

EINAR BJORGO

A scientist in peacebuilding

Einar Bjorgo is the Director of UNOSAT, a program of the United Nations that uses satellite imagery for humanitarian purposes. His work, based on science, objectivity and facts reveal an unexpected side to peacebuilding.

The peacebuilding field comprises a variety of professions, such as humanitarians, legal officers, diplomats, lawyers, project managers and so on. Few would imagine scientific professionals, and even fewer would think of geophysicists. Nonetheless, Einar Bjorgo challenges stereotypes by using science and satellite imagery in particular, as a resource in peacebuilding.

A fulfilling task

It all began in 1994 when Einar Bjorgo was doing a Master of Science in Meteorology at the University of Bergen, Norway. He was using satellite imagery to observe the effects of climate change on polar ice caps. The genocide in Rwanda happened that same year. This tragedy had a strong impact on Einar Bjorgo who asked himself, "if the same technology used to look at polar ice caps could be used for a more fulfilling task?" Having decided to answer this question positively, he received his PhD in 1999 on using applications of very high resolution satellite imagery to support refugee relief operations. Satellite imagery was not used for this particular purpose at the time as the technology was less evolved. Nevertheless, thanks to his work and the evolution of technology in satellite imagery, Einar Bjorgo



has succeeded in the implementation of satellite imagery for humanitarian purposes.

Science in peacebuilding

After working for the United Nations High Commissioner for Refugees (UNHCR), where he used satellite images to monitor refugee camps, Einar Bjorgo began work at UNOSAT, which is an operational satellite applications program of the United Nations Institute for Training and Research (UNITAR). Its primary task is to analyze satellite imagery for a wide range of applications. It can be related to water management, natural disasters, humanitarian crises or world heritage sites.

How does it work? First UNOSAT receives a request from an organization following a natural disaster, for example. To respond to that request a satellite is programmed to take new pictures of the concerned area. The new pictures are then compared to the archives.

It is then possible to analyze the extent of the flood and check if the road network is affected and determine how many people live within the flooded area. This information is then used in the humanitarian response cycle.

“Technology plays an increasing role in peacebuilding”

Even though Einar Bjorgo has worked on a lot of different cases, there was one in particular which impacted him strongly. At the beginning of his career, while working for the UNHCR, Einar Bjorgo was approached by colleagues who were heading to the border of Tajikistan and Afghanistan, in an area under the control of the Taliban. Civilians were trying to escape to Tajikistan but were stranded in a “no man’s land” surrounded by a river. The UNHCR’s staff wanted to provide assistance but there was no map of the area. The time window for the operation was very short and they could not afford to take the wrong road. By using GPS coordinates, Einar Bjorgo was able to map the area which allowed the team to reach the civilians. “It was a very fulfilling and motivating reason to continue to do this type of work and to try to do even more” he explains.

Great possibilities

According to Einar Bjorgo, this use of technology leads to great possibilities. Indeed, “satellite imagery can have different applications within peace”. They help to explore and document the facts as to what is

happening on the ground. This is important for reconciliation after conflict.

Another aspect is early warning. For example if something happens in a remote area, it is sometimes very difficult (even for the government of the concerned area) to know what is going on. Satellites allow you to have access everywhere, even to the most remote parts of a country. It is also a way to verify the first reports received and the information provided. Furthermore, these images help to preserve cultural heritage. Einar Bjorgo works with UNESCO to help protect cultural heritage during conflict. “It is important because culture is embedded in society. By protecting it you increase the chance of lasting peace” he says.

According to Einar Bjorgo, even though “technology plays an increasing role in peacebuilding, it will never replace the human element”. Indeed, “peacebuilding is very complex and it is imperative to have a strong understanding of the situation on the ground. Technology can help achieve that, from an objective point of view” says Einar Bjorgo. Although satellite technology cannot replace humans, it nevertheless appears to be a valuable aid, thanks to the objectivity that characterizes it and its ability to photograph places that are difficult to access. Thus, satellite imagery stands out as an interesting tool in the construction of peace and brings a different point of view to the notion of peacebuilding.

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