6th International Disaster and Risk Conference IDC Davos 2016 Keynote V: Turning good intentions to concrete actions 30 August 2016

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1. The UN outcomes in 2016 from Sendai to Addis Ababa to New York and Paris together represent the most ambitious blue print for action the world has ever adopted. The outcomes are linked, the goals and targets are indivisible and what we need to achieve by 2030 is crystal clear. The world has a vision and a concrete long term plan (2016-2030).

But there are two significant gaps:

- The gap between global promises and national actions
- The gap between long term agendas and the constant shocks; economic, social and environmental; which throw us off target:
- 2. These are the gaps I wish to address today with a special focus on the tools available to make the great transitions the world needs. How can we break from the past approaches and apply the lessons and values of the 2015 outcomes to make our world resilient, responsive and fully awake to the severe challenges posed by climate change and disaster risk?

I. BACKGROUND

3. As many have said in this conference an irreversible end to poverty is possible only along a sustainable development pathway. Climate change and disaster risk are fundamental challenges and as we have seen, in country after country, these can roll back decades of development. 250 million people are affected annually by disasters associated with natural hazards – both geophysical and hydro-meteorological events. Climate change has slow onset features as well as an impact on intensity of extreme weather events. Its biggest impact is on hunger and food security. Mortality rates may be falling but economic losses

will rise from \$100 billion annually to \$200 billion by 2030. Lives and livelihoods are lost, pushing more people into poverty with the most vulnerable paying the highest price.

- 4. The incorporation of climate change action and disaster risk reduction has been one of the most significant mainstreaming into development thinking over the last thirty years. These have entered public investment planning systems, sectoral plans, social protection and infrastructure investments, post recovery planning and humanitarian actions. Moreover, the new development approaches recognize the need for:
 - Deeper engagement using whole of government and society approaches
 - Integrated target and goal modelling
 - Urban planning and development
 - Minimizing impacts with reduction in GHG emissions
 - Stronger emphasis on disaster risk management as opposed to disaster management, strengthening resilience
 - Resilience of health and education infrastructure
 - Building back better
 - Risk informed donor support and development
- 5. These conceptual understandings and shifts need to permeate the consciousness of decision makers at all levels. How can this mindset shift take place?

II. NATIONAL/SUB NATIONAL ACTIONS

- 6. The cornerstone of meaningful actions will be at the national and sub national levels. These include all aspects of implementation, including review, monitoring and evaluation. Four actions are most immediate:
 - Ensuring that national plans and national budgets have accounted for disaster risk and climate change.
 - Creating systems and mechanisms for multi-stakeholder engagement at the national level.
 - Strengthening of national statistical capacity to ensure that disaggregated data and the evidence base for policies is well established.
 - Better understanding of goal/target modelling to help define priority actions at the national level.

7. All these actions listed above will need to be mirrored at the local levels with a special emphasis on safe, resilient and sustainable cities and human settlements. Goal 11 of the SDG's, the outcomes from Sendai and the forthcoming Quito Conference place great emphasis on reducing the number of deaths and economic losses caused by disasters, especially water related disasters focusing on the most vulnerable. Adoption of city plans for climate change adaptation, resilience, holistic disaster risk management, resilient buildings, emergency response planning including evacuation and early warning are some of the many urgent actions to be taken at the local levels. But in the long run there is no substitute for sustainable cities development, especially through better land use planning, ending of chaotic urban sprawls, and working to achieve different relevant targets from among the SDG11 and Sendai Framework targets.

Some of the indicators to measure progress on these targets include:

- 7.1. number of deaths, missing persons and persons affected by disaster per 100,000 people.
- 7.2. direct disaster economic loss
- 7.3. proportion of cities that implement disaster risk reduction and resilience strategies
- 7.4. number of cities that implement national and regional development plans
- 7.5. Share of financial support to LDC for buildings which are resilient
- 8. Without an energetic response at the national level every other brick at regional or global level, will be precariously perched. The national actions gap is the most urgent for which a massive effort is called for. Government actions, actions at the local level, support for these efforts from the international community and sharing of experience at the regional level will be necessary vehicles of support. Increased decentralized cooperation can play a major role for local governments and strengthen their ability to be prepared.

III. COPING WITH SHOCKS

9. The constant, sometimes almost daily shocks in the economic, social and environmental arenas have become the new normal. Anti-globalization, anti-free trade, ultra- nationalist forces keep rearing their heads. Social strife, discrimination, unequal and unjust societies are having profound impacts on our conventional understandings of order and stability. Terrorism and the associated losses and disruption threaten all parts of the world. Hydro meteorological

- events visit us with an increasing frequency. Extreme weather variations hit our world often. Food insecurity and hunger stalk large parts of the world. The attendant movement of desperate people adds one more layer of uncertainty and diverts attention from long term plans.
- 10. In the face of these "urgent priorities" the first issue to be sacrificed in budget, planning and development assistance is the long term plans we have for our world in 2030. What I would like to urge is that we need a stubborn, dogged leadership which will not let this happen. A vicious downward spiral has to move virtuously upward. If something has to give it must be the disproportionate expenditures on the military. Unless we ensure the investments to reach the 2030 we want, we shall be visiting bleaker scenarios every year-bleaker economics, bleaker politics, bleaker state of our societies, bleaker state of our environment and continuing devastating consequences of climate change and disasters.
- 11. Achieving the SDGs will be key in creating resilient societies. Climate change and disaster risk is the thread which runs through the goals. Just to mention a few sustainable agriculture and food security, sustainable energy for all, sustainable water management, building resilient infrastructure, sustainable cities, sustainable consumption and production patterns, combating climate change, the goals on our marine and terrestrial ecosystems are all vital for DRR. The goals may appear discrete but are, in fact they represent an interrelated matrix. Progress on one goal or target is dependent on progress on others. There should be no letup in this larger vision. We should not cherry-pick on the goals and targets.

IV. THE TOOLS FOR RISK MAPPING, URBAN PLANNING, AWARENESS

- 12. We now have excellent opportunities to use new technologies to reduce the risks of disasters at regional, national and local level. We can compare the situation to what has happened in communication. One generation of technology, the fixed line phone, has simply been skipped and citizens who have never used a landline are happy users of mobile phones. A similar revolution has taken place in transferring money. The same leap can be done in disaster risk reduction using geo-spatial information technologies.
- 13. While classical surveying still plays a role in accurate infrastructure mapping and planning, there is a need to collect data over large areas at low cost and use this to derive information on first hazard and subsequently risk mapping. Our Operational Satellite Applications Programme, UNOSAT, does just that.

- 14. UNOSAT has been supporting the full disaster management cycle, from preparedness to response, recovery and development for 15 years. Hosted at CERN in Geneva, with regional presence in Chad, Nairobi and Bangkok, the programme ensures a practical focus on applying geo-spatial information technologies, both through its own analyses and in transferring that knowledge to countries that have limited expertise and resources in this field.
- 15. Disaster risk reduction is an integral part of the disaster management cycle and a key strategic area for UNOSAT based on increasing demands from countries. These needs relate both to help during disasters, but even more so to develop their capacities in reducing risks and responding to disasters themselves. I would like to illustrate this with a few practical examples on preparedness, in this case capacity development in DRR, as well as early warning systems in action, disaster response and sustainable development.
- 16. In East Africa we work together with IGAD, the Intergovernmental Authority on Development, to develop capacity in the use of geo-spatial information technologies. After over four years of working with IGAD, I was very pleased to see how data were collected and information shared during the recent El Niño in East Africa. IGAD and UNOSAT, working hand in hand, shared upto-date information on flood and drought risks through an easy to access web-map platform. Coupled with development of geographic information system, GIS, databases, training and supply of satellite imagery covering the whole region, IGAD informed its members states through existing mechanisms on the status of El Niño, including daily flood risk updates. Similar activities take place in Asia, where capacity is developed in Myanmar, Vietnam and Bangladesh.
- 17. I would also like to highlight our support towards early warning. Unless warnings reach the affected populations they are of course of no use. Hence the importance of working inside well established early warning frameworks at local, national and regional levels. Our Flood Finder system does just that. Through partnerships with the CIMA [pronounced TSJIMA] Research Foundation in Italy, the US Geological Survey and CERN, we are able of forecasting flooded areas three weeks in advance, thereby both alerting relevant actors and also programming cloud penetrating radar satellite image monitoring of the situation. This is being done as we speak in Chad in collaboration with the ministries of territorial planning and hydraulics, and with UNICEF and UN Office for the Coordination of Humanitarian Affairs, UN OCHA. We are also liaising with the Global Framework for Climate Services (GFCS) in the region.
- 18. Another example of early warning is drought monitoring in Papua New Guinea. Also linked to El Niño and climate change, the country saw significant drought recently. Due to our regional

presence, we were requested by the Government and OCHA to analyse over time the changes in vegetation and corresponding drought indicators using satellite imagery. Our analyses were timely provided and thus contributed to early warning information linked to food security over the affected areas.

- 19. In terms of disaster response, UNOSAT is involved in roughly 35 event per year. Following the 16 April 7.8 magnitude earthquake, we assisted the Government of Ecuador with satellite image derived analysis. UNOSAT in addition consolidated satellite based damage assessments from various sources into one single GIS database, which was shared with the government. This not only helps managing the emergency situation, but also towards building back better in the recovery and reconstruction phase.
- 20. All that we do would serve no purpose unless the final goal was linked to sustainable development. In Chad, in close collaboration with the Ministry of Hydraulics, University of N'Djamena and the Swiss Development Cooperation, SDC, we are developing capacities in sustainable water management. Having knowledge about groundwater resources is fundamental for development of the pastoralist and agricultural economies. Food security depends on access to water and the proper management of these resources. Through use of GIS, satellite imagery and field data analysis, we are mapping out the water resources of this vast country. The data are provided to the government for use in multiple sectors and also includes state of the art hydrogeological maps. Training is carried out to government employees, including establishment of a new master-level course on GIS in hydrogeology. This can only be successful with a long time perspective and we are fortunate to work with the SDC on a ten-year project duration.
- 21. Innovation is fundamental when it comes to adapting the latest technologies to DRR needs. We work with partners in a project financed by the European Space Agency called UrbanDRR. Here we look at how the use of drones, the UN ASIGN smartphone app and satellite imagery can be used for better city planning and reduce disaster risks for the most vulnerable. We also team with the University of Geneva and CERN in the Citizen Cyberlab where we explore how volunteers can assist towards both improving DRR and reaching the SDGs. For example, our GeoTag-X tool allows specific tasks to be set up using open source technologies for volunteers to assess photos and providing their contributions directly into a database, while also receiving feedback on their work and how it assist us in helping the most vulnerable.
- 22. The United Nations exists to help countries out of poverty and ensure people can live in secure societies allowing for all aspects of human rights to be enjoyed. At UNITAR we do just that through the building of capacity over time, keeping the long term focus that is fundamental to reach the 2030 Sustainable Development Goals.

23	. UNITAR is here to	help and we	are always	looking for I	new and enl	hanced partners	ships to	reach
	the furthest behind	l .						

Thank you