

## **WWF-UK Extractives & Finance**

# THE STATUS AND IMPORTANCE OF NATIONAL SPATIAL DATA INFRASTRUCTURE: A SURVEY OF WWF-UK PRIORITY COUNTRIES

In working to protect some of our world's most important and sensitive biodiversity, effective and transparent spatial data for biodiversity conservation and land use planning is vital.

As increasing pressures are placed on land, and intrusive development projects are on the rise, landuse conflicts between communities, organisations, governments and companies are growing more common. The Sustainable Development Goals (SDGs), introduced in 2015, can only be successfully achieved if these conflicts are resolved in the best way possible for all involved parties.

A key measure to help prevent and resolve these land use conflicts is for organisations to encourage early engagement in these development projects. This is what a National Spatial Data Infrastructure (NSDI) can help to achieve. By mobilising a NSDI within a country, it is possible to solve these spatial data issues, such as availability and transparency, for all involved parties.

This is an introduction to a report which outlines what that solution might look like within and beyond the WWF network. It is a culmination of interviews and questionnaires from in-country spatial data users and experts within the eight countries that are considered 'priority countries' by WWF-UK. The results have been presented in country profiles. The research also gained a crucial insight into the awareness of NSDIs and the use of NSDIs within these countries, as well as how these could be applied and improved.



#### Key Findings and Recommendations across all countries

**Political Support:** If there is no political support for an integrated and transparent NSDI then efforts often fall flat.

**Fluctuating funding:** is detrimental to consistent government support of a NSDI. At present, especially in East Africa and developing nations, inconsistent and sporadic

funding leaves NSDI development vulnerable to inconsistent donor subsidies while governments divert funding to other 'more pressing' issues of development.

As a result, progress in the establishment and improvement of NSDIs can be slow; this may lead to low motivation within ministries in supporting it, and private investors withdrawing support due to lack of tangible results. To justify investment, discussion needs to come from a need based and problem solving agenda, which can prove its use from the outset and demonstrate end results.

**Framing:** the way a NSDI situates itself to government can greatly affect its acceptance and development. For consistent and integrated NSDI development there is a need for governments to make the connection between mapping and investing in mapping, and their national development plan and other ambitions.

**Smart city opportunities**: an effective smart city infrastructure optimally requires open, accurate, transparent and integrated spatial data, all of the qualities that an NSDI provides. As a result, it is thought that this demand will trigger interest and improvement in NSDIs, as smart cities demonstrate to governments the direct link between a development issue and spatial data management as a solution.

#### Need for a global assessment of NSDI

In full, this report recognises that a method of assessing spatial data infrastructure at a national scale is greatly needed. A comprehensive and stakeholder-relevant index and scoring system to assess the NSDI of a country would allow investment and decision-making to be directed towards problematic areas of NSDI development. Additionally, it would promote collaboration and motivation between government departments and other stakeholders, improving their spatial data quality, management and availability. An appropriate NSDI would have long-term advantages for both development and environment agendas, vitally the SDGs require good supporting data infrastructure, making it a benefit for not only the parties involved but also the natural landscapes that WWF works to preserve.

#### FOR MORE INFORMATION

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Why we are here To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature. wwf.org.uk

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### **Next Steps**

The aim is to apply the index globally and to obtain a score for each country. The profile of the index should also be supported by the work currently being done by the GSDI, UN-GGIM, and Ordnance Survey (UK) on data transparency, NSDI and standards.

Initial scoping and feasibility assessment for this index was undertaken in 2015 (Chandler et al., 2016) http://bit.ly/2fYjfXM The draft index and indicators will be critiqued and adjusted through a workshops and focus groups, expert analysis and published in a peer reviewed journal.

The rollout of a NDSI index has the potential to mobilise a collection of donors, investors, and NGOs, to pressure governments to modernise their NSDIs. This would strengthen capacity and demand for integrated land-use planning, with potentially profound long-term benefits for investment, innovation, people, and the environment.

#### **Further references**

For more information see the full report: http://bit.ly/2fpsPS4

