Annual Report on World Humanitarian Summit Commitments - Geomatics Engineering Society 2016

Stakeholder Information

Organisation Name
Geomatics Engineering Society

Organisational Type
Academia

City and Country where Headquartered
Dhulikhel, Nepal

Focal Point Name
Suman Ghimire

Region
Asia

Twitter ID
SumanGhimire7

2D Take concrete steps to improve compliance and accountability

Individual Commitments

Commitment	Commitment Type	Core Responsibility
Geomatics Engineering Society commits to adopt the IASC statement on the Prevention of Sexual Exploitation and Abuse at the individual agency level.	Policy	Uphold the Norms that Safeguard Humanity

Where did your organization stand on these issues prior to making these commitments

Seeing the plight of affected youth, children and women affected by humanitarian crisis motivated the Geomatics Engineering Society to take this commitment. The new changing environment with less cultural and political awareness makes these groups of people highly prone to sexual and labor violence.

Achievements at a glance

Witnessing the present scenarios of refugee crisis, Geomatics Engineering Society undertook a mission to help the refugees at Port of Pireaus, Greece (temporary refugee shelter) . Together with a lot of enthusiastic volunteers Geomatics Engineering Society ensured that refugee children and women were safe from any potential violence. The task also focused on helping the refugee adapt to the new environment (culture, way of life), translating the language, ensuring their right to basic supplies including food and water. We worked throughout day and night restlessly to fulfill our duties to help the people in need. The happiness and satisfaction that we got after our work was indescribable. Our mission was to make them happy, share what we have with them but instead we learned a whole lot of things from them like being happy with what we have and nurture every moment. For more information, please see https://volunteeringinarefugeecampportofpiraeusgreece.wordpress.com/2016/05/06/volunteering-in-a-refugee-camp-port-of-piraeusgreece/

How is your organization assessing progress

The progress has been accessed according to the number of lives we could directly impact upon. We performed the volunteering from 6-15 May 2016, where we were involved directly with the affected children and women helping them translate the language and ensure their basic needs. Together we interacted with a lot of young people. We saw a lot of children in crisis and realized that we have a lot to learn from them. The way they smiled, laughed made me realize life is too short to be unhappy.

Challenges faced in implementation

The challenge for us was on how to effectively communicate with the affected youth, children and women as we were born and raised in different cultural and political settings. It seemed difficult at the beginning, but their open and friendly nature made it very easy to interact and get along very easily. Those innocent people may have lost their families, their loved ones but have never lost their hope, hope for a better future. Its our responsibility to build a better future for them.

Next step to advance implementation in 2017

Our next step would be to innovate a solution for the affected people to reach out to authorities, volunteers to speak freely on their needs, and effectively share their problems. This would help increase their accountability and protect them from any potential violence. We will keep on innovating solutions to and for the needy people. We are determined to work for humanity.

If you had one message for the annual report on what is most needed to advance the transformation Take concrete steps to improve compliance and accountability , what would it be

It's never too late to start a new beginning, a new beginning where everyone is free to express their views and flourish. The borders just exist in our brains. Let's build a safer place for the children in crisis.

Tag with other relevant transformations, keywords, initiatives

Keywords

☑ Accountability to affected people ☑ Refugees

Specific Initiatives

☑ Risk and Vulnerability Data Platform ☑ The Compact for Young People in

Humanitarian Action

Agenda for Humanity

☑ 1D - Develop solutions with and for people

☑ 3A - Reduce and address displacement

4A Reinforce, do not replace, national and local systems

Individual Commitments

Commitment	Commitment Type	Core Responsibility
Geomatics Engineering Society commits to always put humanity first.	Operational	Change People's Lives: From Delivering Aid to Ending Need
Geomatics Engineering Society commits to make sustained funding conditional on the systematic collection of feedback from affected people on the quality and utility of humanitarian programmes.	Financial	Change People's Lives: From Delivering Aid to Ending Need
Geomatics Engineering Society commits to establishing a common approach to providing information to affected people and collecting, aggregating and analysing feedback from communities to influence decision-making processes at strategic and operational levels.	Operational	Change People's Lives: From Delivering Aid to Ending Need
Geomatics Engineering Society commits to adopt the Core Humanitarian Standard (CHS) and International Aid Transparency Initiative Standard, with clear benchmarks for achieving these through the CHS Alliance self-assessment tool.	Policy	Change People's Lives: From Delivering Aid to Ending Need Invest in Humanity

Where did your organization stand on these issues prior to making these commitments

Geomatics Engineering Society considers humanitarian effectiveness as one of its highest priority. Witnessing the devastating Nepal earthquake in 2015, its aftermath and lack of preparedness from both government and private sectors has been the pressing issue behind choosing this commitment. Similarly, the local and national systems guiding the country have been quite unstable in proper governance as a result of which international donations for the earthquake have still been provided even after nearly two years. Having said that we pledge to actively take part in monitoring, preparedness, awareness against such natural disasters and pressuring the system for effective governance.

Achievements at a glance

Geomatics Engineering Society has successfully organized awareness programmes, safety tips for preventive measures against earthquakes. Similarly, we have been putting pressure on the local and national systems for taking necessary steps in rebuilding and strengthening resilience after the Nepal Earthquake in 2015 . We also have been helping the private sector distribute relief, help build resilient infrastructure, improve health and sanitation. Geomatics Engineering Society has been working closely with the Department of Civil & Geomatics Engineering (DoCGE) at Kathmandu University, Nepal in organizing one day seminars, campaigns to help people better understand earthquakes. Similarly, DoCGE and Geomatics Engineering Society worked in assessing the building and infrastructure damage after earthquakes . Geomatics Engineering Society is committed in building a resilient, aware and reinforced society through active participation.

How is your organization assessing progress

Geomatics Engineering Society established a team of four focusing on Innovation and Awareness in our organization to keep track of the context and encourage innovation through active participation. We have promised to organize an earthquake day event at Kathmandu University Central Campus on April every year to make students and people aware of such devastation and prepare accordingly.

Challenges faced in implementation

Difficulties in effective coordination during the devastation, lack of awareness and preparedness.

Next step to advance implementation in 2017

We plan to work closely with different private and governmental sectors to improve accountability, resilience and reinforce the structures and our mindset. We also plan to coordinate with local and national systems to ensure the commitments made during the

World Humanitarian Summit are well taken into account and acted upon.

If you had one message for the annual report on what is most needed to advance the transformation Reinforce, do not replace, national and local systems , what would it be

Inclusive and collaborative approach for resilient communities.

Tag with other relevant transformations, keywords, initiatives

Keywords

☑ Accountability to affected people
☑ Disaster Risk Reduction
☑ People-centred approach

Specific Initiatives

☑ Global Partnership for Preparedness
☑ NEAR - Network for Empowered Aid Response

Agenda for Humanity

☑ 4B - Anticipate, do not wait, for crises

5E Diversify the resource base and increase cost-efficiency

Individual Commitments

Commitment	Commitment Type	Core Responsibility
Geomatics Engineering Society commits to adopt the Core Humanitarian Standard (CHS) and International Aid Transparency Initiative Standard, with clear benchmarks for achieving these through the CHS Alliance self-assessment tool.	Policy	Change People's Lives: From Delivering Aid to Ending Need Invest in Humanity

Where did your organization stand on these issues prior to making these commitments

In the global perspective, the population is increasing at an exponential rate and with such low resources and high demand, clearly signifying the high time for all to act sustainably. Being equipped with latest geospatial trends,Geomatics Engineering Society decided to come up with an innovative agricultural monitoring tool for large-scale farms. Current farm monitoring technologies are only limited to farmers from developed countries like Japan and USA or from Europe due to the associated costs and technologies. To change such existing trends, Geomatics Engineering Society has been doing intensive research at SIIT, Thammasat University.

Achievements at a glance

As of now, Geomatics Engineering Society has been running pilot tests and implementation on 46 acres of banana plantations in the Pathumthani province, Thailand using our cheap modified infrared camera sensor attached to a DJI Phantom 3 Professional Drone. Our results are highly impressive for banana plantations. So far, we have been able to provide some farmers with accurate data related to plant health in the form of geo-referenced maps and in the form of a video implementing cheap alternative near-infrared sensor. Likewise, this initiative is also investigating the possibility of integration of a high spatial resolution 360 degree panorama image (captured through drones) together with health maps enabling farmers to have a 360 degree bird's eye view of their farm for extensive crop health monitoring. For more information see: https://volunteeringinarefugeecampportofpiraeusgreece.wordpress.com/2017/03/20/an-economical-approach-for-monitoring-plant-health-using-cheap-modified-near-infrared-camera-attached-to-unmanned-aerial-vehicle-drone-for-achieving-sustainability-in-agriculture/

How is your organization assessing progress

Geomatics Engineering Society has been assessing progress based on how many lives we could directly impact. So far, our research project has directly made an impact on 15 farmers in Pathumthani Province, Thailand on 46 acres. The area is sensed every two weeks using a drone attached with a cheap infrared sensor to provide them with a timely and accurate crop health map during the entire growing season which mainly consists of banana plantations. The banana is considered as a staple source of diet and helps feed rural poor of Thailand and many developing countries.

Challenges faced in implementation

The challenge lies in proper information dissemination. The farmers from developing countries are not well educated and require proper training to effectively monitor their crops. However, through our research and analysis, we have been developing a platform and designing with simplicity and perfection for farmers to easily adapt to the crop health data. To tackle the end information, we have been implementing the use of health maps overlaying it with high resolution aerial images and classifying plant health as difference in color values. This dissemination technique has proven to be effective under such circumstances.

Next step to advance implementation in 2017

The future prospects of our work includes investigating the integration of a high resolution 360 degree panorama (captured through drones), yield forecasting, monitoring pesticides and nitrogen content in soil and effective irrigation management using thermal sensors and multi-spectral sensors embedded in the drones. This data driven agriculture would provide farmers with an accurate and affordable decision-making tool assisting them in site specific agricultural decision-making. Last but not the least, our vision is to develop a cheap and affordable service which could be implemented by farmers belonging from developing countries to achieve sustainable growth and better irrigation management of their plantation.

If you had one message for the annual report on what is most needed to advance the transformation Diversify the resource base and increase cost-efficiency , what would it be

Research & innovation aided with continuous monitoring and management is vital for increasing the capacity of available resources for ensuring food security for days to come.

Tag with other relevant transformations, keywords, initiatives

Keywords

☑ Food Security

☑ Innovation

☑ People-centred approach

Specific Initiatives

☑ The Global Alliance for Humanitarian Innovation

Agenda for Humanity

☑ 4C - Deliver collective outcomes: transcend humanitarian-development divides