Making Geospatial Opportunities Accessible to All - Interview with Dr Suchith Anand

Suchith Anand served as the founding chair of the ICA Commission on Open Source Geospatial Technologies. He is currently serving as the chair of Geospatial IG of Research Data Alliance (RDA). He is working for the establishment of Open Source Geospatial Labs/Research Centres in key universities worldwide as part of the GeoForAll initiative with the mission to make geospatial education and opportunities accessible to all.

He is currently working as an Independent researcher for the Global Open Data for Agriculture and Nutrition (GODAN) initiative. Before joining GODAN, he worked at the University of Nottingham where he established the first Open Source Geospatial Lab in the UK. Dr Anand is passionate about GeoForAll, the Open Source Geospatial Foundation's Committee for Educational outreach – all reasons to speak with him.

Niall Conway: How did you get into geospatial, techie or a geographer? How did this lead into work with GeoForAll?

Suchith Anand: I come from a state called Kerala in India. I came across GIS by serendipity. Twenty years back, I was a student in Civil Engineering in India and by pure chance, I came across a short article in a magazine in my college library on the amazing Geographic Information System that is used by town planners. That was the first time I heard about the wonderful technology called GIS! At that time there was no GIS in the college where I did my degree. I still remember the struggles I went through to get access to GIS. I got some amazing opportunities later on to learn, so now it is my duty to support others in learning GIS. I am very grateful for the scholarships and help from lots of amazing people that helped me. My PhD was on automated generalisation for MobileGIS, which I did at the University of South Wales. I later joined the University of Nottingham in 2005. From July 2017, I am very fortunate to get the opportunity to work for the Global Open Data for Agriculture and Nutrition (GODAN).

I was determined from the start to making geospatial education opportunities accessible to all. I volunteered for the Open Source Geospatial Foundation (OSGeo) and started working on the education committee. In 2010, I established the first Open Source Geospatial Lab in the UK at the University of Nottingham. I didn't even have any initial funding for starting the lab! But thanks to all my amazing colleagues and students who came forward to support this idea, we were able to put this into action. The idea from the start was to create a network of dedicated Open Source Geospatial Labs in universities worldwide to expand geo-education and research opportunities. We did this by bringing together like-minded communities to support a common mission. In 2011, we worked to get a MoU between the International Cartographic Association (ICA) and the Open Source Geospatial Foundation (OSGeo) with the aim to establish 5 open source geo labs in 5 years time. We now have over 100 labs established in universities worldwide! I am actively contributing to wider initiatives in open data, open education and open science with the aim to build upon all these synergies in expanding our mission for Open Principles in GeoEducation.

NC: Can you tell us a bit about the Community (structure, membership and aims)?

SA: GeoForAll is the Open Source Geospatial Foundation's Committee for Educational outreach and works in close collaboration with partners worldwide in our mission for making geospatial education and opportunities accessible to all. In September 2011, the Open Source Geospatial Foundation (OSGeo) and the International Cartographic Association (ICA) signed a Memorandum of Understanding with the aim of developing on a global basis collaboration opportunities for academia, industry and government organisations in open source GIS software and data. This MoU aims to provide expertise and support for the establishment of Open Source Geospatial Laboratories and Research Centres across the world for supporting

development of open-source geospatial software technologies, training and expertise. The International Society for Photogrammetry and Remote Sensing (ISPRS) joined the GeoForAll initiative in July 2014. We have an advisory board set up of eminent experts, Regional Chairs and Thematic Chairs who provide excellent leadership. Our strength is in our amazing volunteers around the world who are contributing to the mission. We are a global community and our members are from government organisations, academia, industry, startups, NGOs, teachers and students. All interested are welcome to join our community.

NC: Do you have an example of how GeoForAll improves lives?

SA: One example that I would like to share is the excellent work done by Sergio Acosta Y Lara and our colleagues in Uruguay. The amazing work that they have done through the gvSIG Batovi initiative to enable spatial literacy education opportunities to schools has been an inspiration for us all. This is an excellent example of a successful initiative and impact in Open Principles in Education. This empowerment of educators and students is the true essence and gift of Open Principles.

NC: What is the role of GeoForAll considering the changing nature of the field - new markets, commercialisation of OS (e.g. Boundless Spatial) and the increasing developer-oriented nature of the field. Are we losing touch with the geographic foundations and how do we engage new communities?

SA: It is very important that there are no monopolies created in GIS. Having lots of companies and start-ups in the geo domain will ensure healthy competition which will help drive down costs and help accelerate innovation opportunities for all. Having more options for reducing risks to any proprietary lock-in will be a key factor in achieving cost savings and improving efficiencies for governments and organisations worldwide. GIS is fundamental technology in infrastructure development and high-cost proprietary GIS is unaffordable to governments, town planners and local authorities in developing and economically poor countries. In order to achieve United Nations Sustainable Development Goals by 2030, it is essential to provide free and open source geospatial tools and open data to universities and government organisations in developing countries for helping them achieve these targets.

NC: Awareness among decision-makers policy (is it improving and what should be done)?

SA: We have come a long way. I remember just 10 years back when I was sharing ideas about Open Principles in GIS, I was even laughed at by some! The pace of change in GIS in the last decade towards openness has been beyond even my expectations. GeoForAll was initially started by scientists and research-active academics to build strong foundations for Open Geospatial Science. We are now seeing lots of support from governments, industry and academia who are seeing the benefits and are actively supporting us. In the United Kingdom, the UK Government Action Plan on Open Source, Open Standards and ReUse is a step in the right direction. It is important that national and local governments look at the big picture and long-term view (and join forces and efforts) for mechanisms to train and support GIS teams in government and develop a robust innovation ecosystem. There should be immediate steps taken in the UK to create a National Centre for Open Government with expertise in Open Technologies and Open Data to build best practices in open source geospatial implementations and open data. There needs to be support and training facilities available in the local GIS departments. Investing in people is important for long-term impact.

NC: What are your thoughts on the potential of the current satellite data deluge (Sentinels, Landsat, Planet etc.)?

SA: Open data is a very important engine for economic growth as well as key for helping solve global challenges. I believe advances in geo-technologies will play a key role in helping us make use of all these amazing open data sources for delivering near real-time actionable information to help us solve global challenges from food security to extreme weather events.

NC: Advice for people thinking about getting involved in GeoForAll and to feel involved (meetings perhaps)?

SA: Access to quality education and opportunities is key for getting rid of extreme poverty and enabling broadly shared prosperity for all. I really hope colleagues will get ideas to work on solving global challenges based on some of the experiences that I shared. You need to have a strong commitment to a mission for this. Reflecting on our journey, I would say that it was a leap of faith and I believe that if you are doing something for the global good, things will somehow happen to make it possible. Please join our mailing list and be part of the community. We look forward to working and building collaborations with all interested in this education mission.

More information at http://www.geoforall.org/

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