

UN-HABITAT AND THE GLOBAL LAND TOOL NETWORK LAND-BASED FINANCE LEARNING SERIES 3

Theme: Leveraging Land for Delivery of Services, Building the Social Contract and Promoting Peace and Security

REPORT ON SESSION 1

Subject: Rapid Own Source Analysis (ROSRA). A New Tool for Own-Source Revenue Self-Optimization”

03 April 2023



Drafted by Jonathan Yakutiel, reviewed by Jean du Plessis

* Please send any comments or corrections to jonathan.yakutiel@un.org

Table of Contents

Introduction and Welcoming Remarks (Robert Lewis-Lettington).....	3
Programme	4
Presentation 1: “What is RORSA and how does the tool work” (Lennart Fleck)	5
Presentation 2: “Technical architecture of the ROSRA tool” (Mujahid Qadir)	6
Brief reflections on the applicability of ROSRA for Local Governments in Africa (Jean Du Plessis)	6
Key questions and reflection with discussant (Enid Slack)	7
Open Discussion.....	9
Concluding Observations	10
ANNEXES	Error! Bookmark not defined.
Annex 1 Attendance list	12
Annex 2: Presenters	13
Annex 3: Presentations	16
Presentation 1: “Why Points Based Valuation for Property Tax Purposes? An emerging ‘Good Enough’ Approach to Reform” (Wilson Prichard)	16

Introduction and Welcoming Remarks (Robert Lewis-Lettington)

On 03 April 2023, the Land, Housing and Shelter Section of the United Nations Human Settlements Programme (UN-Habitat) and the Global Land Tool Network (GLTN) Secretariat, in partnership with the Local Government Revenue Initiative (LoGRI) of the International Centre for Tax and Development (ICTD), presented session one of its Land-based Finance Learning Series three, on the theme “Leveraging Land for Delivery of Services, Building the Social Contract and Promoting Peace and Security”. The session, titled “Rapid Own Source Revenue Analysis (ROSRA), a new tool for own-source revenue self-optimization”, consisted of two presentations and a facilitated discussion integrated by sidebar questions and comments, and concluded with closing observations by the discussant. The session registered 56 participants representing 15 institutions (see list of participants in Annex 1).

Robert Lewis-Lettington, Chief of the Land, Housing and Shelter Section of UN-Habitat, welcomed the participants to the third learning series and thanked Jean du Plessis for setting up the series and making it work. He said that these learning series provide UN-Habitat with a platform for internal discussion, as well as for engaging with external partners at a more practical level on the thematic concepts of land-based finance. He noted that the theme of this specific session has been a great source of interest to UN-Habitat. The level of detail the ROSRA tool can provide about what is happening in a city has been interesting from a wide range of points of view. It tells the user a great amount about governance, equity, and the economic activities within a city, as well as how money is circulated within the system. It is known that in many countries, central government transfers dominate much of the economy and the spending in cities. However, transfers are generally not flexible, as they restrict cities’ spending activities while limiting capital for social protection needs. The challenge is getting political authorities engaged with the tool, as it shows more information than people want. However, through discussions and piloting, it is believed that this tool will become more useful. Robert congratulated Lennart Fleck on developing the tool and being the thematic leader. He concluded by saying that UN-Habitat’s work on housing and land will build on the ROSRA tool and on various other elements to inform cities of their situation, ultimately leading to further catalytic discussions and new directions.

Giulia Lavagna, the co-moderator, presented the first session of the third series on Land-Based Finance. She emphasized the central idea of bringing together various stakeholders, including experts, practitioners, specialists and, in the case of the current session, the presence of donors, to discuss the issue of land-based finance and revenue collection, with a focus on developing countries and fragile states. She referred participants to the series theme, purpose, and learning objectives, and presented the calendar of the third learning series as follows:

Theme: Leveraging Land for Delivery of Services, Building the Social Contract and Promoting Peace and Security.

Purpose: Bringing together partners, experts and implementers to learn about advances, good practice, innovations and challenges, and to create opportunities for collaboration.

Learning objectives:

1. Increased knowledge of available land-based finance and land value capture tools, methods and approaches.
2. Enhanced understanding of the social, economic and political challenges facing implementers.
3. Case-specific information on ways of overcoming challenges and building good practice.
4. Proposals for priority actions for improved impact formulated.
5. Areas of potential collaboration identified.

Subject	Presenters	Date and time (EAT)
1. “Rapid Own Source Revenue Analysis (ROSRA). A new tool for own-source revenue self-optimization”	Lennart Fleck (UN-Habitat, Mujahid Qadir (UN-Habitat consultant), with Macloud Kadam’manja (Malawi), Olinda Chirwa Sikazwe (Zambia), and Ben Omollo (Kenya) Discussant: Enid Slack (Univ. of Toronto)	3 April 2023 16h00-18h00 EAT THIS SESSION
2. The role of diagnostic assessments in land-based finance reform in fragile states	Tbc LoGRI (details to follow)	5 June 2023 16h00-18h00 EAT
3. IT for Property Tax Reform	LoGRI (details to follow)	11 September 2023 16h00-18h00 EAT
4. Linking Property Tax Revenue with Service Provision	LoGRI (details to follow)	6 November 2023 16h00-18h00

Giulia presented the programme as follows:

Programme

SERIES 3 SESSION 1: PROGRAMME “Rapid Own Source Analysis (ROSRA) A new tool for own-source revenue self-optimization” 3 April 2023, 16h00-18h00 (Nairobi time / EAT)		
Moderators: Giulia Lavagna, Jean du Plessis, GLTN Secretariat, LHSS, UN-Habitat		
Time	Topic / Activity	Process, Roles
16h00	Welcome and opening remarks Purpose, agenda and process	- Robert Lewis-Lettington, UN-Habitat (5 min) - Giulia Lavagna, UN-Habitat (5min)
16h10	<u>Presentation 1</u> : What is ROSRA and how does the tool work?	Lennart Fleck, UN-Habitat (20 min) <i>- All: questions and comments in meeting chat during presentation</i>
16h30	<u>Presentation 2</u> : Technical architecture of the ROSRA tool	Mujahid Qadir, UN-Habitat consultant (10 min) <i>- All: questions and comments in meeting chat during presentation</i>
16h40	Brief reflections on the applicability of ROSRA for local governments in Africa	- Macloud Kadam'manja, Olinda Chirwa Sikazwe and Ben Omollo (5 min each) <i>- All: questions and comments in meeting chat during presentation</i>
16h55	Key questions and reflections	Discussant, Enid Slack (Univ. of Toronto), in dialogue with the presenters (15 min)
17h10	Facilitated discussion	Moderator, all (25 min)
17h35	Concluding observations	Speakers and discussant (20 min)
17h55	Closing	Robert Lewis-Lettington (5 min)

Presentation 1: “What is RORSA and how does the tool work” (Lennart Fleck)

Lennart Fleck, expert on land-based finance and urban finance from UN-Habitat, thanked everyone who joined the session. He started his presentation by defining own-source revenue (OSR) as taxes, charges, fees, and other revenue sources under the direct control of local governments. These include property taxes, business licenses, user fees for markets, among others. He argued why it is important to leverage own-source revenues, stressing the relevance of optimization given the tendency of local governments to leverage around 20% of their potential. Hence, own-source revenues can be a major source of funding for local governments to deliver service provision. Optimizing own-source revenue is also a way of accessing other sources of financing. Creditworthiness assessments typically include an own source revenue component, and when local governments have minimal own-source revenue, it becomes a challenge to convince lenders of their ability to repay loans. Moreover, the literature suggests that when local governments rely on own-source revenues as opposed to external sources of finance, they may be more effective in allocating their capital. This is argued on the basis that local governments, who depend on the taxes paid by citizens, are to some extent held accountable to spend the revenue on services and infrastructure provision.

The ROSRA tool is a self-optimization tool that local governments can use to address the problem of sub optimal usage of OSR. By inputting their data into the tool, local governments can obtain an automated analysis of the challenges they face. This analysis assists them in prioritizing and developing more effective strategies for optimizing OSR. This self-optimization tool was developed because UN-Habitat recognized that most local governments lack the funds to invest in technical advisory and capacity support for assessing their own-source revenue gaps and challenges. In addition, there are not enough technical advisors and own-source revenue experts to support the thousands of cities that could benefit from OSR analysis. Furthermore, there is the overall challenge of the lack of comparable experiences and data. Hence, UN-Habitat and its partners developed the ROSRA tool for local governments to use the tool to address the various challenges of how to optimize their own source revenues.

The tool uses economic, budgetary, social, and institutional/administrative data, which after saved, remains confidential and is not disclosed to other users. The tool’s development began in 2013, and it has now reached the stage of being rolled out to local governments. Nevertheless, the tool is still a work in progress. The aim is to provide local governments with a means of assessing their need for own-source revenue reform, identifying priority reform areas, and offering this as a free service to thousands of local governments. Through the collection of data, the tool aims to build insights and analysis regarding the entered data. Eventually, the tool will be integrated with other municipal finance databases to facilitate research and enhance learning opportunities.

Lennart presented the tool itself and provided a brief overview of its functionality. The tool is structured around two types of analysis: performance analysis and problem analysis. The former assesses whether the local government is effectively generating own-source revenues. The problem analysis, on the other hand, seeks to identify the main challenges and determine where to begin in optimizing own-source revenue. The performance analysis considers the overall performance of OSR, its potential, historical performance, transactionality, GDP per capita, administrative cost analysis, and peer analysis. The problem analysis consists of a series of questions to understand the starting point of own-source revenue optimization. These questions are divided in three categories: the national own-source revenue

environment, local own-source revenue environment, and revenue administration. Lennart mentioned that it is possible to add more analysis to increase precision. However, the intention is to minimize the amount of data input required, as excessive data entry could discourage users from utilizing the tool. Thus, the tool aims to provide maximum analysis with minimum data input.

To conclude, Lennart acknowledged that the tool is still a work in progress, as improvements are needed in terms of user-friendliness, visualizations, process flow, the inclusion of a user login feature, and additional fields to explain variables and interpretations. Nevertheless, he expressed that it is an opportune moment to gather additional feedback from the broader community and experts to engage in further discussions.

Presentation 2: “Technical Architecture of the ROSRA Tool” (Mujahid Qadir)

Mujahid Qadir, the developer of the ROSRA tool, started his presentation with the high-level overview of the technical architecture of the tool. He mentioned that the tool tries to gather as much data as possible from the users by presenting them a series of questions, providing input fields and options for selection. Once users begin entering data, the tool provides an automated analysis and presents the results through visualizations, charts, and insights. There is a plan for users to download the results as a PDF report, allowing them to store the report and data for future reference. The challenge was to create an interactive interface with fast, accurate analysis, always taking the user’s experience into account.

Mujahid explained the set of technologies used to build the ROSRA tool. Regarding the user interface or frontend, the tool utilizes React JS, an open-source JavaScript framework renowned for creating fast and efficient single-page applications. It operates with the user’s browser, resulting in instantaneous responses. React JS achieves this by breaking down the different parts of a website into smaller reusable components, making it easier to manage and leading to better performance and faster load times. For the analysis part, the tool leverages the UN cloud infrastructure. The user’s browser sends all the inputs to the cloud, where the analysis takes place, and the responses are then sent back to the browser. This analysis code is written in C#, a powerful language that provides all the necessary mathematical functions, which are then sent back to the browser in JSON to be translated into on-screen images. Mujahid concluded by mentioning that for persistence and storage, the tool uses SQL server to store, retrieve, and manage data, used in a variety of applications, from small business applications to large enterprise systems.

Brief reflections on the applicability of ROSRA for Local Governments in Africa (Jean Du Plessis)

Jean du Plessis thanked the presenters and acknowledge that some of the attendees were already familiar with the development of the ROSRA tool. He noted the remarkable progress and evolution of the tool. Jean du Plessis then invited Macloud Kadam’manja from Malawi, Olinda Chirwa Sikazwe from Zambia, and Ben Omollo from Kenya, three experts from local government level, to reflect on the tool’s applicability to their work.

(Owing Macloud Kadam’manja from Malawi’s absence, no intervention was provided)

Olinda Chirwa Sikazwe, from Zambia, highlighted that the tool brings added value for local governments as it enables benchmarking and comparison with peers, as well as assessing progress over time. She suggested introducing the tool to the Ministry of Local Government to strengthen own-source revenues and asked if UN-Habitat could support the ministry in building the capacity to use the tool. However, she raised a concern about the tool's requirement for online access, which might constrain local governments with limited internet capacity. She concluded by emphasizing that the tool would benefit local governments in analysing their performance and enhancing target achievements.

Ben Omollo from Kenya thanked the presenters. He noted that the tool is helpful in terms of visualization and its role in benchmarking, a critical aspect to optimize own-source revenue. However, he suggested that the tool should place more emphasis on providing strategies and pathways for reform rather than solely focussing on identifying problems. He noted that in most devolved systems, awareness of the problems exists, but there is a lack of clarity regarding potential solutions. Hence, Ben recommended that the tool should provide strategies to guide users towards viable solutions to enhance revenue collection.

Key Questions and Reflection with Discussant (Enid Slack)

Enid Slack expressed her gratitude to Jean du Plessis and all the presenters. She mentioned that she had seen earlier versions of the ROSRA tool and found it exciting to see its improvements. Enid emphasized the importance of the tool, highlighting how own-source revenue provides local governments autonomy to make independent decisions, addressing local needs and strengthening local accountability. She noted that it is important to link those who make expenditure decisions to those who make the revenue decisions. Furthermore, own-source revenues are more predictable compared to transfers, which depend on allocation decisions of the national government. By maximizing own-source revenues, local governments can also enhance their creditworthiness.

The purpose of the ROSRA tool is to help local governments understand the extent of the gap they have between actual and potential own-source revenue, to identify the sources of the problem, and suggest what reforms need to be prioritized. She acknowledged that the tool is a work in progress and applauded the idea of the meeting as an opportunity to provide feedback to the authors for improving it. Enid Slack then asked three questions to the presenters: the first regarding measuring the gap, the second about data availability, and the third related to implementation and solutions.

For the first question, Enid asked Lennart Fleck how he determined the estimated 20% gap in own-source revenue. She explained that typically one would compare the actual revenues with potential revenues. For example, in the case of property tax, the potential revenues could only be calculated if all the properties are registered, all are assessed at market value, etc. She requested further explanations on how the extent of the problem is determined for each local government and the role and usefulness of international benchmarks.

Lennart thanked Enid for the question and acknowledged that there is an element of art involved rather than pure science. To some extent, the ROSRA tool is aiming to get 80% accuracy level recognizing that there are some heavy assumptions behind the results provided by the tool. He clarified that the entire methodology will be displayed on the website for public access to show how the estimates have been developed. He recognized that 100% accuracy may not significantly change the decisions that flow from the analysis. For instance, if a local government's potential is estimated at 25% or 35%, this might not make a huge difference of the fact that it must take actions for improvement. However, he emphasized the aim

of striving for precision over time. A combination of top-down and bottom-up approaches is employed to assess the potential. For the top-down approach, national-level indicators and comparative data are used, to then extrapolate the information based on what we have analyzed in other contexts. After a mapping of the OSR per capita for various cities around the world, we plotted the GDP per capita on the X-axis and the OSR per capita on the Y-axis, resulting in a trendline and an average potential. That potential should be at least as good as the average of what we would find across countries in a similar income group. However, this is a problematic approach to some extent because the average is not the potential. Moreover, if you would include higher-income countries the average would be skewed. The bottom-up approach would look at all own-source revenues and tax bases to determine, for instance, how many taxpayers exist and how many are registered. As so, both approaches are used in the algorithm that underpins this analysis. The overall caveat to consider is that the tool's accuracy would not match the level of precision of a team on the ground registering properties and business, verifying the tax base, and estimating potential revenue from various sources.

Enid raised the question of whether there was any difference between the analysis of taxes and user fees. Lennart explained that there is no difference in methodology for these two categories. He noted, however, the paradigm shift that this tool is trying to pursue in terms of the use of budget figures, which tend to be used as indicators. The intention is to get local governments to think in a different dimension. Enid proceeded to ask about the reliability, accuracy and objectivity of the data input into the tool. Lennart responded that the quantitative data would be more reliable, accurate, and objective because it would come directly from budgeted data. For qualitative data, if the users input information that is not accurate then the analysis will also be inaccurate. Currently, the tool is subject to what the user inputs, however, in the longer term it is projected to have an automate basic data inputs. However, the questions asked by the tool attempt to limit subjectivity. The goal of the tool now is to collect as much data as possible to develop a database that allows a more accurate understanding to limit the subjectivity of the analysis.

In terms of implementation solutions, Enid asked how one can determine which improvements are more feasible to increase own-source revenue and who should be involved. Lennart explained that when this type of analysis is undertaken manually, a reform strategy is developed. When speaking to local governments they would not lack an understanding of what the problems are, but the challenge is to prioritize them to maximize results. The tool assesses which are the most urgent and relevant to them, however the aim is to link those problems with specific solutions and prioritize them based on existing literature and best practices from around the world to then customizing them to the local level.

The last question asked by Enid addressed monitoring the users' progress over time. Lennart responded by stating that as the tool is being rolled out, local governments will share their feedback, allowing for the refinement of the approach and questions. The priority now is for the tool to make the right analysis and recommend appropriate solutions. However, it is important to bear in mind that while the tool can provide potential solutions, incentives must accompany it.

Enid Slack then addressed a question from the chat about whether the tool allows for city-to-city peer learning to accelerate SDG uptake, as this can be done through instructional design to add social and pedagogical learning perspectives for effective e-learning products. In addition, it was asked whether the tool provides exemplary own-source revenue best practices for cities to address the gaps identified through the diagnosis. Lennart replied that alongside problem identification, the tool will suggest the best practices and solutions for local government's use. The tool intends to provide a range of solutions to the local governments, serving as a source of inspiration and a catalyst for ideas. He mentioned that the tool's

progress will rely on the expertise of stakeholders to contribute to best practices and link them to problem diagnosis.

Jean du Plessis thanked the discussants and mentioned that if Larry Walters were in the meeting, he would address the question of “who wants the change?”. As so, he stressed that the purpose of the tool is to serve as device and a system that will help the users establish the current state of their situations and what possibilities could lie ahead. Hence, Jean highlighted the need for action at the local government level to have realistic expectations on the tool.

Open Discussion

Jean du Plessis, as moderator, opened the floor to the participants to reflect and raise questions on the presentations and discussion.

Bill McClusky thanked Jean and the presenters. Firstly, he asked about the scalability of within and across countries. Secondly, he addressed the issue of data input and its confidentiality. Bill remarked the development of the tool and noted its valuable addition to the “toolkit” to build on international experience.

In addressing Bill’s question, Lennart mentioned the long-term vision of the tool, which is projected to be used in various languages across the world, in lower-income and fragile countries, for local governments of different sizes. The challenge lies in local governments’ different revenue systems, and language constraints, as that may make certain questions irrelevant or inapplicable. He mentioned the pursuit effort of categorizing several revenue sources to avoid addressing specific revenues that may not exist in certain contexts. Over time there will be the need to adapt the tool for its applicability in various geographies, city types and scales. Lennart mentioned that during the next 2-3 months UN-Habitat would want to roll out the tool in 10 English-speaking cities, whereby feedback will guide the implementation in other 200 cities. Regarding confidentiality, he assured that the tool uses categories for its peer-to-peer analysis, without disclosing any specific city name but information on categories. There must be, however, a process to convince local governments that the tool is safe.

Two questions on the chat were raised: Jane Katz asked about the weightings for the qualitative analysis and how is that determined. Jean inquired about the usefulness in the existing local level projects.

To the first question, Lennart replied that each question has multiple choices, and each answer receives a certain score. For instance, on the question “is the revenue department adequately resourced?”, if “yes” the user gets full points; if the answer is “somehow”, one gets a middle score, and if the answer is “no”, one gets a low score. The scoring system has a level of subjectivity and lack of granularity, but, as stated before, the tool serves as a “rapid” assessment rather than absolute precision. Addressing Jean’s inquiry, Lennart highlighted the potential of using the tool in places where UN-Habitat is currently working to adopt it as part of the programming. As so, instead of spending six months and 50,000 USD by doing an extensive analysis of local revenue, one would ask the local government to input the data into the tool and based on this one would design the interventions to adopt them in a specific context.

Concluding Observations

Jean du Plessis gave the space to the speakers and guests to share their reactions and reflections. Ben Omollo applauded the importance of recognizing the differences in local governments systems and across countries and highlighted the timing to support the devolved units in Kenya. He stressed on the relevance of benchmarking and indicators across similar local governments, the need for analysis comparing similar sets of data, and the importance of the tool to develop strategies based on the assessment and analysis done. Ben concluded by showing his desire for Homa Bay County to partner with UN-Habitat and for further engagement with the tool.

Olinda Chirwa Sikazwe emphasized the usefulness of the tool for local governments in enhancing the performance analysis of own-source revenues. In Zambia, own-source revenues are used to finance service provision, with 40% allocated for services. Hence, insufficient revenue collection directly affects service delivery. Olinda suggested introducing the Government of Zambia to this tool to enhance their capabilities by engaging with the Ministry of Local Government and Rural Development and the Ministry of Finance and National Planning.

Lennart intervened and addressed the inquiry on the challenge of connectivity and the tool's requirement for an online connection. He suggested that this could serve as an incentive for local governments to accelerate their digitalization agenda and improve their revenue systems. Additionally, Lennart highlighted the issue of online data availability as another challenge. To overcome this, the way forward is to collect data effectively, enabling comprehensive analysis and providing suitable solutions to local governments. This approach would empower them to implement the tool, prioritize their challenges, and upload their data.

Titilola Akindeinde intervened showing interest in the tool and the potential in identifying revenue gaps between what local governments are collecting and their potential. However, there is the need for deeper understanding of the calculations and the algorithms used by the tool to achieve the result. Considering the parallels between the tool and the diagnostic assessments, Titilola highlighted the importance of understanding the tool's software functions within the whole assessment framework. Titilola requested Graeme Stewart-Wilson to intervene considering his experience in Zambia. He affirmed the relevance of the tool for diagnostic assessments, as it will provide insights into the potential gaps in estimating revenue. He drew attention to the top-down and bottom-up approaches used to estimate revenue gaps, considering that in Zambia not all properties are taxable, making it difficult to determine the actual tax base and the number of potential properties missing from the tax base.

Jean du Plessis gave the word to Enid Slack for her final remarks. She commented on the webinar's value and the tool's progress over the year. She emphasized that this tool helps local governments increase their own-source revenue by identifying problem areas. However, local governments must be willing to use the tool, make the necessary changes and reforms to increase their own-source revenue. Furthermore, the tool allows for benchmarking as a way to help local governments to understand where they stand relative to their peers. The value of benchmarking should not be underestimated. Additionally, Enid emphasized the necessity of high-quality data inputs to generate high-quality analysis. She discussed the

importance of solutions and the focus on improvements and prioritizing key reforms that could generate more revenue. She acknowledged the need to convince the right stakeholders to implement the recommended reforms, involving both national and local governments, as well as the need to follow up to ensure that own-source revenues are actually increasing. Enid concluded by expressing interest in the tool's roll-out in more cities.

Robert Lewis-Lettington concluded the session by expressing his interest in the discussion and insights shared. He mentioned the interest in looking at how revenue systems interact with all their indirect impacts, such as the speculation around land and housing prices, and the potential to use revenue sources to change the balance in some of those systems. He emphasized the significance of the session into GLTN and UN-Habitat's work on housing and land. He thanked all the participants for their contributions and expressed the desire to continue exchanging ideas.

ANNEXES

Annex 1 Attendance list





Name	Organization	Email Address
Abdirizak Ali	UN-Habitat	abdirizak.ali@un.org
Abdishakour Said	UN-Habitat	abdishakour.said@un.org
Anna Kvashuk	UN-Habitat	anna.kvashuk@un.org
Daleen Brand	GIZ	daleen.brand@giz.de ;
James Kavanagh	GLTN Expert Working Group on	jkavanagh@rics.org
Cecilia Andersson	UN-Habitat	cecilia.andersson@un.org
Eleonora Serpi	UN-Habitat	eleonora.serpi@un.org
Enid Slack	University of Toronto	Enid.slack@utoronto.ca
Enrique Silva	Lincoln Institute of Land Policy	esilva@lincolninst.edu
Uchendu Eugene Chigbu	Namibia University of Science and Technology, GLTN	echigbu@nust.na
Evandro Holz	UN-Habitat	evandro.holz@un.org
Geoffrey Payne	Independent expert	gkpayne@gpa.org.uk ; gkpayne@hotmail.com
Heba Fekry	UN-Habitat	heba.fekry@un.org
Willard Matiashe, Claudia Hitzeroth, Mkhholisi Sompeta	Development Action Group (DAG)	willard@dag.org.za ; mkhholisi@dag.org.za ; claudia@dag.org.za
Jane Katz	Independent expert	janedokatz@gmail.com
Jan-Petter Holtedahl	Norad	Jan-Petter.Holtedahl@norad.no
Paterson Gauntner	Independent expert	liz.gauntner@gmail.com
Peadar Davis	Ulster University	peddavis1@googlemail.com
Rachel Beach	UNDP	rachel.beach@undp.org
Richard Baldwin	ILand	r.baldwin@iland.consulting
Riel Franzen	African Tax Institute, University of Pretoria	riel.franzen@up.ac.za
Robert Lewis-Lettington	UN-Habitat	robert.lewis-lettington@un.org
Samuel Gachohi Njuguna	UN-Habitat	samuel.njuguna@un.org ;
Sunday Aliti	Programme Officer, UNCDF	sunday.aliti@uncdf.org
Thomas Kanneh	M.A. Candidate, Duke University	thomas.kanneh@duke.edu
Titilola Akindeinde, Colette Nyirakamana, Rosetta Wilson, Graeme Stewart-Wilson	Local Government Revenue Initiative (LoGRI), ICTD	titilola.akindeinde@utoronto.ca ; colette.n@ictd.ac ; rosetta.wilson@btinternet.com
William McCluskey	Independent expert	wj.mccluskey2@gmail.com
Emile Eleveld		
Jon Helfers	UN-Habitat	jon.helfers@un.org
Mutuku, Benson Mutinda		
Alex Chileshe		

Olinda Chirwa Sikazwe	Assistant Director of Finance: Lusaka City Council Revenue	olindachirwa@gmail.com
Ben Omollo	Independent expert	benomollo@gmail.com
Priyanka Shah	University of Toronto	pri.shah@utoronto.ca
Edinilson Augusto Da Silva	UN-Habitat	edinilson.silva@un.org
Katharine Cotty	UN-Habitat	katharine.cotty@un.org
Jacqueline Macha	UN-Habitat	jacqueline.macha@un.org
Mujaheed Qadir	UN-Habitat	mujaheed.qadir@un.org
Yuki Takada	UN-Habitat	yuki.takada@un.org
Amina Koss	UN-Habitat	anna.koss@un.org
Lacina Traore	UN-Habitat	lacina.traore@un.org
Debbie Oyeku		
Ragina Gitau	UN-Habitat	ragina.gitau@un.org
Tobias Konyango Otieno		
Nicolas Orgeira Pillai		
Clinton Omusula, Jean du Plessis, Lennart Fleck, Jonathan Yakutiel, Giulia Lavagna, Eric Gachoka	UN-Habitat (Learning Series Team and support staff)	clinton.omusula@un.org; jean.duplessis@un.org; lennart.fleck@un.org; jonathan.yakutiel@un.org; giulia.lavagna@un.org; eric.gachoka@un.org

Annex 2: Presenters

SERIES 3 SESSION 1: PRESENTERS AND FACILITATORS		
Name and Institution	Role and Topic	Brief Biography
Lennart Fleck, UN-Habitat 	Presenter: What is ROSRA and how does the tool work?	<p>Lennart Fleck works as a Municipal Finance and Local Economic Development Expert at the United Nations Human Settlements Programme (UN-Habitat) Headquarters in Nairobi. Since joining UN-Habitat, Lennart has advised local governments on issues of Municipal Finance and has led the development of a self-diagnosis tool for own source revenue (OSR) optimization. Lennart has delivered trainings on OSR, Land-Based Finance, and local economic development. He also developed a rental subsidy model for internally displaced persons in conflict regions and a model for assessing the financial viability of large social housing programmes. Prior to joining UN-Habitat, he worked as a management consultant in the financial sector in Switzerland, advising private firms on their financial strategy and operational efficiency. Lennart has also worked on financial system development for GIZ in Mozambique and evaluated private investments into Sub-Saharan Africa at Frontier Advisory Deloitte. He holds an MSc in Public Financial Management from SOAS University of London, an MSc in Development Management from the London School of Economics and Political Science and an MA in International Relations from the University of St Andrews.</p>

<p>Mujahid Qadir, UN-Habitat consultant</p> 	<p>Presenter: Technical architecture of the ROSRA tool</p>	<p>Mujahid Qadir is a full stack developer and architect with over 15 years of industry experience. He developed the first version of the ROSRA tool and has continued working on newer versions. He also developed the Urbanlex website. Prior to joining UN-Habitat, he worked for SNL financial as a senior developer and then as an Architect at S&P Global. He graduated from George Mason University with a Bachelors in Computer Science and a Masters in Software Engineering.</p>
<p>Macloud Kadam'manja</p> 	<p>Brief reflections on the ROSRA presentation</p>	<p>Macloud Kadam'manja is an accomplished Local Government professional with over thirty years' experience in local administration. He holds a PhD in Business Administration, a Master's degree in Business Administration, a Bachelor of Arts degree in Human Resource Management, and a Diploma in Accounting. His areas of expertise include, resource mobilization, performance management, public sector reforms, strategic management, and financial management. Macloud is currently the chief executive officer for Lilongwe City Council which is the capital city of Malawi. He has also worked as district commissioner in various districts in Malawi, despite also working as local government auditor, Clerk of council, director of Finance and director of administration in local councils. Macloud is also a managing partner for a consultancy firm known as " Centre for Local Governance".</p>
<p>Olinda Chirwa Sikazwe</p> 		<p>Olinda Chirwa Sikazwe is the Assistant Director of Finance: Revenue at Lusaka City Council. She holds a Bachelor of Accountancy degree from the Copperbelt University and is registered with Zambia Institute of Chartered Accountants. Olinda has more than 31 years of experience in Local Government and has been attached to a variety of projects such as LOSIP, GTZ, GIZ, GFA and Sweden ICLD.</p>
<p>Ben Omollo</p> 		<p>Ben Omollo is an experienced public finance, assurance, and strategy expert with a track record in international consulting for development agencies, governments, and private sector organisations. He is the Managing Partner at Bernard Frank, and an independent public finance and strategy consultant. He has recently served as the Programme oversight review and due diligence consultant for UNOPS and Sanitation Health Fund (SHF-Geneva). Previously he worked as an audit and advisory manager at PricewaterhouseCoopers (PwC) in Kenya. Ben holds a Master's of Science degree in Public Financial Management from the University of London in UK, and a Bachelor of Commerce degree in accounting from Strathmore University in Kenya. He is a Certified Public Accountant of Kenya (CPA(K)) and a practicing member of the Institute of Certified Public Accountants of Kenya.</p>

<p>Enid Slack, University of Toronto</p> 	<p>Discussant</p>	<p>Enid Slack is the Director of the Institute on Municipal Finance and Governance (IMFG) at the School of Cities at the University of Toronto. IMFG focuses exclusively on the fiscal health and governance challenges faced by large cities and city-regions in Canada and around the world. Enid has written extensively on property taxes, municipal fiscal health, intergovernmental transfers, development charges, financing municipal infrastructure, and metropolitan governance. She consults on municipal finance and governance issues with governments and international agencies such as the World Bank, IMF, UN Habitat, Asian Development Bank, Inter-American Development Bank, and the International Growth Centre. She has worked in Brazil, Chile, China, Colombia, India, Jordan, Mexico, Mongolia, the Philippines, South Africa, Tanzania, and Uganda. Enid is on the Advisory Board of the International Property Tax Institute (IPTI). In 2012, she was awarded the Queen’s Diamond Jubilee Medal for her work on cities.</p>
<p>Robert Lewis-Lettington, UN-Habitat</p> 	<p>Welcoming and opening remarks</p>	<p>Robert Lewis-Lettington is Chief of the Land, Housing and Shelter Section at UN-Habitat. Robert has more than twenty years professional experience, primarily working in programme management, multilateral processes and in providing technical assistance in policy formulation and legislative processes to a variety of partners. With field experience in more than seventy countries, Robert’s specialist areas include land management, human rights and rule of law, urban development, legislative drafting, intellectual property rights and information management, digital governance, environment and natural resources and international trade. Robert holds a Juris Doctor degree in law from the College of William and Mary (USA), an MA (Hons) degree specialising in Architectural History from the University of St. Andrews (Scotland) and an MLitt (Dist.) degree in History specialising in land and population displacement from the University of the Highlands and Islands (Scotland).</p>
<p>Giulia Lavagna, UN-Habitat</p> 	<p>Moderator</p>	<p>Giulia Lavagna is an Italian Architect and Urban Planner, working as Programme Management Officer within the Land, Housing, and Shelter Section of UN-Habitat. Giulia has professional experience on project as well as knowledge management in the areas of urban development, housing policy, homelessness, and land management. During over seven years of service at UN-Habitat, Giulia has collaborated closely with national and local governments for the development of policies and interventions that promote sustainable urban development through inclusive land management and affordable housing. She has country experience in Angola, Bulgaria, Malaysia, Morocco, Paraguay, Saudi Arabia, Spain, and Tunisia. Giulia is also a doctoral candidate in Public and Urban Policy at the New School University in New York. She holds an MSc in International Cooperation in Sustainable Emergency Architecture from the Universitat Internacional de Catalunya and a MSc in Science of Architecture from the Politecnico di Milano.</p>
<p>Jean Du Plessis, UN-Habitat</p> 	<p>Moderator</p>	<p>Jean du Plessis is a land specialist based in the Land, Housing and Shelter Section of UN-Habitat, Nairobi. He draws on more than 25 years of experience in the areas of land, housing, human rights, forced evictions and development. He has previously held positions in local, national, and international NGOs, the South African government’s land restitution programme, and the UN Land and Property Unit in Timor-Leste. He has country experience in South Africa, Namibia, Zambia, Zimbabwe, Botswana, Rwanda, Ghana, Uganda, Kenya, Tanzania, Egypt, Palestine, Timor-Leste, Cambodia, Thailand, Indonesia, Haiti, Nepal and Iran; and has produced a variety of reports and publications on land-related issues. Jean has been with UN-Habitat since 2011, leading on the continuum of land rights, land-based finance, land readjustment and capacity development. Jean holds an MA with Distinction in Political Philosophy from the University of Stellenbosch.</p>

Annex 3: Presentations

Presentation 1: “What is RORSA and how does the tool work” (Lennart Fleck)

An Overview of the Rapid Own Source Revenue Analysis (ROSRA)

Who is it for and what does it do

What is OSR?

Taxes, Fees, etc. levied & controlled locally...

Common OSR types (examples)	
Property Tax	
Business Tax	
Personal Income-related Taxes	(Local Income Tax, Payroll Tax, Estate/Inheritance Tax)
Local Sales Tax	(General Sales Tax, VAT)
Selective Sales Tax	(Excise/Sin Tax: Fuel Tax, Hotel Tax, Advertisement Tax, Vehicle Tax, etc.)
User Fees / Utility Charges	(Public Service Fee, Parking Fee, Road Tolls, Hospital Fees, Market Fees, Public Transportation, Libraries, etc.)
Property & Land related charges/fees	(Developer Fees, Tax Increment Financing, Land Transfer Tax, etc.)
Fines or Penalties	(Parking Fines, Late Payment, etc.)
Regulatory fees/licenses/permits	(Business Permit, Liquor License, Health License, etc.)
Revenue from Assets	(Public land/buildings, investments, gov. owned factories, etc.)

Exemplary Subnational Revenue Composition

Why is OSR optimization important?

Local governments (LGs) struggle to raise OSR

- LGs lack institutional capacity to adequately meet responsibilities of decentralized/devolved governance. A majority of countries have devolved responsibility for service provision to LGs in the past decades, providing them with new responsibilities for service provision and new taxation authority. Few local governments are able to fully use their tax (OSR) authority
- The taxes/fees which have been devolved to LGs are not easy to administer: taxes on land and property argued to be the ideal local tax yet they require costly, complicated and notoriously contentious valuation rolls. User fees often require frequent collection and are susceptible to corruption of tax collectors. This own source revenue (OSR) thus may be ineffective in covering costs
- LGs are susceptible to elite-capture: containing the interests of powerful local elites may be difficult for newly established local governments whose local revenue systems therefore often struggle to adequately tax local elites

Optimizing OSR is advantageous

- Increases resources for public service provision it helps close unfunded mandates, maintain existing infrastructure and invest in development
- Increases creditworthiness of LGs: creditors assess the overall likelihood of debt repayment in part based on local revenue generation
- Improves institutional capacity more broadly: optimizing local revenue also enhances accounting, expenditure, procurement, and auditing practices
- Enables leveraging of non-revenue advantages: the local revenue system impacts economic growth, income distribution, and can correct other market failures e.g. urban sprawl
- Minimizes dependence on governmental transfers: Reliance on gov. transfers violates the basic principles of decentralization and undermines the accountability of local governance and the incentives for effective and cost-efficient service delivery
- Improves public perception of government

What is the Rapid Own Source Revenue Analysis (ROSRA)?

What is the ROSRA?

- The ROSRA is an online user interface that has been developed by UN-Habitat, which partnering local governments can use to self-optimize their OSR systems. The interface guides the local government in the data it needs to collect, and automatically/immediately analyzes and interprets the data. It assesses the overall need for OSR reform and diagnoses the most pressing shortcomings of OSR systems to facilitate strategic and effective OSR reform.

Why/when is the ROSRA needed?

- When local governments are unsure whether they need to prioritize OSR reform, when they are not sure what the problems of their OSR system are and/or are unable to prioritize among possible reform options

What is an optimized OSR system?

- An **effective** system that ensures adequate resources are raised from the local population
Indicator: Annual OSR per capita
- An **efficient** system that ensure that resources are raised in a cost effective manner
Indicator: Annual OSR / total cost of local OSR administration (tax effort)
- An **equitable** system in which citizens of a similar income pays similar tax contributions but higher tax contributions than lower income groups
Indicator: annual compliance rates for OSR

Why did we decide to develop an OSR self-optimization tool?

OSR Optimization is possible

- We helped increase OSR of Kiambu County by 100 2013/14

International technical advisory is expensive

- Local governments often cannot afford to hire international experts to support

OSR experts cannot be everywhere

- There simply are not enough experts that can support the thousands of cities across the world

Revenue data is not easily accessible

- Data is often confidential and costly to collect

There is not enough data/learning across interventions

- There is little systematic learning
- Data is often times lacking and not effectively captured

What data does the ROSRA need?

What data does the ROSRA need to carry out the analysis?

- Socioeconomic data (GDP, population, Human Development Indicators)
- Data on devolved functions of local government
- Budget documents providing overview for the past 5 years including e.g. revenue breakdown, OSR breakdown, actual vs budget revenue, current vs capital expenditure, absorption rates, etc.
- Data around costs of local revenue administration
- Data on admin processes, taxpayer registration, exemption, billing, compliance, etc

What if the data required by the ROSRA is confidential and not for public scrutiny?

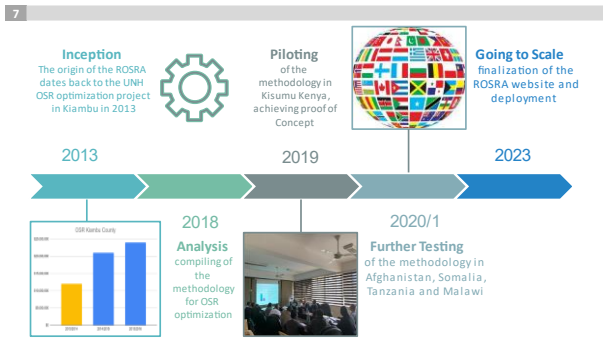
- The data collected and analyzed by the ROSRA is visible to the local government itself. UN-Habitat will only use the data after gaining explicit formal permission from the local government

What if a local government does not have the data readily available?

- UN-Habitat also offers a manual ROSRA where UN-Habitat led team works directly with the partnering local government to collect and analyze the data. Unlike the tool this manual analysis is not free of and will cost between \$30,000,000. It will generally take 3 months to complete, but is more comprehensive and more precise than the automated analysis

* This is highly context dependent

After years of development the ROSRA will be launched in 2023



ROSRA, a work in progress with a big dream

- 8**
- A tool that every city can use to get a quick analysis of its OSR reform need
 - A tool that can identify the priority reform areas to create effective OSR optimization strategies
 - A tool is free of use for local governments
 - A tool which is used by thousands of local governments for OSR optimization
 - A tool which collects data from local governments and keeps growing in analytical power
 - A tool which plugs in with municipal finance databases, to facilitate research and further learning
 - A tool which plugs in with other expenditure tools and analysis to facilitate improved service delivery

How does the ROSRA work? (1/2)

9

1) Local Governments input data as requested

Please enter your property tax revenue for last FY Year

Please enter your population

2) The ROSRA software runs 3 types of analysis and provides corresponding visualizations

Historical Comparison

Peer Comparison

Benchmark Comparison

3) The ROSRA software interprets the data and provides a diagnosis of key OSR challenges

- e.g. Property tax revenue / capita decreased over the years
- e.g. Property tax revenue is less than in peer governments
- e.g. property tax revenue is below the global benchmark

How does the ROSRA work (2/2)

- 10**
1. **Performance assessment:** What is the OSR performance of the local government (does it need OSR reform)?
 2. **Problem analysis:** What are the key bottlenecks at the various levels of government and within the revenue administration itself which undermine OSR performance?

Thank You

