

**GIS for a Sustainable World conference on 17-19 of April** in Geneva at Campus Biotech.

Speech by Ambassador Stefano Toscano, Director GICHD On GIS and the SDGs

Good morning ladies and gentlemen, dear colleagues

Thank you to ESRI and UNOSAT for organizing this very interesting and stimulating event dedicated – this year – to the theme “People, Planet, Prosperity, and Peace”. These are, indeed, the key aspects that matter when thinking about and acting towards a sustainable world.

[As mentioned], my name is Stefano Toscano, and I am the Director of the GICHD – which is short for Geneva International Centre for Humanitarian Demining.

Humanitarian demining – or, more broadly, mine action – is about reducing the impact of landmines, cluster munitions and other explosive hazards on people, land, housing and infrastructure. The GICHD supports the development and professionalization of the mine action sector, focusing on three specific aspects: developing capacities of mine-affected countries and partner organizations, contributing to multilateral work here in Geneva, including the implementation of relevant international treaties and standards, and furthering cutting-edge concepts, methods and tools for the benefit of the sector.

Mine action is eminently geographic. It is about generating clarity on the location of explosive hazards and their proximity to people and infrastructure, removing them according to set priorities, and enhancing the resilience of communities to them through activities such as risk education and victim assistance. No surprise then that the GICHD promotes the use of GIS, in close cooperation with ESRI, as part of its Information Management System for Mine Action (commonly known as IMSMA). The latter is being used with success and since many years by the vast majority of affected countries, for example in Afghanistan and Iraq, in Cambodia, Laos and Vietnam, in Ukraine and Kosovo, in Mali, Sudan, Angola and Zimbabwe, and in Colombia and Chile –over 40 countries and programmes in all.

When talking about mine action, I always make it a point to say that the sector is more than about removing mines; it is actually about enabling and building sustainable livelihoods. Or at least it should be.

#### NEED FOR INTERCONNECTEDNESS: CASE 1

It is estimated that globally 2 billion sqm of land are suspected of being contaminated by explosive ordnance. The number of casualties from mines in 2016 amounted to close to 9'000, the highest since 1999 due to protracted conflicts particularly in Afghanistan, Ukraine, Libya, and the Middle East. Now: casualty rates are, I am afraid, only the tip of the iceberg when it comes to mines. Land even only *suspected* of being contaminated is condemned land – taken out of productive use: no housing, no schools, no agriculture, no livelihoods.

A few years ago I was fortunate enough to visit the Municipality of Santa Helena in the department of Meta in Colombia. This Municipality was one of the sites selected by the National Government of Colombia and the FARC to pilot a trust-building exercise in the context of the then-on-going peace negotiations. Joint Military-FARC demining teams were formed to clear the area of landmines. Work had begun in November 2015 and, by February 2017, 20'000 sqm of cleared land were released back to the community.

We hear much talk of Results Based Management these days, and rightly so; essentially that what matters in our work is not the output (in our case, sqm of released land), but the outcome (the land that is put to productive use). When I spoke to residents of Santa Helena they made it clear that demining alone would not be sufficient to rehabilitate their community; for the demining activities to be truly successful, they had to be carried out in tight collaboration with other development initiatives. And, indeed, this was foreseen: demining was accompanied by road rehabilitation, bridge maintenance and a number of key construction activities. This is important: opportunities are lost if the inter-dependencies of different sectors of humanitarian and development work are not fully recognized; or to put it differently: all that you do risks ending up unsustainable.

## NEED FOR INTERCONNECTEDNESS: CASE 2

A different case in same point: In mine-affected countries, land and valuable land-based resources can be denied for years or decades by contamination. Once released for productive use, their value increases exponentially; however, clarity on land ownership might have faded in the meantime. If land rights and land ownership are not clear when the land is released, serious conflict can ensue.

Let me give you a concrete example, part of a study produced by the GICHD in 2014: In 2006, approximately 300 landless households living in a village in the Pailin province, Cambodia, made a request to a mine-clearance organization to clear contaminated, unoccupied land in their village. The local authorities initially agreed that the land, once cleared, would be allocated to these households, but no formal ownership was established. Following clearance the land ended up in fact being allocated by commune and district officials to households from outside the village causing, as you can imagine, serious intra-communal tension and leaving the families landless.

## THE CONNECTION BETWEEN MINE ACTION AND SDGs:

Again: the close connection between mine action and land rights must be properly acknowledged so that the release of land does not lead to conflict (undermining efforts on SDG target 16.1), or to a perception of unaccountable institutions (undermining efforts on SDG target 16.6), and so that it can effectively contribute to beneficiaries enjoying equal rights and access to economic resources and control over land (SDG target 1.4).

Demining helps prevent accidents and make communities peaceful (SDG 16 again). When farmers can start planting crops on safe land again, their families are less likely to suffer hunger (SDG 2) and poverty (SDG 1). Kids can get an education because their path to school is no longer lethal (SDG 4).

I am sure you are getting the point I am trying to make here: either we go interconnected, or we go unsustainable.

Thus, what we in mine action need to do is to ensure, for instance, that, when demining land, there are also seeds or tools available for the farmer or that, when clearing a school, there are teachers to give classes. We need to plan, prioritise and work in better coordination with all development actors. This is key for demining to unfold its full development benefits, but of course the same is true for all other development fields.

The global challenges we face are connected to one another. To address them effectively, an integrated approach is a necessity, not a nice-to-have. This calls for the identification of synergies and trade-offs across different policies and sectors as early as the planning and prioritization phases. Capitalizing on synergies multiplies the impact of an intervention. Managing trade-offs limits their potential to reverse development through unforeseen consequences.

#### GIS AS A TOOL TO SUPPORT INTERCONNECTEDNESS:

I am no GIS expert. But in my time at the GICHD, I have seen first hand what the technology you will be discussing this week can bring to the table in terms of bridging sectors of activity that must work better together if we are to succeed in achieving the SDGs.

Everything happens 'somewhere'; this 'somewhere' is defined not just by its X and Y coordinates, but also by the interplay of many natural and socio-economic currents. GIS allows us to understand and visualize this complex environment at a level of comprehensiveness matched by few other tools. It has therefore the power to guide decision-makers towards truly inclusive and holistic action.

## A CHALLENGE TO THE AUDIENCE

So you, GIS experts, have this power at your fingertips. But with power come responsibility.

If you will allow me; I would like to challenge you.

You know well the full potential of your GIS tools. You know well that these are tools that can integrate so many different strands of information, so many perceptions, so many dimensions, and that it is in the very nature of GIS to provide a multi-dimensional understanding of our world.

You also know that technology in itself is ever less a barrier to accomplishing your respective sector's objectives.

But what is it going to take to connect these objectives with those of the neighbor on your right who works in Water and Sanitation, or the neighbor on your left who works on Education? What are the mechanisms that will ensure that you can meaningfully reach out to one another, understand one another's priorities and constraints and find the course of action that optimizes results, for everyone? I very much doubt the answer lies solely in the technology itself, but rather in how you choose to organise yourselves around it, collectively.

Allow me then to challenge you to figure out ways to promote this interconnectedness, this inter-sectoral cooperation. And let me challenge you also to take on the responsibility of actively pushing for this to happen – with your colleagues, your managers, your partners.

If you – with your insight through GIS – will not promote breaking down siloes and building bridges, who will?

Thank you.