

MEDIA & MAKERS JUBA 2012: 'Open Knowledge' Stream December 2012, Juba, Republic of South Sudan

MEDIA & MAKERS JUBA2012 Open Knowledge and Sustainable Media Forum, December 11-13th, Juba, South Sudan. The 'Open Knowledge' or "Makers" stream of Media&Makers: JUBA 2012 builds on the groundwork of #OSJUBA and [TEDxJuba](#) in promoting open source solutions in South Sudan, with a focus on open data & knowledge, ICT, and innovation.

The Open Knowledge stream comprised of three interrelated 'chapters': 'Open Sourcing South Sudan', 'Open Data for Open Knowledge' and 'Open ICT and Innovation.' The three day session concluded by drafting a preliminary 'South Sudan Open Systems Strategy' which lays out the contours of an Open Systems 'roadmap' for government and civil society sectors.

RESPONSIVE OPEN SYSTEMS & STANDARDS IN SOUTH SUDAN

The roadmap is an 'action plan' for policy and practical implementations with a focus on concrete scenarios. This preliminary draft "*Responsive Open Systems & Standards in South Sudan*" illustrates the interactive nature of the initial exploration in to Open Source and Open Standards as they could be evaluated in South Sudan, including frameworks and definitions such as:

- Needs/Benefits/Potentials of Open Systems (Open Source, Open Data, Open Knowledge)
- Vision/Expectations/Goals
- Supporters/Key Players/Policy
- Key Implementations/Milestones/Best Practice examples

KEY POINTS OF DEPARTURE FOR ROAD MAP:

- User centred design - scalability, sustainability and openness (assessment and application of open and appropriate technologies, also necessary in the procurement process)
- Creating inclusive participation & involvement of all citizens and CSOs.
- Giving greater consideration to skills exchanges, maker & DIY culture, alternative resources
- Gaining better access to existing resources, development of extension officers
- South Sudan 'Data Server Backbone' to support active not passive data

RECOMMENDATIONS / PILOT PROJECT IDEAS

- Augmenting and coupling literacy training in collaboration with media literacy training (including strengthening network of extension services)
- Humanitarian Information Management through Cluster System (creating, keeping and dissemination of information in an accessible knowledge bank)
- Use existing UN Systems as action space to improve openness and data standards, and create a Task Force on ICT4D (i.e. w/ Gov. line Ministries, WB, UNICEF, Ericsson, NGO Forum)
- Participatory initiative: youth-led social monitoring, "wisdom of the crowd" - Ureport (Unicef).

24 HOUR OPEN KNOWLEDGE STREAM RESULTS

- Commissioner of Morobo County, Hon. Moses Simon Soro to publish county budget online (first fully accessible public budget disclosure in South Sudan)
- Pilot project with students at the University of Juba to create an urban 'knowledge and awareness' map of citizen input for political and urban development using ojoVoz platform
- South Sudan 'Data Server Backbone', National Bureau of Statistics led initiative serviced by central and state government line ministries and agencies to further existing NBS open data publishing, improve transparency and accountability, citizen response and interaction
- Offers to develop, host and implement 'Open Data and Open Government' pilots in Morobo
- Invitation by the UNESCO 'Knowledge Societies' division to South Sudan to WSIS (World Summit on Information Society) review conference in Feb 2013

ACTION PLAN FOR PILOT PROJECTS

#OWS - Open Warrap State: Post-Conflict Dialogue & Rapid Crisis Management
University of Juba: Open Systems Solutions Capacity Building
Morobo Open Government Initiative & South Sudan Open Server Backbone

MEDIA & MAKERS JUBA2012 Open Knowledge and Sustainable Media Forum was hosted by r0g_agency and MICT in collaboration with UNESCO, UNICEF and partners in South Sudan including the Juba Civic Engagement Center (CEC), the Gurtong Network, AMDISS and the University of Juba. The meeting is a follow up to [#OSJUBA conference held in Berlin in June 2012](#).

NEEDS / BENEFITS / POTENTIALS

Open Systems, Open Data, Open Knowledge

"The Republic of South Sudan is a leader for a new political imagination of a more open, more transparent space in the movement to digital technology. We need to take the challenges of citizens, and scale these to address the complexity of policy making that leads to implementable and measurable action. Key areas of change: Perception (unresponsive governments), Practice (expanded services focus on quality), Preoccupation, Knowledge, Participation & Human Rights." *Philip Thigo, SODNET, Nairobi*

"Fail to capture the commanding heights of technology, and your political efficacy will be of no significance." In the Republic of South Sudan you have an opportunity: you can be the beacon to illustrate for other countries: "we are making very conscious decisions on the technologies we use." *Dorothy Gordon, Ghana-India Kofi Annan Centre of Excellence in ICT / FOSSFA, Accra*

EDUCATION

When we're talking to our people we MUST talk in our language.

"Open source technology allows for localization. If it's all in English, the people in effect need to learn two new languages - the technology and English. Please, publish in your own language. We encourage university students throughout Africa to use open education resources, to gain the equivalent of a university degree using free, open source resources online. Create the resources relevant to South Sudan, for example: adult literacy, hygiene, sanitation, computer literacy, maths." *Dorothy Gordon, FOSSFA*

OPEN DATA

What is open data? Data that is technically accessible. Easy to find and easy to search. (PDF, XML). Legally open and reusable. You should actually be able to perform analysis, and be available for free. How does it connect with open development? Collaborative ways of developing a shared resource. How can people develop shared resources to address real development challenges? These things must be managed in a sustainable way. How do you use available data so you can make sense of everyday issues that matter to citizens? EXAMPLE: iCow. A virtual cow. A cow on the cloud.

iCow is a simple SMS based system where farmers can get information.

A critical discussion between CSO, government, and farmers. What challenges do farmers have - how do they keep track of registration of their cows, who gives it artificial insemination, feeds it, milks it. There's several SMS interfaces, but there's also a mapping system. This gives them many ways to access the data - not just one format. People can see where there are agricultural services, how many farmers are there per county, where are they distributed, etc. Farmers are texting in, government is sharing and visualizing the data. It's a collaboration. Open data meets open development through collaboration.

"Sometimes practice needs to come before policy." *Philip Thigo*

South Sudan 'Data Server Backbone'

Use open source technology and reduce the costs, because you are in control of your own network and software. Create and manage intranets – to control our own servers, to serve our own goal. Coordination is a key message, to avoid replicating efforts and duplication, we need to know what data is there, share our information to reduce this kind of redundancy. Existing structures to work through: INWG and the cluster system. UNDP and the World Bank are funding the NBS collaboration with other agencies and data collectors.

David Chan Thiang, National Bureau of Statistics, Juba

Active not Passive Data.

Key goal: to see the passive open data scenario become an active one.

Data visualization is so important, open source tools like Open GIS, and Ushahidi help to determine the likelihood of children attending school, needs for transport, maternal health and other services. Technology now can allow you to interact more effectively with citizens, eg. open survey on mobiles. Ushahidi allows us to geo-locate data in real time on mobile phones then visualize this data. Open data allows 'crowd sourcing,' to deliver a better service to your people using collective brain power.

OPEN BUDGET

EITI - Extractive Industries Transparency Initiative and United Nations Anti-Corruption convention. Once the government signs these, we can know exactly how much oil is flowing and where the money is flowing, and we may see those \$4 billion we lost coming back. Open oil almanac.

The World Bank - South Sudan High Frequency Survey started out as a pilot project, now we have \$3.2 million from DFID to keep scaling this up. ROSS is a young, fragile, fast-changing country with many vulnerabilities and tensions. How can we help the government gather this data? The World Bank uses Google's Open Data Kit (ODK) technology with tablet computers - the data itself is open and ODK is pretty much free. We have our own electronic survey forms that are sent at the end of each day to the server via the mobile phone network, and the data becomes available in near real time. We do the data analysis and make it available. The technology is pretty easy to use and implement. Collecting open source data you have mountains of information - so how often do you want to post? How often do you want to release the data? *Economic data you might want to collect weekly. Household data you want to get definitely more than once a year.*

Two surveys: market price & exchange rates, and household welfare & perception.

Collecting black market data, what are exchange rates? You can monitor inflation rates through this price collection, which is updated once a week. The household survey: we ask a range of questions on food security, hunger, citizen perception of government service delivery. There is quarterly data coming in from the household survey. *Mikael Clason Hook, World Bank*

OPEN OIL

OpenOil, a Berlin-based publisher and consultancy, has developed the *South Sudan Oil Almanac*, the first reference guide to the extractive industries of South Sudan. The guide is produced online using open source wiki software and leverages the value of the open data already out there to create a convenient one-stop-shop where visitors can learn about all aspects of the South Sudanese industry. The goal of the *Almanac* is to curate the public domain and broker it to the people who most need it – parliamentarians, NGOs and local and national-level media, and other groups who are currently peripheral to management of the oil and mining industries yet very much affected by them.

The guide has two goals: to increase the flow of information to all local opinion shapers and decision makers; and to position regional and local groups to take ownership of the reference materials, so that, for the first time, there is an editorially independent and technically informed source of data and information about South Sudan's extractive industries. The guide summarizes contract areas, assets, issues, history, policies and the geopolitics, and is produced in a collaborative editing process and is exportable to print book editions. The guide is one element of a growing open source movement around governance in South Sudan, and contributes to the transparency of an industry so critical to South Sudan's development goals.

Find the wiki at southsudan.wiki.openoil.net.

OPEN GOVERNMENT

"I want to make government accountable to the people. I don't want to hide our budgets - I want to publish everything. Here in Republic of South Sudan, if you don't have internet, radio is an alternative media we can use. 71% of people listen to radio as their primary source of information."

Moses Simon Soro, Government Official, Morobo State

"Moses, as a government official, you want to make government work better. How do you do that? Open source is part of that story. This kind of discussion is a citizen-government engagement scenario. In order for that to have a starting point, we need to look specifically at your needs and context in Morobo. What kinds of systems are there that allow you to reach that model state?"

I came here specifically with the idea of getting my government to work better. When I learn more, we can continue taking steps forward. Let me tell you what my goals and objectives are. These are the things I want open government for, these are what a democratic Republic of South Sudan needs:

1. Build capacity and effectiveness of all government agencies to improve information flow to citizens.
2. Adjust policies using the media to gauge people's view.
3. Transparency and better financial management, less corruption. Practical things I need your help on. Corruption is a problem - people searching for "service money", it's all corruption.
4. Providing food support, improve human rights. We want to be more accountable. People are sleeping in containers - these are things we need.
5. Strengthening the judiciary. You give a policeman 500 pounds and then the case does not go in front of a court. Let's make the courts independent. This is a big big issue for me. Citizen rights are citizen rights in the West. Sometimes here it doesn't happen.
6. The cornerstone is to have a productive civil servant corps. Make the government work more efficiently. Why employ 6 people when you can employ 2? The government can't afford this.

Let's make sure there is constructive dialogue between government and people. Open government should be interlinked with democracy, making sure people are involved in decision-making processes. We'll also look at observation of human rights. One goal is to increase transparency, in order to increase trust in what the different branches of government do. I want to provide raw data so people can extract value out of it, and create innovative services that ultimately benefit my citizens. I want to engage people. *Moses Simon Soro, Government Official, Morobo State*

VISION / EXPECTATIONS / GOALS

OPEN CULTURES AS CATALYSTS FOR AN OPEN SOCIETY

We want to discuss how has FOSSFA tried to look at helping GOSS consider implementing open source strategies as they form their own policy?

FOSSFA is recognized by many African governments, we work with them in implementing situations where open source strategies for policies can flourish to achieve African development. We show governments how to incorporate open source thinking into their national policies. Our basic aim is to enable the Republic of South Sudan to have its own voice in open source movements.

COOPERATION is the key word. You in the Republic of South Sudan can make a huge contribution to the society of nations: be conscious of how you build society, and technology. Take full control of your content creation as you move forward to empower citizens: both men and women. How will government move to open source? Government systems are more complex than just productivity. What about monitoring functions? What is the difference between the situation of my people today, and their situation after I've been in office for two years. Being able to track is key. You're always preparing for the future. In Kenya, some policies are really useful, e.g. in public procurement. If you're using taxpayers' money, you can't use any proprietary software. It's a good policy. As an NGO, we can't tell governments what to do. It depends on your country as to the options you choose.

CIVIL SOCIETY / SUSTAINABILITY

The Civic Engagement Center is a network of over 40 NGOs working in human rights, children's education, health, and so forth. We came together because individually our voices were not heard by the government, but if we go as a collective body they are. We had a vision for sharing information. The civil society talked largely about the issues of transparency and accountability. We have lost more than \$4 billion dollars that were meant for development in this country. We built the constitution of Southern Sudan, before that there was no civil society in the constitution.

What are we looking for in the future? We are looking for citizens who are well informed about issues in this country. We want to engage the constitution so that we can all have a say in it. We want to inform people about their political rights, so that when their rights are stepped on, they can say something. Our motive is to educate all the citizens of ROSS. Beginning with the IT computer literacy training that we have, and going forward. *Peter Lasu Ladu, Civic Engagement Center*

CULTURAL NARRATIVES

"What connects all of us: story. All of us have a story. The Africa story to the rest of the world can be boiled down to two elements: 1. crisis - hunger, famine, civil war and 2. the exotic - a safari, beautiful beaches and wildlife. And always pictures of African children.

What I'm going to share with you is my own story: I had my role to play in George Lucas' vision of Africa, as the young Ubangi boy in TV series, the Chronicles of Young Indiana Jones. Two decades later, I moved away from being a part of someone else's vision of Africa to creating my own. I got to direct a short film called Dawa. It's a comedy - a grandfather and boy try to pull off a scam in Kampala... I went from being passive to active, creating my OWN story. This is the Africa I know, the Africa I live in and create every day. Africa's time is upon us. We should all awaken the potential within us to tell our own story. I'd like to challenge you - the next chapter in world history starts right now. You can create your own story. You will determine what the world has to say. I'm sure that a lot of you have moved from being the passive recipients of what the world has to say, to shaping it, creating it and forging it on your own terms. Begin with the person sitting next to you. There's no better place to start." *Mark Kaigwa, Afrinnovator (Nairobi)*

SUSTAINABLE AGRICULTURE

"My research is contextualized in climate change. In farming, there are extreme, unpredictable changes. These conditions are variable from place to place, so there is as great need to incorporate indigenous knowledge into scientific research, to gather local data. Instead of just speaking about the effects of climate change, this could be changed into a network of mutual learning: techniques of growing new crops, how to adapt, etc. Open data is good. But people are also generators of content and knowledge. We need to exploit the interactive capabilities of mobile media." *Eugenio Tiselli*

ICT is actually about these human networks. Extension work on the community level exists in ROSS, and we need to introduce technology to make their job easier. *How do we connect all these initiatives to come out with a body of research, to see what is happening at a community level?*

The CTA in Holland are trying to get a compendium of these types of initiatives. A project called Farmer Line. And the Talking Book. A design that can withstand extreme conditions, use it on the farm to listen to extension messages, and also record their own message that can be uploaded on radio. *It would be really interesting to make out a call for papers, so we can collate the lessons learned. There are so many things happening not only in Africa but also on other continents.*

SUPPORTERS / KEY PLAYERS / PROPOSALS

The Open Government Partnership (OGP) is a concrete structure in which to implement open source thinking. The first key pillar of the OGP is freedom and access to information. Open data makes open government possible, through transparency, participation, accountability, efficiency.

Open data is not just open data, but releasing data in a way that can be used.

How do you create democracy? By making technology a driver for citizen engagement with more efficient and effective government, to move toward greater transparency through open source technology. International targets that countries can aim for, and frame their own commitments. OGP recognizes that it works BEST when there is local capacity. Citizens must be involved in every step of the policy making process. You must be able to show that the National Action Plan has been agreed upon by government, civil society and the people. The OGP can help set yearly benchmarks. If the Republic of South Sudan says, we have a freedom of information law drafted, OGP says, OK, set your goal to pass it by that date. It's a rolling process.

The state of access to information (ATI) in Africa: Decisions depend on information. Access to information laws allow or don't allow people to make these decisions. Broadly, ATI can bring about transparency and accountability in governance. The map from 2011 shows that Africa has the fewest countries where ATI regulations and policies are in place, or are at least in draft form. Media and civil society communities need to be vigilant to ensure that such laws, wherever adopted, are effectively implemented. *Edetaen Ojo, Media Rights Agenda / African Platform on Access to Information*

OPEN DATA FOR OPEN KNOWLEDGE

National Bureau of Statistics, Juba

Given the situation we're in, it's high time for the government to provide statistics and the quality information so the government can make a firm and reliable decision." David Chan Thiang

"What is the role of the NBS? What are the goals and challenges? The data itself is hosted by South Sudan. Without proper data on health, GDP, etc, the government can't function. Jointly with the north, we created the National Baseline Surveys. Wanted to capture the household consumption patterns - consumer price index. We also produced indicators on health, education, housing, nutrition.

We took the national census, and the household surveys, and we compute it. We are working with the national accounts, with the department dealing with economics. You cannot be a member of the international community without a GDP. Per capita incomes. That's the basis on which the World Bank and others give conditional loans. That is determined based on per capita GDP. We produced GDP figures for 2008, 2010, and 2011. And that information is available.

We now have the South Sudan High Frequency Survey, a \$50 million document, in collaboration with the World Bank. We have submitted the thesis to the government for endorsement, and we remain with the council of ministers presently. We revisited resources available for the people. Computers, housing, etc. We are very hopeful that the Bureau will stand on its own soon.

Open data is the key here for us to involve the people, important because statistics have to be a public good. Otherwise, we will not be able to develop. We're very interested to share this with you. We developed high frequency economic development indicators. We collect prices on a daily basis and see how they change. These prices are really important to us, we make them available on the website. Services delivery: we want to see how people proceed, in terms of education and health. How safe is an individual in his or her neighbourhood? If people complain, the government must analyse this information. This situation has to be addressed. Prices have gone up, and we know.

Challenges: The bureau has been working hard on the statistics. If something is produced, we must disseminate it. How do we distribute revenue? The government is paying less, and the market is open. Some people are not compromising, and they leave. Another issue is the collaboration with other collectors of information. Another challenge is the office space. Since we have huge data, it's difficult for us to operate in pre-fabs. You cannot put in a good server because of the nature of the building. Our IT capability is very low. Without internet 24/7 we also can't do it. We have young people, we are eager to learn. We are open. There is no restriction. If you want the data set to analyse further, the Bureau is open. The leadership is very friendly. Statistics have to be a family good, and to be a family good the statistics have to be very open.

How do we make passive data into more active data? The first thing I'm happy that the government in ROSS is doing, is that the data is usable. That's the amazing thing here! They're already halfway there. There needs to be a way for data to be collected in individual ministries in an open way, so that it is seamlessly translated into the open data platform. What about creating an open knowledge directorate? The NBS has an important role. The organs of the government need to be involved at every level. The rest of the information should come from other local organs of the government. *The government needs to decide, which data is it*

releasing for free? Which data is a source of revenue. How can you get all aspects of the government to work together? Is it possible to incorporate other streams into the data the NBS uses? We have a "digital atlas". It has all the geo-codes for the schools and hospitals. We tell the government: let us release this. Data is variable. Some data you can release, some you cannot release. We are in a process of learning. The Bureau is seeing: if something is good for us, we want to explore it. If it's something we can integrate, it's welcome. The key outcome of this discussion is to know: what can be shared and what cannot?

IMPLEMENTATION

User-centred design is a key element. The operational research around user centred design is one of the elements we need to include in our roadmap.

MAKER SPACES

Afrinnovator is organizing events around the iHub. What makes innovation hubs tick? There two dozen labs and hubs across the African continent. iHub is a physical space, an internet community, and the knowledge that you can do whatever you want. Success stories: iCow. M-Farm. Kopo Kopo. Mobile money, all comes out of the iHub. Community and the physical space. You own it. Getting young ambassadors to get within the space and get creative. Putting the expectation back on the community to DELIVER.

Icecairo

iHub, ICE Cairo, Open Design City - places where people can meet, access resources and tools. We exist in a world where, most of these challenges, someone has already come up with a solution. Open source ecology, bio-energy from waste, etc. A lot of this knowledge is online and exists within local communities. How can more people see it? Events are the most important. Bring people with the skill sets together with the local community, and build networks. ICE is a prototype of such spaces. How can we use this space to support new spaces, and to empower local communities to make these spaces themselves? In Juba, we're looking for the community. The young people. Government can empower and enable young people to grow, but the drive needs to come from them. Ambassadors' program: How can people find these spaces and learn from them? How can people go and learn business models and techniques and apply them in a local context?

COPY, ADAPT, SHARE AND THRIVE. These are key. *Jay Cousins, icecairo*

Children's Pavilion, Juba

What makes a modern city? A lot of spaces only for adults take up a lot of land, children have no space within this landscape. There are no playgrounds. Children are our most important asset, and we need to start investing in them in very tangible ways. My dream is that this happens in the centre of Juba, not on the periphery. We have a responsibility to put our children front and centre.

Children's pavilion is an interactive landscape. Children can dream. Create their own content. Rather than just consuming what other people give them. By playing the children are exploring and learning and testing boundaries and sharing. South Sudanese businesses should contribute. The building uses local labour and local infrastructure, we use beds, metal framework that gets painted and we use that all over South Sudan.

What if children have the opportunity to upload the art they create? Children are the ones who teach their parents how to use the technology we're talking about. Start with the children - that's a way to impact the rest of society as a whole too. Why do we need these spaces for children, or these special kinds of public places? Because if we don't stop this, everything will be built up. We have a beautiful cultural centre that is now a casino, and a nightclub. In the 70s that was a place where people could meet and exchange ideas. So the only outlet for South Sudanese families now has walls around it. Therefore, young men and women don't take their families out. If we had cultural spaces where people could take their families out, it would be such a help for the healing process. *Iduol Ahang Beny*

Open Cultures, A Glossary for MMJUBA

Compiled by Ela Kagel, Free Culture Incubator & SUPEMARKT, Berlin
http://de.slideshare.net/supermarkt_slideshow/121208-opencultures-jubaela

Below you will find the results of our common sensemaking practice around open source terms.
http://wiki.r0g-media.org/index.php?title=Eight_key_open_source_terms

GLOSSARY OF TERMS

DISCOVERY will be driven by the talks, so we can develop a story together. The first step is understanding where we are. User-centered design is key. What does access to information look like? What are the needs? We look at data, knowledge and technology.

DREAM is creating an image of where we want to be. Where do we want to go, what is the goal?

DESIGN: we need concrete plans. We know the technology needed for development and open source solutions, and the international community is willing to support Republic of South Sudan.

DELIVER create an implementation plan and concrete steps. Who does what, how, and with what resources? What is the relevance and the applicability of the solutions we're sharing here?

OPEN SOURCE: Opening source code means sharing. Open source can enable a communal response and meaning. If more people have access to source code, they can improve it – and this creates more opportunities for people to engage with each other even in an economic sense.

CREATIVE COMMONS: letting go of traditional notions of copyright. A group can decide on their own terms, to what extent users can participate in content - alter it, share it, work on it, improve it.

FREE CULTURE: A social movement that promotes freedom to distribute and modify social works, using the internet. These services aren't necessarily without money - and certainly not without value. Free culture is about free access to information and exchange of ideas.

OPEN KNOWLEDGE: Distribution of knowledge in an open manner, closely related to open source. Embraces open data and content. Open knowledge is a leading term for this field.

OPEN INNOVATION: Innovation requires cooperation between people. Enables people to participate in an innovation process. The value should be spread between all people, all ideologies - not just for one company or one ideology or goal.

OPEN RESOURCE: How do we look at economic, social assets within society? We are surrounded by resources. Resource is not just an economic thing. A cultural movement is a resource. Resources are actually opportunities - things that can benefit society on a larger level.

MAKER CULTURE: A technology based extension of a DIY culture. Let's approach hi-tech on a very low-tech level. It's about enabling people to interact, make their own choices, have access to information and knowledge. This allows people to find ways to do their own things even if they're under-equipped and don't have the resources they might need.

SUSTAINABILITY: Sustainability calls on people to create systems that last more than a few days. Systems that nourish themselves, and do not depend on external energy or help. Something that can be fed by its own community, by its own productions. So it requires a specific thinking, dealing with critical resources such as time, with knowledge of the needs of people and environments.

ADDITIONAL MATERIAL & REPORTS

'Open Knowledge & Systems' wiki for ongoing contribution, reference and projects (thanks to Amrit Naresh)
http://wiki.r0g-media.org/index.php?title=Main_Page

Additional material and reports posted on r0g site:
http://r0g-media.org/mmjuba/mmjuba_reports/

MMJUBA Open Knowledge Report by Jodi Rose with thanks to Stephen Kovats, Ela Kagel & Amrit Naresh

FURTHER RESOURCES & REFERENCES

[Afrinnovator](#) organizing events around the iHub
[AMDISS Association for Media Development in South Sudan](#)
[Children's Pavilion and Interactive Landscape](#)
[The Citizen](#), Independent News, Juba, South Sudan
[Free Software and Open Source Foundation for Africa \(FOSSFA\)](#)
[Ghana-India Kofi Annan Centre of Excellence in ICT](#), a capacity-building institution involved in training, research and consulting which runs exclusively on FOSS
[Gurtong Trust Peace and Media Project](#), South Sudan
[iceaddis](#) & [icecairo](#) maker hubs
The Social Development Network (SODNET) is dedicated to fighting the causes and consequences of poverty and disempowerment through its [INFONET](#) initiative
[Juba Civic Engagement Centre](#) Juba, South Sudan
[Kapital Movie](#), Lagu Stephen Samuel (Founder), Juba, South Sudan
[MEDIA & MAKERS JUBA 2012](#)
MICT Media in Cooperation and Transition
[Ministry of Housing & Physical Planning Juba](#), South Sudan
[National Bureau of Statistics Juba](#), David Chan Thiang (Director of Economic statistics) South Sudan
[Nawaya](#), (seed/intention) is a not-for-profit green business/NGO with a focus on "True Sustainability".
[The Niles](#) Independent bilingual news from Sudan and South Sudan
[Open Government Partnership](#) (OGP) is a new multilateral initiative that aims to secure concrete commitments from governments to promote transparency, empower citizens, fight corruption, and harness new technologies to strengthen governance
[Open Knowledge Foundation](#) promotes the creation, dissemination and use of open knowledge in all its forms, from genes to geodata and from sonnets to statistics.
[OpenOil](#) energy consultancy and publishing house based in Berlin
[Oil Contracts, How to Read and Understand Them](#)
[r0g agency](#) for open culture, hacktivism and critical transformation
[Sauti Ya Wakulima](#), "The Voices of the Farmers" is a collaborative knowledge base created by farmers in Chambezi, Tanzania
[SUPERMARKT](#) Berlin
UNESCO First WSIS+10 Review Meeting [Open Systems Solutions TOWARDS KNOWLEDGE SOCIETIES FOR PEACE AND SUSTAINABLE DEVELOPMENT](#)
UNICEF South Sudan [Technology for Development \(T4D\) and Innovation](#) Team (Stuart Campo)
[UNICEF STORIES](#)
[Ushahidi](#) is an African technology company that develops free and open source software for information collection, visualization and interactive mapping used globally.

MEDIA & MAKERS JUBA 2012: 'Open Knowledge' stream participants included:

Local / South Sudan Attendees / Participants:

Hon. Atem Yaak Atem, Dep. Minister of Information and Broadcasting GoSS, Juba
Peter Lasu Ladu, Chairperson, Juba Civic Engagement Centre, Juba
Prof. Gyavira Wani, Dean, Faculty of Architecture and Engineering, University of Juba, Juba
Prof. Nada Hammad, Faculty of Architecture and Engineering, University of Juba, Juba
Iduol Beny, Planner/Architect, Juba
Alfred Taban, Editor-in-Chief "Juba Monitor", Juba
David Chan Thiang, Director of Economic Statistics, National Bureau of Statistics GoSS, Juba
Jessica Hjarrand, UNESCO, Education and Literacy Program, Juba
Stuart Campo, UNICEF South Sudan, Juba
Mikael Clason Hook, World Bank South Sudan, Juba
Hon. Moses Simon Soro, Commissioner, Morobo County, Morobo
Taban Michael Towongo, Mission Aviation Fellowship (MAP), Juba
Dickens Olewe, Hacks/Hackers, Nairobi
Eva Yayi, Community Empowerment for Progress Organization (CEPO), Juba
Matthew Benson, Crown Agents, Juba
Suba Samuel Manase, Ministry of Physical Infrastructure, Gov't Central Equatoria State, Juba
Kenyi Ndipa, IT Officer, Office of the President, GoSS, Juba

Kennedy Alfred Remo, Server specialist, Ministry of Telecommunications, GoSS, Juba
Lagu Stephen Samuel, Kapital Productions, University of Juba, Juba
Jok Madut Jok, Under-Secretary, Ministry of Culture, Youth and Sports, GoSS, Juba (Skype/remote)
Mading Ngor, Radio Journalist 'Wake-up Juba!', Juba (Skype/remote)

International Guest Experts:

Stephen Kovats (Facilitator), r0g_agency for open culture and critical transformation, Berlin
Ela Kagel (Co-Facilitator), Free Culture Incubator, Berlin
Dr. Dorothy Gordon, Ghana-India Kofi Annan Centre of Excellence in ICT (AITI-KACE) / FOSSFA, Accra
Asteway Negash, Free and Open Software Foundation for Africa (FOSSFA), Addis Ababa
Philip Thigo, Open Government Partnership (OGP) / SODNET, Nairobi
Jay Cousins, ICEcairo Innovation Hub / GIZ, Cairo
Severin Peters, AgenZ / GIZ, Berlin
Mark Kaigwa, Afrinnovator / iHUB, Nairobi
Amrit Naresh, OpenOil, Berlin
Davide Storti, UNESCO, Communication & Information Sector, Knowledge Societies Division, Paris
Eugenio Tisselli, Z-Node, Dar es Salam / Mexico City