University of Dar es Salaam, CoICT, Kijitonyama Campus

REPORT

THE dLab ROUNDTABLE WITH THE HEALTH SECTOR

20th January 2017

1. INTRODUCTION

In April 2016 the University of Dar es salaam together with its development and implementing partners (SBC4D, ODI & IntraHealth, and UDSM/UCC) established a project called dLab which is led by University of Dar es salaam Computing Centre funded by PEPFAR and foreseen by the MCC. The dLab is an innovative space where data from multiple sectors and sources can be combined, processed, and shared to drive better policies and decision-making.

In its endeavors to achieve the project's objectives, dLab has conducted a series of roundtables, workshops and training on data usage, data availability, data visualization and publication. On 20th January, 2017, dLab conducted a roundtable discussion which focused on developing a clear practical plan on how Organizations in the health sector can work with dLab in harnessing data use so as to increase the benefits gained from the publication of health data in Tanzania. This event took place at the dLab premises situated at University of Dar es salaam, College of Information and Communication Technologies in Kijitonyama Campus.

More than 40 participants from both public and private organizations within the health sector were involved. The event focused on soliciting ideas from participants that are to be used in producing use cases which can further be developed into use stories. The primary objective was to bring together stakeholders from health sector to brainstorm on the data availability, data collection challenges and data publication for better decision making in Tanzania

The roundtable platform also provided an opportunity for the dLab staff and participating organizations to work together in identifying different use cases that can be developed into use stories. In the breakout session the participants were given the chance to present the data gap, data challenges and data publication in their organizations. The dLab will use the information gathered from the uses cases in identifying the best practices that will guide the collection, publication and usage of data.

Participation:

The participants were from different institutions that included both the public and private sectors as well as the civil society – (academia, CSOs and NGOs). Figure 1 below shows the participant's representation by organizational category. See Annex I for list of participants.
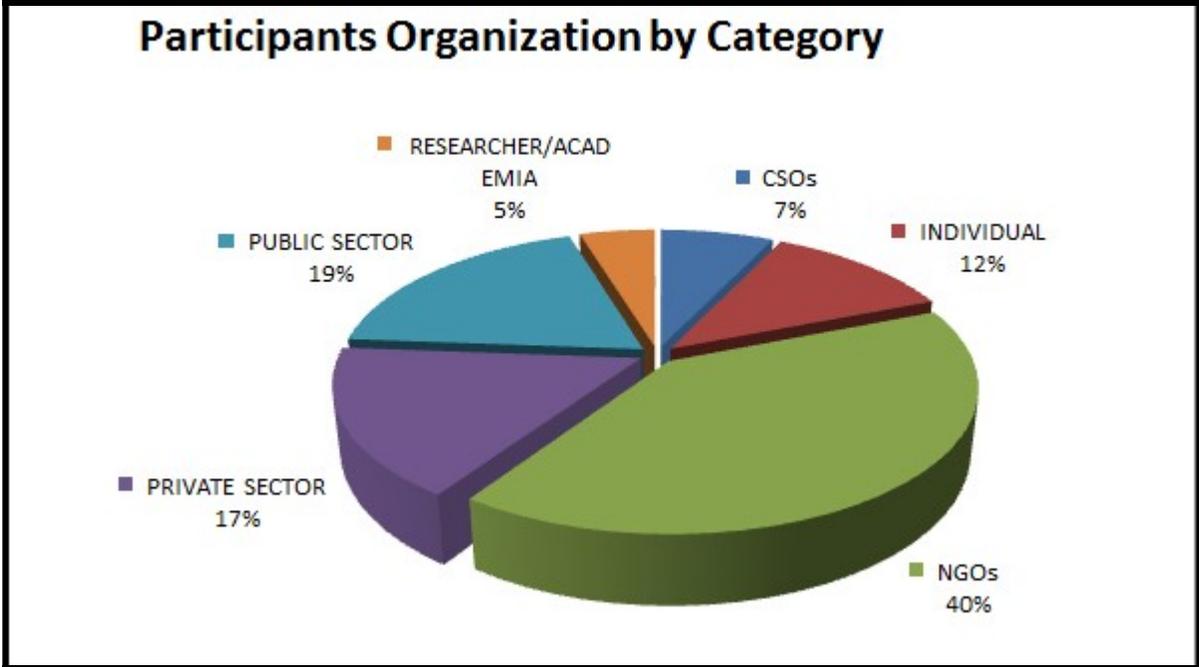
Figure 1: Participant proportion representation by category

Figure 1 above indicates that of the participants, 19% where policy makers from the public sector, 17% were from private organizations, 40% from NGOs, 7% from CSOs, 5% from research institutions and 12% were individuals.

2. PROCEEDINGS OF THE SESSION

The roundtable session was opened up by the introduction from the dLab Engagement advisor Dr. Justo who introduced and highlighted the aim of that roundtable which is to strengthen the collaboration between dLab and the participating organizations by identifying different use cases which can be developed into use stories. The emphasis was on the importance of releasing data publicly, allowing stakeholders to use, understand, and help improve the data, which in turns provide opportunities to improve data quality. The dLab and other stakeholders can improve dataset to be published by identifying the dataset for improvement and provide feedback before publishing them.

Participants had an opportunity to break into breakout sessions. The aim of the breakout session was to give room to the participants to highlight the different data gaps, available data, data challenges and the stories based on their experiences.

During the breakout session, participants made the following findings:

a) **Available data.**

1. Enhanced CHF (Community Health Fund) membership data, in Dodoma, Morogoro, and Shinyanga
2. IMS (Insurance Management System): Active members, Expired members, family members with individual cards.
3. Human Resource data via HRIS (Human Resource Information System
4. Regional Hospital data
5. CAHMS (Computer Assisted Hospital Data Management System), by using platform "Afya Pro"
6. Patient registration records
7. Revenue Collection and type of services
8. Nutrition Data
9. Malnourished children at district level
10. HIV Prevalence data (4.7%)
11. Death 36,000 related to HIV/AIDS deaths
12. Percentage of people living with HIV and have access to ARV is 53%
13. The Health Management Information System – (DHIS 2-WEB)
14. Chronically diseases records
15. MTUHA data
16. CTC /TB, HIV data
17. BRN assessments data
18. Mwanzo Bora Nutrition Project- Number of beneficiaries reached.
19. CTC Clinics for HIV/AIDS – Data on health facilities and beneficiaries
20. National Child Helpline – TCRA data on MNOs, Raw data from the CHL

b) **Challenges**

Although the participants mentioned the available data but still there are challenges which are being faced either in collecting, publishing, accessing or using them. Table 2.1 summarizes the challenges faced and the solution to tackle them.

Table 2.1: **Data Challenges and Suggested Solutions.**

S/N	CHALLENGES	SOLUTIONS
1	Costs and time constraints	Centralization of data portals
2	Methodologies and data collection tools	Strengthen infrastructure on data collection, Training on free software tools used in data collection.
3	Lack of commitment, data literacy and Stigma	Awareness and Community Mobilization/BCC-sensitization
4	Infrastructural Challenges which includes availability of internet and electricity	Electronics data collection tool should be integrated with national reporting tool (integrated with mobile phone).
6	Donor syndrome/not priority sector	Donors to be advised to increase scope on different sectors.
7	Policy and laws which are not conducive in data publishing and usage.	Provide access of the available data to the public especially government agencies. Amendment of the policies and laws.

8	Unintegrated data within a sector	Creation of community forums and platforms where people can share data
10	Lack of data quality assessments systems	Data analysis and review meetings. Centralized data Hub.
11	Data on donor funded projects are usually not open. (Attribution)	Boosting data sharing and utilization to different stakeholders

c) **Data user stories**

The participants were given a chance to develop data user stories based on their organization perspectives in which dLab can work hand in hand with the particular organization. Table 2.2 describes the user stories from the participants

Table 2.2: User Stories from Participants

S/N	Organization/Individual name	User stories (Input from Participants)
1		As a Health Stakeholder, I want to be able to use NATIONAL HEALTH INSURANCE DATA so that we can collect spatially tagged burden of diseases and other health indicators longitudinally faster, cheaper and better
2	NACOPHA	As NACOPHA we want to be able to use Number of PLHIV data available so that

		we can advocate for the availability of Viral load machine
		As NACOPHA, we can use GBV and HIV related data so that we can advocate for PLHIV Rights as Human Being
3	DTBi/DLI-IC	As a mentor, can make use of data available on web portals on health facility registry to engage local entrepreneurs, developers, NGOs and private sector to innovate ideas on generating timely supply/share data for local impact
4	Academic-SUA, MUHAS/DUCE	As a Researcher can make use statistical data and budget speeches available online to develop policy briefs and engage MPs for budget formulation
5		As a Health BRN coordinator, I want to be able to use health indicators data to have quality improvement plan so that all health facilities score at least three stars.
6	NIMR/ Angela Shija	As a Research scientist in NIMR, I want to use the mass drug administration (MDA) distribution List by communities/Districts (Locations) for treating neglected diseases (Minyoo ya Tumbo, Usubi, Vikope, Mabusha, Matende) in order to assess the programme impact on reducing the burden of neglected diseases in the

		country.
7	C-SEMA- www.sematanzania.org	As a child protection programs coordinator, I want to be able to use Regional MNOs subscription data from TCRA and VAC data from the CHL to inform the LGAs on the trends of child abuse and priorities of child protection in line with the SDGs 16.2, so that we can realize the SDGs indicator faster.
8	TAWG	a. We want to be able to use data for number of patients recovering from bed to work after the use of herbal remedies to compare their efficacy with those patients receiving artificial medicines from modern facilities within regions. b. As Project Coordinator in Mwanzo Bora nutrition Program, I want to use district maps (Mvomero,Gairo and Kilosa) to locate number of households adopting various priority areas like home gardening, keeping of small animals etc for comparing village prevalence of stunting to children for better actions. c. As project coordinator in MBNP Project, I want to use the population data in villages (Pregnant women and children) to compare with Project data for pregnant women and children reached in villages to see the existing gap, of the people reached in areas.
9	UNICEF	As an ICT4D practitioner, data (detailed) on mobile usage in the country (smart

		phone adoption, devices and/or operating systems in use etc) would offer a great deal of insight into my line of work, developing products that are market relevant.
10	DR. JONATHAN. E. BUDENU, 0768260512, jbudenu72@gmail.com	As a District medical officer (Maswa District), I want to be able to use TB/HIV data in Maswa District council to implement possible cause at death among male patient than female patient so that I can reduce the morbidity and mortality of co infection among the HIV infected patient so that can reduce severity of disease faster and cheaper.

Also, I want to be able to use antenatal clinic and family planning services offered at health facilities so that I can reduce the maternal mortality, unnecessary death, faster, cheaper and better. |
| 11 | LUSEKELO MWAKALUNOWA , DRSTRICT SOCIAL WELFARE OFFICER, HEALTH DEPARTMENT, MERU DC, | As Social Welfare officer, I want to be able to use most vulnerable group data to use in planning, implementation so that I/we can deliver social welfare services better and faster.
As a CHMT, I want to be able to use health related data to improve health sector in accordance with Sustainable Development Goals.
As a BRN Coordinator, I want to be able to use health indicators data to have |

		quality improvement plan so that all health facilities to score at least three stars.
12	RAHABU WANJARA, THE PALLADIUM GROUP	As a strategic Information Associate, I want to be able to use the Patient level data to keep track the progress of the patients so that I can evaluate a cohort group of patients and patient level data to monitor the survival and outcome of treatment over time.
1314	CSSC-CHRISTIAN SOCIAL SERVICE COMMISSION (PREVIOUSLY ART PROJECT)	As a Data Management officer, I want to be able to use CTC2 Database with demographic data to identity lost to follow-up (LTFs) clients so that we can reduce and/or eliminate the LTFs faster.
15	GABRIEL ANTHONY MANENO,	As a public health organization, we want to be able to use a. HIV data on drug adherence and community health providers' coverage data to investigate the cause of immunological failure to new clients from the same communities and hence save government funds in procuring second line medications. b. Family planning data and different methods the community usually use to investigate the effectiveness of the methods and come up with the more effective method to the general public and make reproductive health services available to make the community have

		child/children by choice and not by chance.
		c. TB data for both CO infection and single TB infection so that to investigate causes of deaths from TB and come up with intervention which will increase TB screening to the level of community and strengthen referral system for TB cases and drug adherence counseling and monitoring to eradicate TB to the community for all age groups.
16	EVANGELICAL LUTHERAN CHURCH IN TANZANIA-ELCT HQ-ARUSHA,	As a nurse coordinator, I want to be able to use; a. Chronically ill clients' data from palliative care database accompanied with type of medicine given to chronically ill clients and service points to be able to perform cost analysis of services which will help in advocating for better services. b. Pregnancy attendance data with timing of first visit and risk factors to be able to promote early attendance through community sensitization and education approaches to improve the current practice for better maternal and child health. c. Palliative care end-term evaluation data so that we improve services to our clients basing on accurate information.
17	VICK SIDNEY- M & E officer	a. I want to be able to use CHF

		iliyoboreshwa enrollment/coverage data to understand the enrolment status so that we can strategize the CHF iliyoborehwa communication in a more focused manner to increase the coverage to 100% b. We need to use CHF claim data from health facilities so that we support councils to process and reimburse HFS for treating CHF iliyoboroshwa clients so that investing the refund into procuring medical commodities for improved quality healthcare. c. We need to be able to use council budget allocation data to be able to analyse CHF iliyoboreshwa contributions in healthcare hence revise/update financial mgt guidelines for ensuring resources are available for improving health services
18	PANGOLIN QUALITY CONSULTING CO. LTD	As a consultant in quality management system I use client data to get their situation regarding quality of their organization processes. The data available will help me to address several problems existing and guiding them on how to improve the following · Their documents and procedure · Their management systems · The quality of their products · How the comply with the international requirement

		· How the improve the performance in general · Improving data collection and analysis in organization
19	SHEILLAH MATINHURE	As a senior technical Human resource advisor I want to be able to use Human resource data to identify human resource challenges that my project can use to develop plans and strategies for strengthening HR systems in the Tanzania Public sector.
20	RESEARCHER-STEFANIE HENKE	a. As the researcher I want to be able to use accurate maternal and Mortality data on health facility level to analyze the Maternal Mortality rate b. As the cartographer I want to be able to use geographical location of health facilities to map the health services infrastructure better.
21	TUMAINI KILIMBA	a. As a citizen , I want to be able to use council budget, income, expenditure data so that we can hold our local leaders accountable b. As the Health Stakeholder, I want to be able to use National health insurance data so that we can collect spatially tagged burden of Diseases and other health indicators longitudinally faster, cheaper and better c. As the citizen, I want to be able to use Tanzania Revenue Authority Data so that we can monitor revenue collection

		trends and hold our local leaders accountable
		d. As the stakeholder, I want to be able to use Dare s salaam stock exchange (DSE) Data to be able to automate time series analysis so that we can do stock price prediction faster, cheaper and better.
22	RAMADHAN BOFU AND NYABA MBOZI	As a number of environmental health services consultancy organization, we want to be able to use street maps, data to locate companies we are going to supervise/provide consultancy services so that we can simplify the service delivery.
23	SUA- Anitha Emmanuel Maswe and Nelson Majura	As a student, I want to be able to use graphs implanted with employment data after graduation in order to investigate life position after graduation so that to be alternative with where I am going.
24	JOSEPH KAYINGA	As a social worker I want to be able to use the social welfare services data(range of activities) in: a. Doing advocacy and lobbying for the development of National welfare policy which is not there yet b. Collaborating with other National and international non-governmental organization, c. c. Development partners and other key stakeholders to standardize service provision guidelines

		regulation and standard operating procedures for the propose of delivery of quality services to most vulnerable groups
		d. Influence government to have in place the National Regulatory council for social work and social services delivery including Registration of service providers and their clusters.
25	MTUHA FP	As a MTUHA FP, I want to be able to use malaria data which I got from the DHIS to help my organization to be able to plan for the malaria prevention and treatment e.g in prevention by using cheapest cost fumigation and treatment. As municipal Mtuha FP, I want to be able to use data from mtuha to convince my boss who is municipal director to use data so that we can be able to have sound planning/Evidenced data decision in the municipal As a municipal Data (Mtuha FP) I want to be able to use family planning data I got from the system to be able to increase access of family planning to the community so that they can have manageable families hence better living.
26	DATA ZETU-MAANA KATULI	As Data zetu representative I want to be able to access and use various datasets like HIV/AIDS, gender equality and economic growth to bring data revolution and decision making using

		data at the sub-national level.

3. CONCLUSION

The dLab plans to continue with the identification of prime organizations and outreach strategy in order to build momentum of data availability, data publishing as well as data usage by promoting success stories of data use from different Organizations.

dLab has established a follow up strategy by contacting the previous participants and request the feedback to identify key datasets for publication and improvement so as to ensure that datasets with high demand are as relevant, accessible, and usable. It is also planning to conduct more roundtables, workshop and training on data publishing and visualization that will enable the organizations dealing with datasets have enough knowledge in tackling the challenges faced in data publishing.

Annex I: dLab Roundtable on Health Sector Participants
UDSM/COICT Kijitonyama Campus, 20 January 2017

S/N	Full Name	Organization	Title
1	Abdalla A Ali	ZAFAYCO	Executive Director
2	ABDALLAH NASSOR	Health	Individual
3	Abedi Buulu	Private/Individual	M&E Officer
4	Adam Settenda	Charity Support and Care(CSC)	Project Officer
5	Alberto Sanga	NACOPHA	IT TECHNICIAN
6	Ally Mamlo	NACOPHA	M &E Officer
7	ANDREA Longo	PANGOLIN QUALITY CONSULTING COMPANY LTD	Laboratory Management Systems Consultant

8	Angela Shija	NIMR	Research Scientist
9	ANITHA Maswe	SOKOINE UNIVERSITY OF AGRICULTURE	STUDENT
10	Anna Mahenge	Evangelical Lutheran Church in Tanzania	Nurse coordinator/project officer
11	Bernardo Bulugu	Tanga AIDS Working Group (TAWG)	Project Coordinator (TAWG/MBNP)
12	Elizabeth Mbwana	Meltores Proffessionals	Researcher
13	Engelbert Chuwa	UNICEF	
14	Francis Semwaza	Fortune Associates	
15	Gabriel Maneno	Elizabeth Glaser Pediatric Aids Foundation	Health Informatics Manager
16	Geofrey Chambua	Dar Teknohama Business Incubator	M&E Manager
17	GODFREY Manyanda	KDC	ENVIRONMENTAL HEALTH OFFICER
18	GRACE Saria	MOSHI MUNICIPAL COUNCIL	MTUHA FOCAL PERSON
19	Itanisa Mbise	C-Sema	Editor
20	JASON Kahatano	CSSC	IT & DATA MANAGEMENT OFFICER
21	LAST Mlaki	NACOPHA	M & E Officer
22	LUSEKELO Mwakalundwa	MERU DISTRICT COUNCIL	DISTRICT SOCIAL WELFARE OFFICER
23	Maana Katuli	Tanzania Bora Initiative (Data Zetu)	Project Officer
24	Mbaraka Said	Nkinga	MD

25	Mensia Malingumu	NACOPHA	COMMINICATION OFFICER
26	Michael Kehongoh	C-Sema	Child Protection & Outreach
27	NELSON Rumbeli	MWANZA REGIONAL SECRETARIET	ENVIRONMENTAL HEALTH OFFICER
28	NELSON MAJURA LUSATHO	MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES	POSTGRADUATE STUDENT
29	NYABA Mbozi	Individual	graduate
30	Pauline Basimaki	KCMC	Senior Computer Technician
31	Rachel Jackob	National Council of People Living with HIV/AIDS	Monitoring and Evaluation Manager
32	Rahabu Wanjala	The Palladium Group	Strategic Information Associate
33	Ramadhani Bofu	EHSCO	Environmental Health Practitioner
34	Richard Ochanda	NACOPHA	Program Manager
35	SEHEWA Chilongani	Health	KUSAJA FOUNDATION
36	Sheillah Matinhure	USAID	Human resources senior technical Advisor
37	Stefanie Henke	Private	Graduated Engineer for Cartography
38	Steven Mavere	St. Augustine University of Tanzania	IT Manager
39	Tumaini Kilimba	None	Farmer
40	Vicky-Sidney Msamba	Health Promotion and	Monitoring, Evaluation and

		System Strengthening Project	Operational Research Officer
41	VICTORIA Huburya	NACOPHA	Monitoring and Evaluation Officer
42	Zaid Mkangwa	UDSM	Health informatics candidate