put the wheelchair into production. The wheelchair is now available to order, and is in the process of being stocked so that organisations can purchase the wheelchairs immediately and without a minimum order quantity. The unique design is compact, easily transportable, adjustable, suitable for rough terrain, and available at an affordable cost to enable organisations reach the maximum number of people during an emergency.

2. **Training in emergency wheelchair response procedures developed**
   Motivation has produced a training package for emergency wheelchair response. This package covers:
   - Disability in the emergency context
   - Wheelchair User and service provider needs in the emergency context
   - Wheelchair assembly
   - Wheelchair Assessment, Prescription and Fitting
   - Wheelchair User training
   - Wheelchair Service Set Up

   The training package format includes; trainer and participant manuals, training PowerPoint, assembly manuals, wheelchair service documentation and training films.

   Motivation, JUH and HI staff have been trained in delivering the training and the one day training is available to any organisation with an interest.

3. **Integration of wheelchairs into emergency preparedness programmes**
   50 emergency wheelchairs are now being stored in Nepal as part of HI’s emergency preparedness programme. Meetings were held in Nepal to sensitise the team to the rationale behind the wheelchairs and to develop a long term plan to ensure the sustainability of relevance of the wheelchairs if they are not used in the next few years.

   The UK International Emergency Trauma Register programme has integrated emergency wheelchairs into the Emergency Field Hospital it has developed and staff from the Trauma Register have been trained in emergency wheelchair response.
4. Implementation of emergency wheelchair response

On 9 November 2013 Typhoon Haiyan swept through the Philippines causing devastation, leaving thousands of people homeless and injured. JUH and HI both reacted to the disaster with JUH deploying their stock of 50 wheelchairs on 22 November. They sent one of the P&O technicians trained in emergency wheelchair response as part of the project to set up their emergency wheelchair response. HI sent 100 wheelchairs, but unfortunately were unable to clear them through customs in time to form part of their emergency response.

JUH’s wheelchairs were distributed by both JUH and HI and monitoring was conducted by on this implementation.

5. Evaluation and dissemination

A monitoring visit was completed during the emergency wheelchair response and a report with a number of recommendations was produced. The recommendations have been implemented as far as possible to date in terms of product design, service design and training.

We have now received the impact assessment report which clearly proves the need for emergency wheelchairs. We will be studying and responding to the recommendations.

The concept of an emergency wheelchair response has been disseminated through social media, magazine articles, conferences and Motivation’s organisational partnerships. We will continue with this work.

METHODOLOGY

Overall the methodology of the emergency wheelchair implementation has proved itself: “There is a need for emergency wheelchairs”\(^1\) “The emergency wheelchair response package… product, training and services – is adequate to respond to an emergency.”\(^2\)

However, it became apparent in the Philippines that the training cascade needs to be strengthened, with more simple directions given to those responsible for delivering the training on the ground. Some key points such as cushion positioning and the problem solving guide were not highlighted when the training was passed on in the Philippines. Motivation is addressing this by refining and simplifying the training instructions.

The generic size selection was not a good match for the Philippines population, with too many of the larger sizes. The basis for size selection prediction has been reviewed and the proportions altered based on the population sizes of countries most likely to be affected by disasters.

\(^1\) Xavier C, Impact Assessment; Emergency Wheelchair Response in the Philippines, P2
\(^2\) Xavier C, Impact Assessment; Emergency Wheelchair Response in the Philippines, executive summary P1
MAJOR OBSTACLES

Implementation
Once we had trained partners in emergency response and had placed emergency wheelchair stock in their emergency storage, we had to wait a long time for an appropriate emergency to happen in which to carry out a trial implementation. The lack of natural disasters during an 18 month period was unusual, but we had planned to test the wheelchairs in a chronic emergency if no acute emergency occurred. In the event, we decided with our partner organisations that there were no chronic emergencies that were suitable for a trial implementation as all were conflicts with high security risks. This meant that whilst the wheelchair response might have been appropriate, it would have been very hard to monitor an implementation effectively. HIF granted us a no cost extension of four months, and the wheelchairs were deployed in response to Typhoon Haiyan in the Philippines in November 2014. Although a suitable disaster did eventually occur within the project time frame, the extension was still necessary to allow time for an impact assessment.

Product Minimum Order Quantity
Once product development was complete, we were given a larger than usual Minimum Order Quantity by the manufacturer for this product due to the low price of the product. (We have been used to a MOQ of 50 units for other products and have been given 300 for this product, and had not predicted this.)

We had identified lack of stock of emergency wheelchairs as a stumbling block to the on-going success of the project due to the high Minimum Order Quantity and a long lead-time which stop us being able to provide an immediate response to orders. We submitted a revised budget to HIF to reallocated £10k from underspent budget lines to buy stock. HIF approved the budget reallocation and this will positively impact upon the sustainability of the project.

Customs Problems
HI sent 100 wheelchairs in mid-December to the Philippines as part of their emergency response. Unfortunately the wheelchairs arrived two days after the Philippines government ceased emergency customs relaxation requirements and the wheelchairs were held up due to administrative and logistics constraints. Unfortunately despite a visit by a HI head office technical advisor, to assess the situation, the wheelchairs could not be cleared and were unable to be used as part of the implementation. In response to this, JUH shared their wheelchair stock with HI and Motivation were still able to monitor the implementation of the wheelchair response, albeit in lower numbers.
The 50 wheelchairs intended for Disaster Preparedness were cleared in Nepal in mid-January; however there was an unexpected delay in the Government providing a Duty Exemption form. This was probably caused by an unfortunate combination of the Christmas period and national elections, but resulted in a large demurrage charge by the shipping company. We were not able to mitigate this, however have taken learning from this.

**BENEFICIARIES/HUMANITARIAN INTERVENTIONS IMPACTED**

Of the 50 wheelchairs sent to the Philippines by JUH, 44 were provided to beneficiaries, 4 were donated to a maternity hospital through IsrAID and 2 were kept as samples. 64% (28) of the beneficiaries were female and 36% (16) were male. 25% (11) of the beneficiaries were within the age range of 71 to 80 years old, 20% (9) were within the 81 to 90 age range and 16% (7) were within the 61 to 70 years range. From the perspective of local leaders, the impact of the project for them revolves around having a better understanding of disability issues.

For humanitarian workers/agencies, the impact of the project are (1) more on a strategic level – as an organisation being able to provide something quickly in response to a need (2) provide a wheelchair that fits (3) to allow mobility to a person with disability and become more independent in the midst of an emergency (4) be able to advocate for the inclusion of persons with disability in their emergency response.

**PARTNERSHIPS AND COLLABORATION**

The project was designed in partnership with HI and JUH. HI was the lead partner, with JUH acting to ensure the package was developed appropriately for other organisations.

JUH have provided much more input into the project than originally anticipated, for which we are very appreciative. They have shared their experience of disaster response training, emergency logistics and given very useful feedback. In the event of the emergency response HI did not manage to clear their wheelchairs and JUH headed the wheelchair response, provided the training and shared their wheelchair resources with HI. Working with two different emergency response organisations to implement this project has been very useful as each have different approaches, which has been beneficial to project learning. We continue to work closely with both organisations.
We are now collaborating with HI UK as part of the UKIETR programme, to deliver training and emergency wheelchairs as part of the project.

DISSEMINATION
The concept of an emergency wheelchair response has been disseminated through social media, magazine articles, conferences and Motivation’s organisational partnerships.

Conferences
Feb 2013 - Motivation made a presentation on Emergency Wheelchair Response to ISPO; a key organisation representing a range of organisations in the physical rehabilitation field.

Jun 2013 - We presented the emergency wheelchair at the annual Occupational Therapy conference run by the British Association of Occupational Therapists and the College of Occupational Therapy.

Oct 2013 - We attended a conference in Bonn to mark the International Day for Disaster Reduction which had a focus on the inclusion of disability in disaster preparedness.

Nov 2013 - we officially launched the Emergency Response wheelchair at Aidex – a humanitarian and development trade show in Brussels. We presented a workshop at Aidex to discuss the emergency service we had developed behind the wheelchair. We were able to meet with a number of key organisations to discuss the wheelchair and support package. The trade show was a great opportunity for us to highlight the need for inclusion of disabled people in an emergency response.

Media
Articles about the Emergency Response wheelchair have been included in the following publications:

- Wired magazine³ (Mar 2013)
- Bristol evening post (Nov 2013)
- SciDev.Net⁴ (Mar 2014)
- CI DRR Community of Practice Newsletter (Mar 2014)
- ISPO newsletter⁵ (Jun 2014)

Other
Motivation’s work has been included in DFID’s ‘Great’ campaign.

³ http://www.wired.co.uk/news/archive/2013-02/25/emergency-technology-fea
⁴ http://www.scidev.net/global/health/multimedia/q-a-david-constantine-on-technology-that-transforms-lives.html
⁵ http://www.ispoint.org/sites/default/files/archives/ispo_eupdate_may-june2014_0.pdf, P11
The emergency wheelchair project was cited in the UK Government response to the International Development Committee report on disability in development.\textsuperscript{6}

We will now look for opportunities to present the Impact Assessment report at relevant seminars and in publications.

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**TRANSFERABILITY**

All project outputs: product, training and service are replicable. All training resources are available and current, with staff trained to deliver the training.

Wheelchairs are now in stock and available for use by relevant organisations.

Motivation is now developing a long term dissemination strategy and will be working to engage other organisations.

\textsuperscript{6} [http://www.publications.parliament.uk/pa/cm201415/cmselect/cmintdev/336/33604.htm](http://www.publications.parliament.uk/pa/cm201415/cmselect/cmintdev/336/33604.htm), Recommendation 3