

Contribution of the Committee to the UN Conference on Sustainable Development (Rio+20)

Dr Vanessa Lawrence

Co-Chair, UN Committee of Experts on GGIM

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Contribution of Geospatial Information to Rio+20 Processes: a background paper co-authored by Professor Fraser Taylor and Dr Carl Reed

Recommendations made in January 2012:

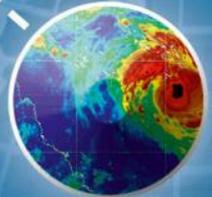
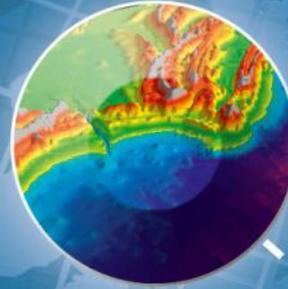
- Continued consideration and development of geography as an integrative framework for sustainable development applications, decision support, and policy development.
- Identification of new and emerging technologies and how they can enhance our ability to better respond to sustainable development issues.
- Consideration of legal and ethical issues such as privacy, security, intellectual property and liability.
- Engagement with the scientific and research community in the development of sustainability science.
- Provide guidance and a discussion framework for how the numerous regional and global remote sensing portals and dissemination networks can be integrated to create a network of networks.
- Provide guidance on geospatial standards best practice
- Facilitating cooperation among the major players involved with geospatial information at the global level





RIO+20
United Nations Conference
on Sustainable Development

Monitoring Sustainable Development: Why Location Matters?



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Purpose

- To demonstrate the vital role accurate, maintained and reliable geospatial information can play in helping to deliver and monitor sustainable development across the globe
- Demonstrating the societal, financial and efficiency benefits to users of having a universally used geographical framework which underpins all decisions locally, regionally, nationally and globally
- Explaining the role of UN-GGIM as a mechanism of assisting Member States.
- Confirming that all understood why an understanding of location is essential to the successful delivery of the Rio+20 agenda and to the prosperity and sustainable development of nations.



Agenda

- Professor Sir Bob Watson CMG FRS, Chief Scientific Adviser, Department for Food, Environment and Rural Affairs (Defra), UK Government
- Dr Vanessa Lawrence CB, Co-chair of the United Nations Committee of Experts for GGIM and Director General and CEO, Ordnance Survey, Great Britain
- Mr Greg Scott, Director, Geographic Information, Australian Government
- Dr Luiz Paulo Souto Fortes, Chair of the United Nations Permanent Committee on Geographic Information for the Americas
- Professor Sir John Beddington CMG FRS, Chief Scientific Advisor, United Kingdom Government





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Monitoring Sustainable Development: Why Location Matters?

Professor Sir Bob Watson
UK Government, Defra
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The Importance of Geospatial Information in Monitoring Sustainable Development in the Americas

Luiz Paulo Souto Fortes, PhD
President of PC-IDEA

"Monitoring Sustainable Development – Why Location Matters"
Rio+20 Side Event

June 20, 2012, Rio de Janeiro, Brazil



RIO+20
Conferência das Nações Unidas
sobre Desenvolvimento Sustentável





Australian Government
Geoscience Australia



Monitoring sustainable development: Why location matters in Australia



Greg Scott

Director, National Geographic Information
Geoscience Australia

APPLYING GEOSCIENCE TO AUSTRALIA'S MOST IMPORTANT CHALLENGES

 © Commonwealth of Australia (Geoscience Australia) 2012

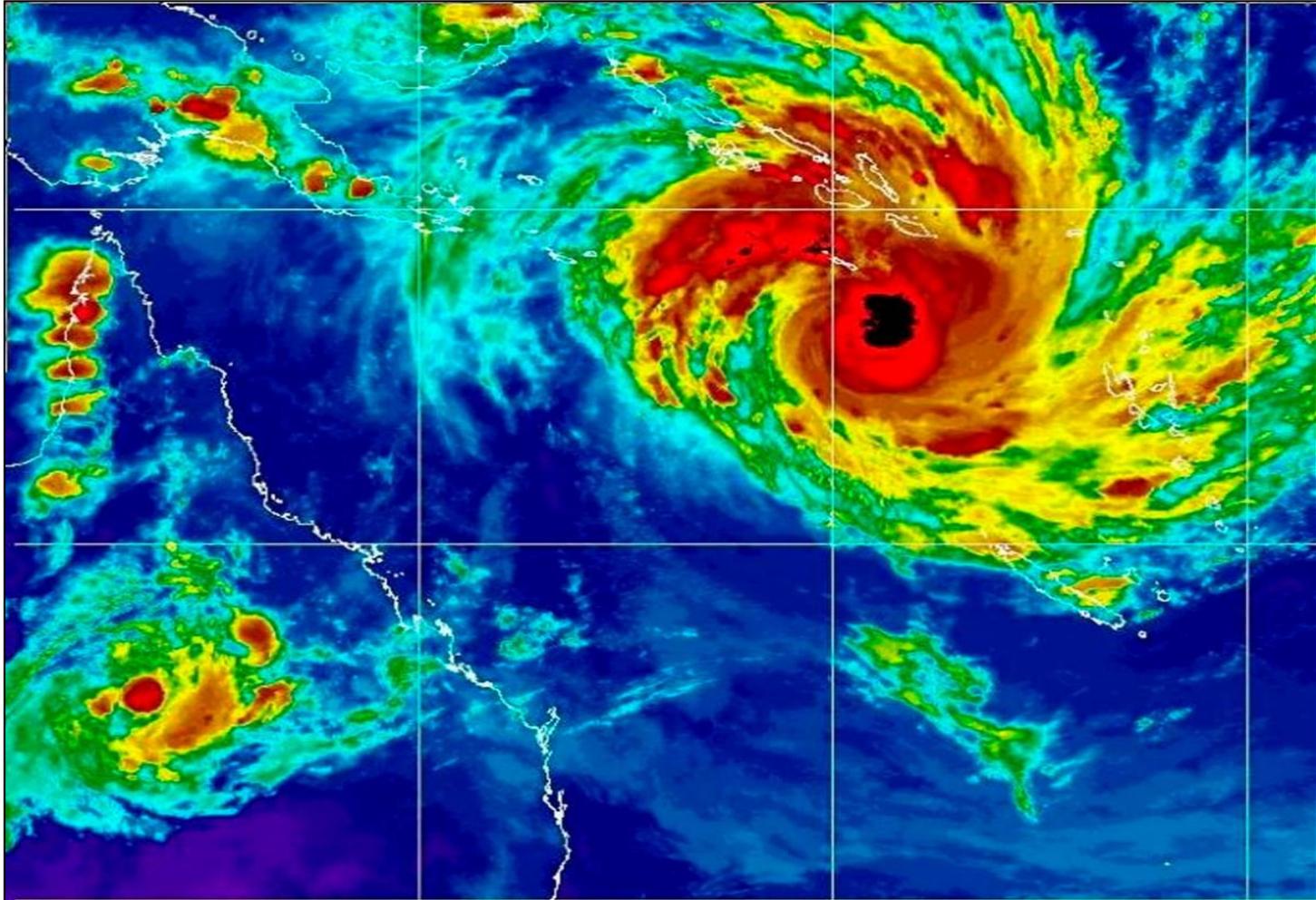


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Everything happens somewhere



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Accurate location information assisting better decision-making:

- Water management
- Food management; food supply and sustainable agriculture
- Sustainable energy



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The Future We Want: 19th June 2012

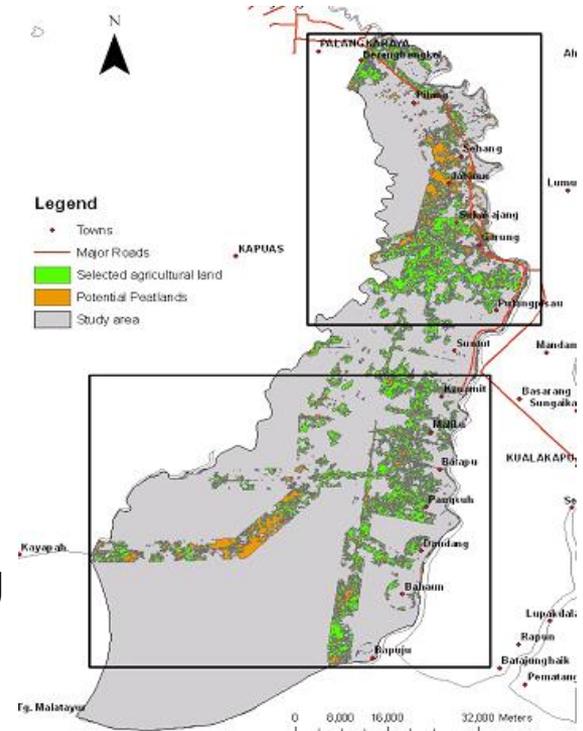
187. We recognize the importance of early warning systems as part of effective disaster risk reduction at all levels in order to reduce economic and social damages including the loss of human life, and in this regard encourage States to integrate such systems into their national disaster risk reduction strategies and plans. We encourage donors and the international community to enhance international cooperation in support of disaster risk reduction in developing countries as appropriate through technical assistance, technology transfer as mutually agreed, capacity building and training programmes. We further recognize the importance of comprehensive hazard and risk assessments, and knowledge and information sharing, including reliable geospatial information. We commit to undertake and strengthen in a timely manner risk assessment and disaster risk reduction instruments.

274. We recognize the importance of space-technology-based data, in situ monitoring, and reliable geospatial information for sustainable development policy-making, programming and project operations. In this context, we note the relevance of global mapping and recognize the efforts in developing global environmental observing systems, including by the Eye on Earth network and through the Global Earth Observation System of Systems. We recognize the need to support developing countries in their efforts to collect environmental data.



Resource management: Indonesia

- Major problem of how to balance conflicting ideals of economic growth and maintaining environmental quality and viability.
- Using location information:
 - provided a framework for the optimal use and cost benefit of drained peatlands in Indonesia in relation to generated revenue. By evaluating the results
 - helped to identify different crops that can be grown viably on the drained peatlands of Indonesia, for example, Sago palm, Melaleuca and Gharu wood.
 - helped to identify suitable locations for the processing of the cash crops and likely local markets; such as Berengbengkel, Pilang, Senhang, Jabiren, Garung and the capital, Palangkaraya.



Creating a sustainable City

- Masdar City, Abu Dhabi: ‘The First Carbon Neutral City’ – aims to integrate the use of GIS in every aspect to plan the city: from ensuring the construction process is efficient and produces zero waste to planning the transport and energy network to meet potential demand, and building in monitoring systems into the city infrastructure.
- Location is essential to help with urban planning on any scale: from creating a new city to expanding current infrastructure, location is needed to ensure infrastructure is optimal in terms of energy reduction, environmental conservation and social development.



Monitoring the City: Managing daily life

- The Rio Operations Centre helps the City Authority watch and manage daily life.
- The Centre integrates information on weather forecasts, water information, traffic flows and any other anomalies in daily life of the city to predict and manage potential situations such as flooding or traffic accidents.
- By monitoring the City and communicating information to local services, including traffic officers, fire services, and flood protection officers, contingency plans can be put in place and the public put on alert to minimise impacts of potential situations.



Monitoring transport use: planning for electric cars

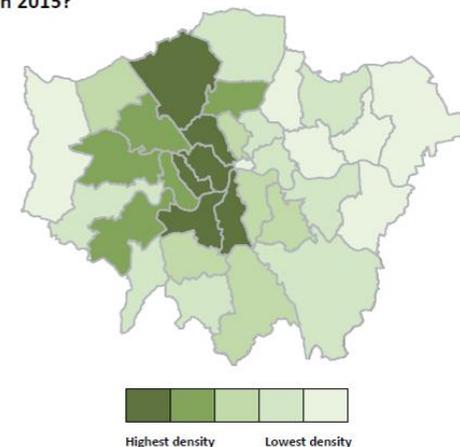
London's Smart City: part of the Plugged In Places Initiative.

Mapping car use to plan
electrical charge points for
most effective and
sustainable use.

Key consumer segments...



Where are plug-in vehicle owners likely to live in 2015?



Source: DfT/TfL



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Geography as a mechanism for sustainable development

How can Britain feed itself?



Enter the GeoVation challenge



Social enterprise facilitating new and existing growing schemes and local government engagement with local food.

Discover great food, at your fingertips

foodnation
www.food-nation.co.uk



A location based web and mobile application that promotes locally sourced food and farms.



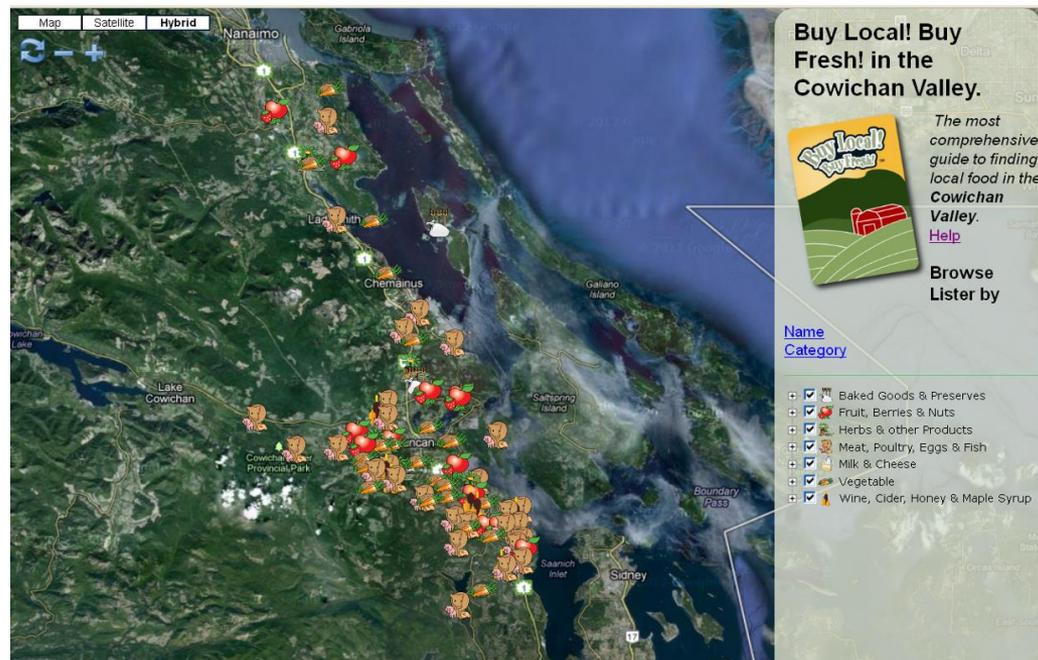
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Monitoring daily life: community food security management

- A community in Canada map their own food resources and access to food.
- Encourages residents to buy produce locally.



Source: RamanaTandale



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Land tenure regularisation in Rwanda

- The UK's Department for International Development (DfID) have been supporting a major Land Tenure Regularisation programme in Rwanda
- Rwanda is one of the most densely populated countries in Africa, with pressure on land likely to increase in the coming years.
- Aim to increase number of registered plots from 40,000 in 2009/10 to 6.9 million by 2015, helping to reduce conflict and provide the security needed by farmers and businesses to invest in long-term food production.
- Location information a key part of this process.



Esperance, 39, a mother of four used to be in constant dispute with her neighbours over ownership of the land she lived on. Through a DFID-funded land registration programme, the dispute is now settled and she



Source: UK Gov't/DfID



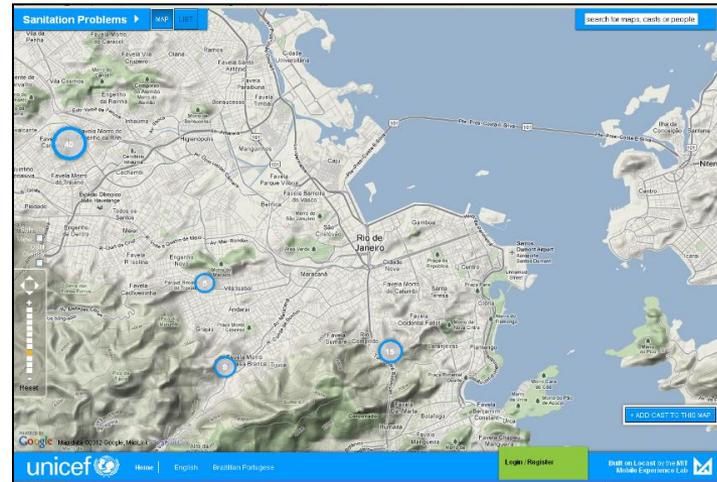
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Monitoring daily life: engaging young people in Rio de Janeiro – UNICEF-GIS

- Engaging young people to care about their community and environment.
- Teaching methods to map with mobiles and report problems in the neighbourhood, from inadequate sanitation facilities, bad waste management to poor access points.



Source: RamanaTandale



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Impressions



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Achieving sustainable development: The role of UN-GGIM

Dr Vanessa Lawrence CB

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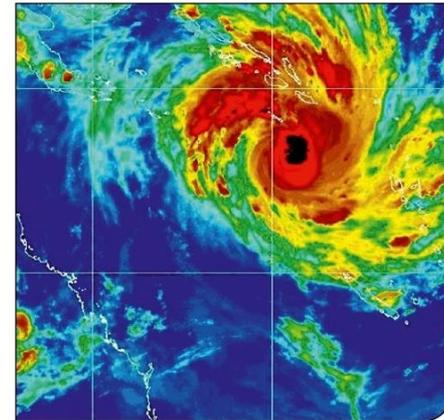
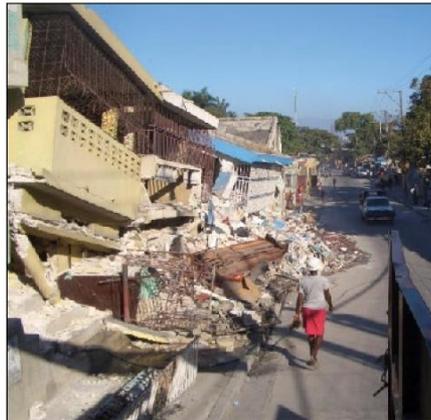
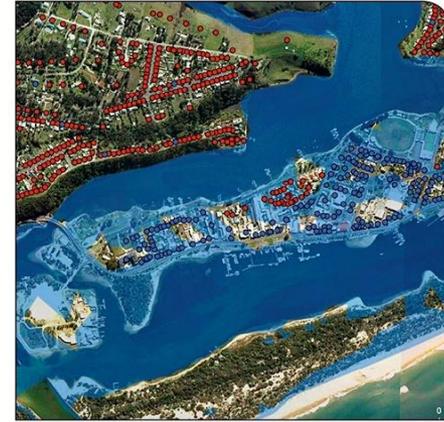
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Ordnance Survey of Great Britain,
United Kingdom Government



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Sustainable development: Location matters



The importance of geospatial information

“I am also pleased to see that the importance of reliable, trusted geographic information is now recognised. The United Nations has now established a Committee of Experts of Member States, which the UK co-chairs, to move this agenda forward”

*Rt Hon Nick Clegg MP,
Deputy Prime Minister,
United Kingdom Government, Rio+20
June 2012*



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“The Future We Want”: 19 June 2012

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