



CENTRE OF EXCELLENCE
for CRVS Systems

Swiss TPH



Economics of CRVS systems

Building a case for stronger CRVS systems

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Mid-point review of the strategic framework for improving civil registration
and vital statistics systems 2021-2025

Outline of the presentation

1. Economic case for CRVS
 2. CRVS Economic Analysis Tool (CEAT)
 3. Case study in Uganda - Digitalization
 4. Case study in Ghana – CRVS vs HHS for SDGs
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Why we need an economic case for CRVS?

- Even though there has been an increase in funding for CRVS, there is still a **significant funding gap** in some countries

	Country	Share of NSDS covered by public finance	Funding Gap
2014	Burkina Faso	31%	69%
Development costs	Mali	50.4%	49.6%
Recurrent costs ^a	Niger	43.1%	56.9%
International support to CRVS including knowledge sharing, and strengthening the evidence base ^b	Maldives	76.6%	23.4%
Monitoring and evaluation ^c	Cameroon	27%	73%
TOTALs	Laos	35%	65%
	Honduras	9%	91%
	Georgia	61.7%	38.3%
	Bolivia	37%	63%
	Tajikistan	25.8%	74.2%

World Bank, 2014

Paris21, 2019

Why we need an economic case for CRVS?

- **Competing priorities** for countries
- **Patchy evidence** on the economics of CRVS systems
- An **economic case for CRVS has not been yet developed** in terms of cost savings and return on investment

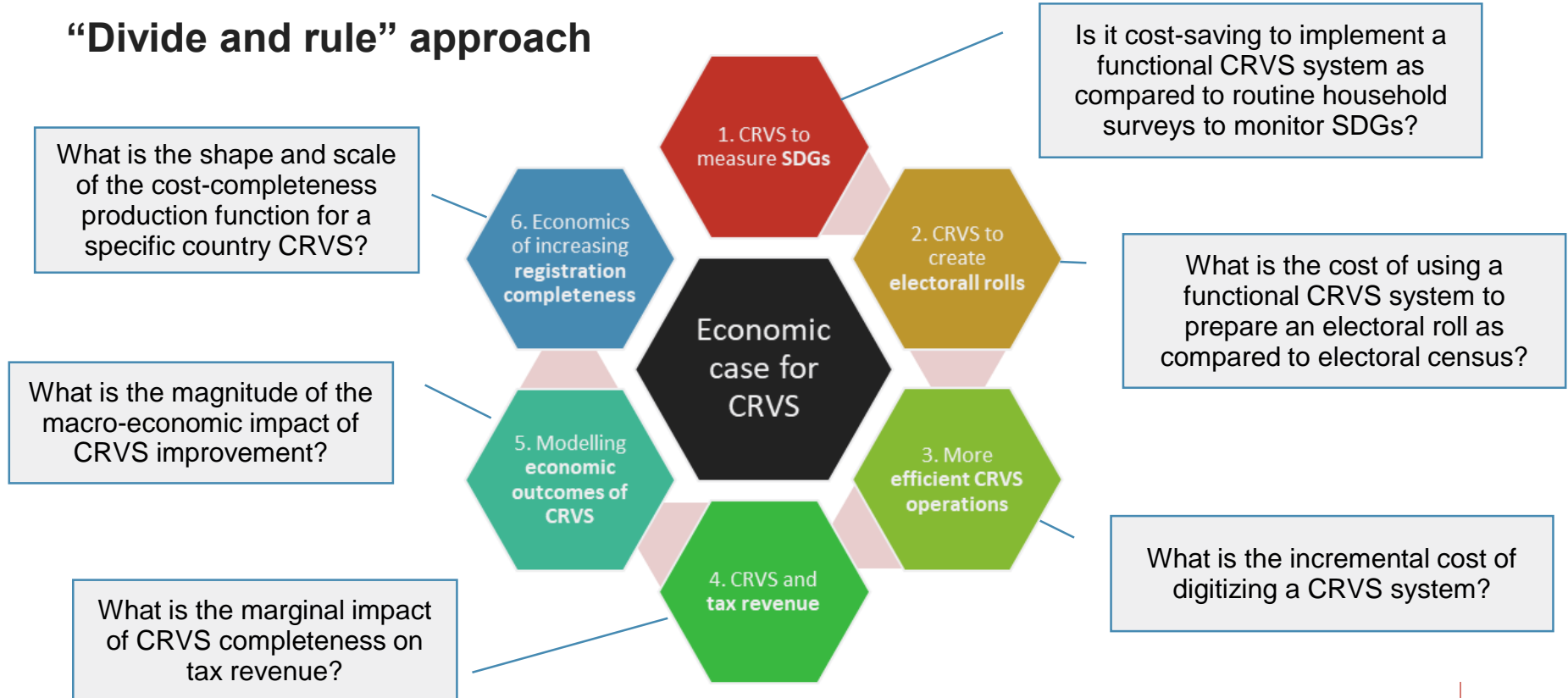


Objectives

1. To **develop a framework for capturing the economic and social benefits associated with CRVS**; and to **analyse the fiscal benefits and efficiency gains** associated with investments in CRVS systems; and
2. To **set out the economic argument and evidence base** that show that CRVS systems can provide **a return on investment for government, multilateral and private sector stakeholders.**

How we make an economic argument for CRVS systems?




“Divide and rule” approach



CRVS costing


CRVS Economic Analysis Tool (CEAT)

Preparatory steps





-  Enter Background Data
-  Select your sample
-  Guideline to the tool

Activities to be costed 






-  Start Up
-  Program Management
-  Governance
-  Supervision
-  Trainings & workshops
-  Direct CRVS activities

Results 

Summary Results

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Results per funding source

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Cost of digitizing CRVS systems

Case study in Uganda

Cost of digitizing CRVS systems

What did we want to know

- What is the incremental cost of digitizing a CRVS system given different scenarios of implementation?
- What is the cost of investment in CRVS Parish Model in Gulu district?
- Are digital CRVS systems more efficient than paper-based systems?

Cost of digitizing CRVS systems

Costing Approach & Data Source

A micro-costing (ingredients) approach has been used to assess the cost of the current levels of investment on different CRVS system in Uganda

Data Sources

- Secondary Data (financial reports, monitoring and evaluation, government salary scales, and meeting reports)
- Primary Data (semi-structured in-depth interviews were conducted with CRVS staff and program managers at various levels)

Cost of digitizing CRVS systems

Results As-Is

Input	Total Financial Cost in 2020 (USD)	% of financial costs	Total Economic Cost in 2020 (USD)	% of economic costs
Start-up costs				
Trainings, workshops & meetings	8,305	3	3,085	1
Other start up	4,908	2	3,581	1
Total start-up costs	13,213	4	6,667	2
Recurrent costs				
Workshops, meetings, trainings and supervision visits	54,042	18	53,432	16
Personnel	164,367	56	172,784	53
Communications	952	0	952	0
Maintenance	37	0.01	37	0.01
Supplies & other recurrent	33,466	11	33,466	10
Total recurrent costs	252,865	86	260,671	80
Capital costs				
Buildings	327	0.11	5,672	2
Equipment	5,155	2	17,072	5
Vehicles	12,600	4	33,215	10
Consultants	10,737	4	4,210	1
Total capital costs	28,819	10	60,170	18
Total Annual Costs	294,897	100	327,508	100
Cost per DHIS2 Notification	9.2		10.2	
Cost per MVRS Notification	15.2		16.8	
Cost per Registration	19.0		21.1	
Cost per Certification	19.0		21.1	

Cost of digitizing CRVS systems

Economies of scale

District	Number of REGISTRATIONS in 2020 (USD)	Financial cost per REGISTRATION	Economic cost per REGISTRATION
Luwero	864	32	36
Kawempe Division	9306	7	8
Mbale	872	38	40
Iganga	2808	8	11
Jinja	2794	12	15
Kiryandongo	401	44	42
Masindi	323	57	89
Soroti	329	108	72
Nwoya	7	3,152	3,151
Gulu	1736	11	15

Cost of digitizing CRVS systems

Results fully digital
MVRS 90%

Input	Total Financial Cost in 2020 (USD)	% of financial costs	Total Economic Cost in 2020 (USD)	% of economic costs
Start-up costs				
Trainings, workshops & meetings	8,305	4	1,088	0.4
Other start up	15,250	6	4,271	1.7
Total start-up costs	23,555	10	5,359	2.1
Recurrent costs				
Workshops, meetings, trainings and supervision visits	12,842	5	12,231	5
Personnel	147,354	62	147,506	59
Communications	1,951	1	1,951	1
Maintenance	37	0.02	37	0.01
Supplies & other recurrent	32,231	14	32,231	13
Total recurrent costs	194,415	82	193,956	77
Capital costs				
Buildings	1,674	0.7	9,481	4
Equipment	4,307	2	6,855	3
Vehicles	12,600	5	34,267	14
Consultants	392	0	412	0
Total capital costs	18,973	8	51,014	20
Total Annual Costs	236,943	100	250,329	100
Cost per DHIS2 Notification	7.4		7.8	
Cost per MVRS Notification	8.2		8.6	
Cost per Registration	8.2		8.6	
Cost per Certification	20.3		21.4	

Cost of digitizing CRVS systems

Results fully digital Parish Model

Input	Total Financial Cost in 2020 (USD)	% of financial costs	Total Economic Cost in 2020 (USD)	% of economic costs
Start-up costs				
Trainings, workshops & meetings	-	0	2,768	7
Other start up	-	0	-	0
Total start-up costs	-	0	2,768	7
Recurrent costs				
Workshops, meetings, trainings and supervision visits	8,334	25	8,344	22
Personnel	20,016	60	20,016	53
Communications	802	2	802	2
Maintenance	392	1	392	1
Supplies & other recurrent	3,629	11	3,629	10
Total recurrent costs	33,173	100	33,183	87
Capital costs				
Buildings	-	0	86	0.23
Equipment	125	0	921	2
Vehicles	-	0	1,088	3
Consultants	-	0	-	0
Total capital costs	125	0.4	2,095	6
Total Annual Costs	33,298	100	38,047	100
Cost per Registration	3.1		3.5	
Cost per Certification	6.1		7.0	
Cost per Notification	3.1		3.5	

Cost of digitizing CRVS systems

Conclusions

- A substantial number of capital investments have already been done
- Opportunities to improve efficiency with small investments (economies of scale)
- Significant inefficiencies in the system
 - Resources used in notification that are not translated into registrations
 - Resources that are not been used up to their full production capacity
- Opportunity to increase registration by increasing National ID coverage (significant barrier to registration)



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Monitoring SDGs through CRVS

Cost comparison with other methods

Cost of monitoring SDGs

What did we want to know

- Which SDG indicators can be produced using CRVS systems and which must be produced via other methods such as household surveys?
- Is it cost-saving to implement a functional CRVS system as compared to routine household surveys to measure these indicators?
- What are the costs per year, unit costs per person-years and cost per SDGs indicator per year?

Cost of monitoring SDGs

Costing Approach & Data Source

A micro-costing (ingredients approach) supplemented by a 'top-down' (macro-costing) approach has been adopted in this case study

Data Sources

- Previous costing study implemented in Ghana
- Secondary Data (financial reports, monitoring and evaluation, government salary scales, and meeting reports)

Cost of monitoring SDGs

Household surveys to monitor SDGs

Survey/ Census	Implementer	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Population and Housing Census	GSS (SOCD)	■										■	
Ghana Living Standards Survey	GSS (SOCD)			■	■	■			■	■			■*
Demographic and Health Survey	GSS (SOCD)					■					■		
Multiple Indicator Cluster Survey	GSS (SOCD)		■						■				
Maternal Health Survey	GSS (SOCD)								■				
Malaria Indicators Survey	GSS (SOCD)							■					

*Planning for GLSS8 may start in 2021 after the 2020 Population and Housing Census.

Cost of monitoring SDGs

Data sources to monitor SDGs

Type of Survey	Last 10 years	Valid – Years	Number of SDGs	Person Years 2021-2030 (Inclusive)
Civil Registration and Vital Statistics (CRVS)	Yearly	10	62	349,948,167
National Population Census (NPC)	2010	10 ³	30	349,948,167
Malaria Indicator Survey (MIS)	2016/2019	3 ⁴	33	97,284,992
Multiple Cluster Indicator Survey (MCIS)	2011/2017-18	7 ³	33	237,042,837
Demographic and Health Survey (DHS)	2014	5 ³	28	165,677,665
Living Standards Survey (GLSS)	2012-13/ 2016-17	3-5 ⁵	5	97,284,992
Maternal Health Survey (GMHS)	2017	5	11	165,677,665

Cost of monitoring SDGs

Results

	CRVS	Census	Malaria IS	MICS	DHS	LSS	MHS
Unit costs per year	352'107	9'268'839	828'288	256'506	691'822	603'554	958'591
Unit costs per person-year	0.010	0.265	0.007	0.005	0.010	0.009	0.014
Cost per indicator per year	5'679	308'961	165'658	7'773	2'471	120'711	87'145

These results assume indicators calculated by the different methods are comparable (probably not the case e.g. granularity)

Cost of monitoring SDGs

Conclusions

- Monitoring SDGs requires a combination of methods leveraging on the strengths of each of them
- There are strengths and weaknesses in each of the methods
- Understanding cost and benefits is instrumental to allocate resources to improve data systems for SDG monitoring

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Thank you for your attention

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