## **GEO-DARMA Regional Assessments Summary** September 19<sup>th</sup>, 2019

<b>Region/Institution</b>	DRR Priorities	Challenges (and GEO-DARMA Role for LAC assessment)
Asia		
- ESCAP	Geospatially identifying hazards, vulnerability, and exposure; Providing early warning and prediction through on-going monitoring using EO data; Disaster emergency response which can be supported through impact assessments, damage assessments and inform the planning and delivery of humanitarian relief; Supporting reconstruction efforts to ensure resilient planning and monitor on-going reconstruction efforts.	Finances; Technology and use of technology; Capacity building; Trade and license restrictions (on data); Institutional development (gaps, barriers, awareness, etc).
- ADPC	Data access, quality and sharing; Technical capacity; Usable tools and models; Land use and land cover mapping and monitoring; DRM, especially EWS for droughts and flooding; Agricultural monitoring and food security; Climate change adaptation and mitigation.	Silo approach for resilience, which is not mainstreamed into public planning; Lack of data sharing between government agencies and between these agencies and NGOs; Geospatial resources (budgets for projects); Lack of awareness of risk, which is too focused on exposure and loss; Communication and coordination; Human resource capacity.
Africa		
- RCMRD	Droughts (EWS); Floods (EWS);	Capacity building;

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	Impact of disasters on livelihoods (e.g. vector borne diseases); Climate change and disaster vulnerability assessments and adaptation (focus on social vulnerability); Food security.	Challenges of differing impact on range of ecosystems and communities; Development of evidence-based long- term resilience measures; Low quality climate data, insufficient environmental data, inaccessible socio- economic data, insufficient climate change and disaster impacts knowledge; Lack of forecasts of how droughts and floods affect people's livelihoods and well-being; Availability of DEMS, specific climate datasets as well as Vegetation indices (NDVI), ground water and discharge, crop yields, livestock densities.
- ECOWAS	Hazard mapping and risk assessment (geo-hazards, hydro-meteorological hazards, climatological hazards, technological hazards); Early warning/alert and tracking of a range of natural hazards, including flood, drought and landslides; Disaster response following natural and man-made hazards and support for Crisis Mapping/Damage Assessment involving risk knowledge, technical monitoring, and early warning service, dissemination, and preparedness about hazards, vulnerabilities and	Limited understanding of the vulnerabilities ,exposure, and risks, and particularly of issues of a trans- boundary and regional dimension, risk assessments and ECOWAS Disaster Risk Reduction Plan vulnerability analysis; EWS only in limited locations; Lack of standardized tools and approaches as well as adequate capacity for systematic collection, analysis, documentation, and

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	risks, their nature and effects, early warning signs and counter measures; Sub-regional and trans-boundary risks identification and assessments, through the development and use of EO data, maps and similar tools; Facilitating contingency planning activities at the regional and national levels and consolidating National disaster risk information which includes natural hazards, vulnerabilities, and climate change risk and maintain a Regional Risk Map; Developing, strengthening and operationalizing mechanisms for partnership or networking with the private sector, CSOs, and volunteer groups.	dissemination of data/information on disaster risks in the sub-region; Inadequate allocation of human and financial resources for DRR/DRM, both at sub-regional and national levels; Risk transfer and risk sharing facilities is very rudimentary in most ECOWAS member states. DRR and Social Protection initiatives are not well integrated; Mechanisms and capacities for systematic integration of DRR/DRM into emergency response management are not fully developed; Collaboration among media, private sector, and civil society insufficient.
- IGAD	Key hazards: <b>drought</b> , floods, landslides, diseases, and seismic and volcanic hazards (atlas produced 2013); Hazard mapping, disaster monitoring, and early warning system establishment. Drought stands as one of the most detrimental hazard in the region.	Capacity building, especially strengthening regional monitoring early warning platform; mapping major national hazards and vulnerabilities; developing national hazard monitoring and early warning systems, and developing national online and offline sharing platforms; Technical support

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Latin America/ Caribbean		
- Single draft prepared for regional review by CDEMA, CIMH, UNDRR/Americas, UNEP/Americas, Andean Community,	<ul> <li>1 Strengthen disaster risk information systems through supporting national multi-hazard systems, disaster risk mapping initiatives, traditional knowledge, and methodologies for calculating economic, cultural and social losses from extensive and intensive disasters.</li> <li>2 Strengthen of monitoring and recording of potential</li> </ul>	GD role: satellite EO can be a valuable source of disaster and risk information for all phases of the disaster cycle. GD can facilitate access and provide free data to demonstrate prototype systems. GD role: satellite EO can help establish
CEPREDENAC, and AmeriGEO, based on Regional Action Plan for Sendai Implementation priorities	<ul> <li>and existing disaster risks, with specific focus on historical record-keeping to inform future actions.</li> <li>3 Strengthen systems and mechanisms for sharing disaster risk assessment guidance, best practices and methodologies across regions and sectors, promoting open access to data where applicable and as appropriate.</li> </ul>	libraries of past events to inform future decision making. GD role: satellite EO can help establish libraries of past events to inform future decision making.
	4 Promote comprehensive studies and integral evaluations on multi-hazard disaster risk, including climate change projections, and the identification of regional research priorities.	GD role: satellite EO is a critical component to applying global systems on a regional and national scale over large areas. Prototype systems could be developed and proposed through GD.
	5 Promote the implementation of education programs and the use of disaster risk information, including by working with media outlets, as appropriate, for understanding disaster risk at all levels of society.	GD role: satellite EO provides high-level synoptic information useful in promotion and awareness campaigns.

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	6 Strengthen dialogue, cooperation and sharing of knowledge on disaster risk reduction and management among decision makers, planning entities, scientific, academic and technological communities, civil society organizations, volunteers and other relevant actors, in accordance with respective mandates and priorities.	GD role: satellite EO is a neutral, objective source of information about risk and disasters, building consensus among a broad range of partners in DRR.
	7 Strengthen disaster risk management strategies, governance and mechanisms and their evaluation at appropriate levels.	GD role: satellite EO as input to monitoring systems can improve the elaboration of DRR strategies.
	8 Enhance of capacity building programs and cooperation on disaster risk management and governance.	GD role: capacity building tied to EO data exploitation is a key component of GD.
	9 Foster multi-stakeholder and multi-national exchanges through sharing of experiences and best practices for integrating actions in DRR in all areas, including climate change adaptation, and sustainable development spheres.	GD role: no specific role foreseen.
	10 Encourage regional studies on best practices concerning financial instruments for disaster risk transfer and management.	GD role: several organizations have developed parametric insurance tools that use satellite EO as an objective trigger for payouts, most recently in Southeast Asia. GD can be a mechanism to acquire data if a separate programme is established to set up the financial instrument for risk transfer.

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	11 Enhance and mobilize investment in DRR, including through multiple sources and funding such as public and private partnerships, multi-lateral institutions and other means of cooperation.	GD role: no specific role foreseen.
	12 Promote the sharing of best practices on the continuity of vital services taking into consideration all-hazards, as appropriate and applicable.	GD role: no specific role foreseen.
	13 Strengthen the coordination, collaboration and participation of Member States, communities, regional and international organizations, civil society organizations, volunteers and other stakeholders, in disaster preparedness, response, and recovery, within the scope of respective mandates and priorities.	GD role: no specific role foreseen.
	14 Promote the exchange of post-disaster recovery knowledge and best practices that incorporate the perspective of building back better to protect communities and their livelihoods.	GD role: satellite EO has recently been showcased as a key tool for supporting recovery and building back better, notably in the context of the Haiti Recovery Observatory, following Hurricane Matthew. GD may be a mechanism to establish more systematic exploitation of satellite EO after major events.

	DRK Priorities	Challenges (and GEO-DARMA Role for LAC assessment)
1 6 t 8	15 Strengthen knowledge sharing and exchange of experiences on urban and rural development plans that take into consideration disaster risk with the aim of enhancing planning tools such as building codes and master plans.	GD role: no specific role foreseen.
1 i c a i i i i i i i i i i i i i i i i i	16 Develop and share best practices and strategies to improve integrated multi-hazard early warning systems, disaster risk information systems, monitoring networks, and exploring ways for stronger linkages among scientific and technical agencies, communities, and decision makers.	GD role: satellite EO is increasingly recognized as a critical tool in most integrated multi-hazard systems and a simple means of harmonizing data across diverse user bases. GD can provide easier access to data and facilitate the set-up of demonstrator systems.