

M&E of scale-up in two complex systems – community and health care delivery – how systems, methodologies, and stakeholder approaches differ

SUSAN IGRAS, REBECKA LUNDGREN, NANA DAGADU

INSTITUTE FOR REPRODUCTIVE HEALTH -
GEORGETOWN UNIVERSITY

17 OCTOBER 2014 - AEA CONFERENCE - DENVER, CO



USAID
FROM THE AMERICAN PEOPLE



Presentation Overview



1. Program theory for scale up of health innovations and implications for M&E
2. Systems-oriented M&E of scale-up in two complex systems – What is the same? What differs?
 - Defining the innovation and systems parameters
 - M&E system – variables of interest & methods
 - Measuring success in a complex systems context
3. Conclusion and questions



**SCALE-UP
PROGRAM THEORY
AND IMPLICATIONS
FOR M&E**

Scaling-up Defined



Deliberate efforts to increase the impact of health service innovations successfully tested in pilot or experimental projects so as to benefit more people and to foster policy and program development on a lasting basis.”

Achieving Scale-Up Goals

Significant Outcomes – At Scale - Sustained



Complexity Theory

A Fixsen



Scale up does not occur in a vacuum

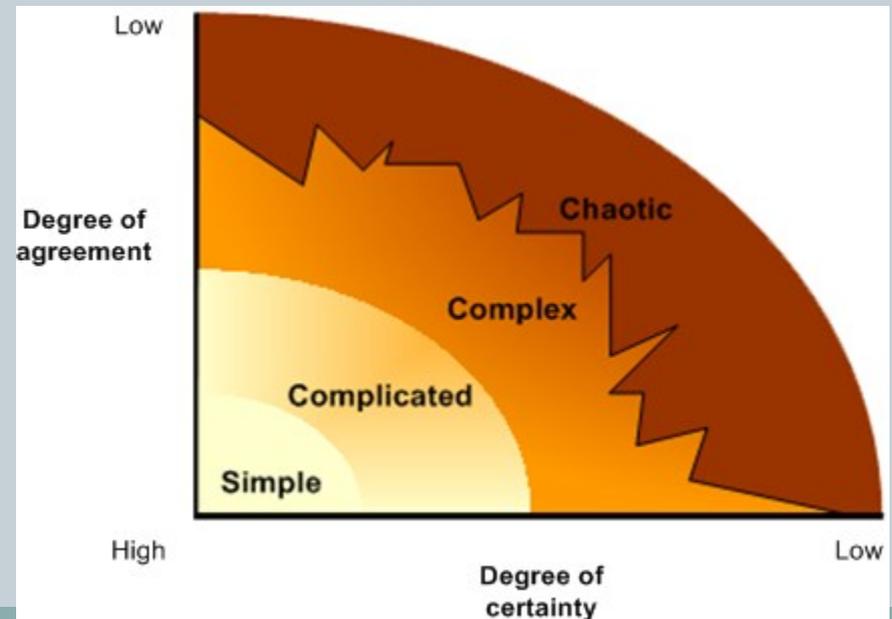
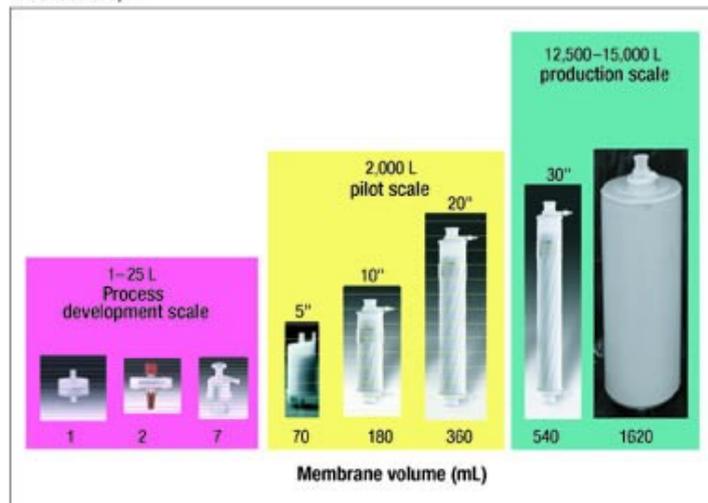
The focus of scale-up is the system (political, social, economic)

And systems are complex...

It's not so linear...

The zone of complexity!

Figure 3. Scale-up concept for cylindrical membrane chromatography devices. The 1-mL capsule can be used for small-scale evaluations and virus clearance studies. The cylindrical format is constant as device size increases, allowing for accurate and linear scale-up.



Technical innovation

Social innovation

What Complexity Tells Us



- Expect the unexpected
- Some systems may move more quickly than others – tailor your approach, pay attention to local context
- Use M&E to track and react to events as they unfold – see what emerges and how it will have an impact on scale up

Complexity-Informed Evaluation



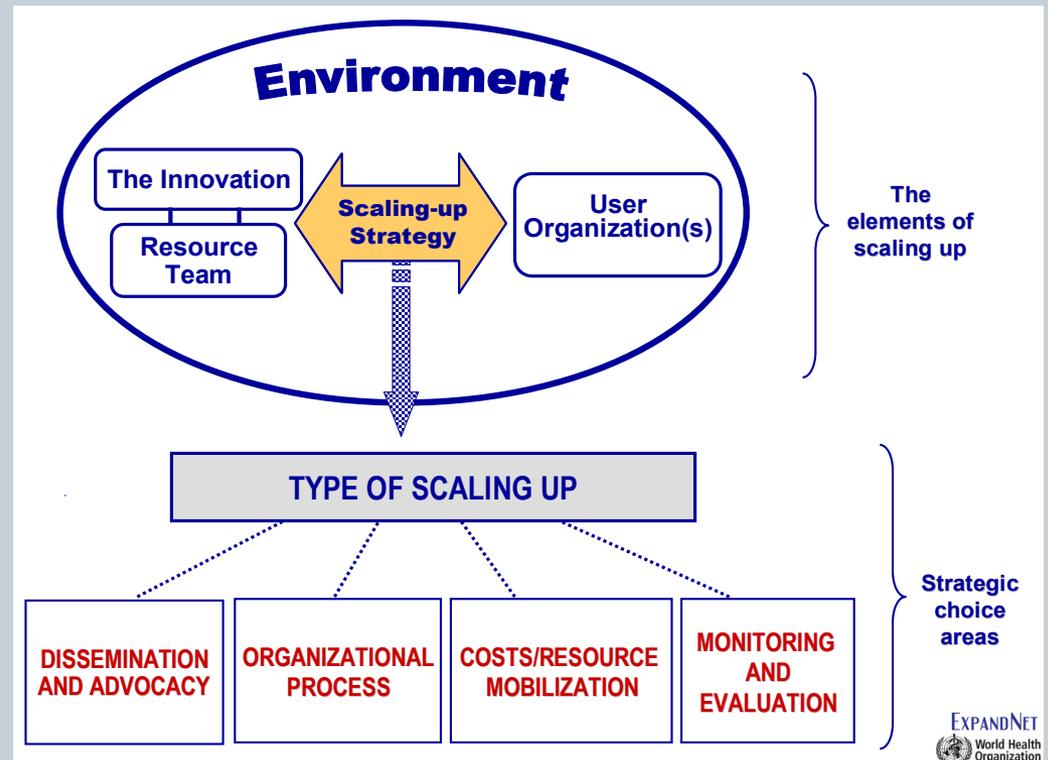
- Evaluates from within - work with the system
 - Collects data frequently
 - Capitalize on quick feedback cycles
 - Works to understand the *interactions* within systems
 - Systems are the focus of change
- Developmental Evaluation (Patton, 2011)
- Implementation Science (Peters et al 2013)



**M&E OF SCALE-UP
IN TWO COMPLEX SYSTEMS
WHAT IS THE SAME?
WHAT DIFFERS?**

Scale-up within Complex Systems - Conceptual Approach

- Scale-up planning and M&E informed by systems-based ExpandNet conceptual model
- Resource Team to guide complexities of multi-organization, multi-sector, and multi-level process



M&E Implications

Scale-Up Within Complex Systems

First - PLAN

- Define the innovation – implementation landscape, innovation components, demand
- Define the scale-up process – benchmarking and potential sources of secondary data for M&E
- Define the capacity of organizations using the innovation to support introduction & expansion

Then – IMPLEMENT

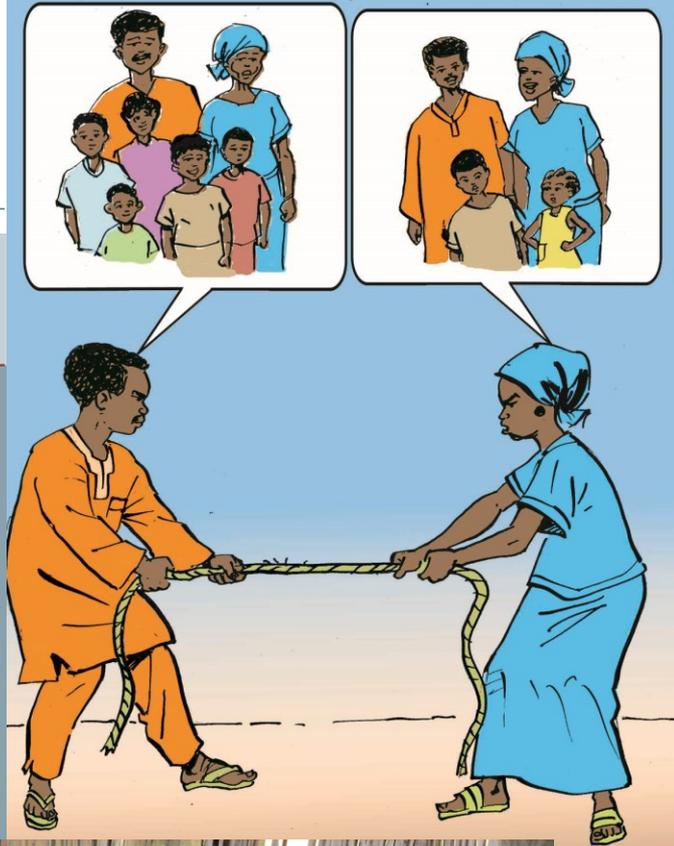
- Measures
 - Process
 - Pace
 - Coverage
 - Fidelity of innovation
- Observe links between scale up strategy and innovation fidelity
- Be flexible – remember the zone of complexity, tailor indicators and approach to the context

M&E Process

- Planning meetings to define innovation and operationalize scale up
- Results shared regularly with resource team and user organizations – transparency and buy-in
- Participation needed from national, district and local levels and from different partner organizations



Comparing 2 Innovations Going to Scale



Defining innovation & system parameters



Innovation

Family planning product, services
& related systems support

Social change process/activities
& peripheral systems support

System parameters

- Public sector health care system
- Well defined system and program boundaries
- Formal policy environment & stakeholders
- Valuing health as an outcome

- Unconnected NGOs
- Org boundaries greatly defined by funded projects
- Community norms environment & guardians
- Valuing social development as an outcome

MONITORING SCALE-UP WITHIN A HEALTH SYSTEM



INSTITUTIONALIZATION

- Line-item in budget
- Product listed in procurement table and procured
- HMIS (separate reporting line)
- Pre-service integration
- In-service integration
- Supportive values (Policy makers & program managers)

Multi-year benchmarking to chart SU progress

- Supportive values (providers/clients)
- Trained FP trainers & providers
- Commodity (CycleBeads) available
- Potential users aware of the innovation
- User data compiled at local, regional & national levels

SERVICE EXPANSION

M&E Approaches & Tools by Scale-Up Domain

– What **changes** with community systems?



	Bench- marking table	HH surveys	Provider interview + facility assessm't	Quality assurance tools	Indepth interview - Stake holders	Env'al scans + event tracking	MOH service statistics	Most Signif Change
Pace & Coverage	✓		✓				✓	
Process	✓		✓		✓	✓	✓	
Quality		✓	✓	✓				✓
Values		✓	✓	✓	✓			✓
Sustainability	✓	✓			✓	✓		

NB: Secondary data, eg, assessment reports, often provide useful monitoring and evaluation info.

MEASURING EXPANSION



- **PROCESS**
- **PACE AND COVERAGE**
- **FIDELITY, INCLUDING QUALITY**
- **VALUES**



Rwanda end of project goals (by July 2012):

- Integrate the SDM into at least 95% of health facilities
- Integrate the SDM into at least 20% of Pharmacies and Private clinics through Social Marketing
(Population coverage: 10,2m, with est'd 2.4m women of repro age and their partners)

Horizontal scale-up	Year 1*	Year 2	Year 3	Year 4	Year 5	Target (n)
No of SDPs that include SDM in method mix	356 (52%)	379 (55%)	687 (100%)	687 (100%)	717 (103%)	690
Estd no of individuals trained to counsel on SDM (IRH-supported)	1679 (31%)	2396 (44%)	2842 (52%)	6816 (126%)	7472 (138.3%)	5,400
No of organizations with capacity to undertake SDM activities (ie, resource organizations)	5 (56%)	6 (67%)	8 80%	7 70%	7 70%	10
Vertical scale-up	Year 1*	Year 2	Year 3	Year 4	Year 5	Target (n)
SDM included in essential policies, norms, guidelines, protocols	2 (50%)	3 (75%)	3.5 (88%)	3.5 (88%)	3.5 (88%)	4
No of public or private training organizations that include SDM in pre-service training	5 (100%)	5 (100%)	5 (100%)	5 (100%)	5 (100%)	5
No of public or private training organizations that include SDM in in-service training	4 (44%)	6 (67%)	6 (67%)	7 (70%)	7 (70%)	10
Inclusion of CycleBeads in govt & donor procurement systems	0	1 (50%)	1.5 (85%)	1.5 (85%)	1.5 (85%)	2
Inclusion of CycleBeads in logistics systems	5 (83%)	5 (83%)	6 (100%)	6 (100%)	6 (100%)	6
Inclusion of SDM in HMIS	0.5 (50%)	0.5 (50%)	1 (100%)	1 (100%)	1 (100%)	1

BENCHMARKING PROCESS

Process, Pace, & Coverage



Benin NGO Goals: Collectively achieve: 1) 50% coverage in 3 health zones by Sep 2016. 2) Innovation-competent staff offering the innovation.

Selected indicators	Qtr 1		Qtr X		Expected by end of scale up	
	Planned	Achieved	Planned	Achieved	Planned	% Achieved
Horizontal expansion						
No of villages reached	35	35	35		155	23%
No of groups selected	115	100	115		465	23%
No group leaders oriented	0	0	115		345	0
No female group leaders	--	0	--		--	
No group members diffusing to peers	--	0	--		--	
Vertical expansion						
No of trained staff	20	25			20	120%

Measuring Innovation Fidelity at Scale

Quality Assurance Tools



Provider supervision

Client follow up

STANDARD DAYS METHOD, Knowledge Improvement Tool (KIT)

Provider's Name: _____ Designation: _____ Name of the Block _____

Training date: _____ District: _____

Instructions

- Ask the following questions to the provider
- On correct responses, mark "1"
- On non-response or incorrect response, mark "0"
- For questions that were answered incorrectly, give the correct information immediately/after completion of the KIT/after completion of one part of the KIT, as per the convenience and situation
- For questions that were un-answered or answered incorrectly, please ensure to ask these questions again during the next visit

How to use CycleBeads?	Date of Visits	
	1	2
1. Explain how are CycleBeads used (Give a set of CycleBeads to the provider for demonstration)		
a. CBs represent the menstrual cycle of a woman. Each bead of the CBs represents a day of the menstrual cycle		
b. The red bead represents the first day of menstrual bleeding		
c. All brown beads represent days when pregnancy is unlikely to occur		
d. All white beads represent days when pregnancy is most likely to occur		
e. On the first day of menstrual bleeding, move the black band on to the RED bead		
f. Consecutively, mark that day on the calendar		
g. Move the black band to the next bead every day (even on days of menstrual bleeding)		
h. Always move the black band forwards the direction of arrow		
i. Use a condom or abstain during the white bead days		
j. On Brown Bead days, couple may have sex without using a condom		
k. On the start of your next menstrual bleeding, skip the left-over brown beads and move the black band on to the red bead. Leave aside the left-over beads, if any		
l. If the menstrual bleeding start before the black band reaches the dark brown bead, it means her periods (menstrual bleeding) have come early		
m. If the menstrual bleeding does not start even after the black band reaches the last brown bead, the periods (menstrual bleeding) are late		
2. What should the woman do, if she forgets to move the black band?		
a. Check the first day of the woman's menstrual cycle on the calendar		
b. Start counting days from that day to the present date and count the number of days that have passed in her menstrual cycle		
c. Then, starting from the red bead, count those many number of beads, and move the black band on to the correct bead		
3. Who can use the SDM?		
a. Women who have their periods (menstrual bleeding) once a month, or in other words whose periods come a month apart		
b. A couple who is willing to use a condom or abstain on the days when the pregnancy is likely to occur (white bead days)		

Client Follow-up Form for SDM users..... District, Jharkhand

Name of Block: Name of Provider (MO/LHV/ANM/Sabhyta/AWW/Others):
 Name of Health Facility (PHC/APHC/HSC/Village): Date:Year 2010

S. No	Name of the Client	Has been interviewed	Reason for non-availability of the client	Are you using SDM (CycleBeads)?	Are you Satisfied with SDM Use?	How does a woman manage her fertile days?	Verification of the use of Cycle Beads		Correct Demonstration by client	Reasons for dissatisfaction with SDM/ Reasons for not using SDM	How does the husband cooperate in the use of SDM/CBs?	
							Marked on the calendar	Moved black band on to the correct bead				
		Yes- 1 (Go to Col.4) No-2	Please see the code	Yes- 1 No- 2 (Go to Col.10)	Yes-1 No- 2 (Go to Col.10)	Abstinence- 1 Condom- 2 Either Abstinence or condom- 3 Withdrawal - 4 Do not use any family planning method and do not abstain - 5	Yes- 1 No- 2	Yes- 1 No- 2	Yes- 1 No- 2	Please see the code (In case of multiple codes, write them with a comma in between)	Please see the code (In case of multiple codes, write them with a comma in between)	
		1	2	3	4	5	6	7	8	9	10	11
1												
2												
3												
4												
5												

Code for Column No. 3		Code for Column No. 10		Code for Column No. 11	
Migrated permanently	1	Wanted a pregnancy	1	Uses condoms on fertile days	1
Migrated for employment (seasonal)	2	Wants a pregnancy	2	Abstains during fertile days	2
Gone to another village for some festival/marriage/other ceremony	3	Became pregnant while using SDM	3	Moves the ring over the beads	3
Gone to farm	4	Husband dislikes/unsatisfied	4	Marks the date of start of period on the calendar	4
Refused to be interviewed	5	Want to use more effective method	5	Husband not involved	5
Not present at home	6	Did not like the method	6	Other (Specify)	6
Other (Specify the reason)	7	Irregular menstruation	7		
		Use of other family planning methods	8		
		Difficulty in using	9		
		Other (Specify the reason)	10		

Signature of the Investigator

Signature of Provider



Measuring Fidelity of Community-based Innovation – Quality Assurance Tool



Liste de contrôle d'observation du coaching
 (À utiliser par les facilitateurs lorsqu'ils observent les catalyseurs animant des activités avec les groupes dans le cadre du projet T1)

Comment utiliser la liste de contrôle. À mesure que vous observez le catalyseur, cochez les questions oui ou non. Lorsqu'il y a une majorité de oui, donnez une note plus élevée. Ce sera au facilitateur de donner la note qu'il juge appropriée.

Compétences:	Oui	Non	Observation: pour un retour d'information au catalyseur	Section notes 1= Pourrait mieux faire 4 = Bien fait! Note
Est capable d'utiliser les histoires/activités confortablement avec le groupe (verbal, voix, visual)				
Utilise des questions ouvertes				
Langage simple/translation				
Parle clairement et assez fort				
Langage corporel et expressions faciales accueillantes, contact des yeux				Note
Se positionne dans le groupe de façon à ce que tous puissent le voir et l'entendre				
Utilise les compétences d'animation appropriées				
Est familier avec l'outil et l'utilise comme directives				
Encourage la discussion réfléchie parmi les groupes				



- Coaching volunteers (no supervisor-supervisees)
- Coaching √-list tool
- Motivation without remuneration

Fidelity (continued) – Defining, then Monitoring Values



- END-USER
- Personal choice
- Couple communication
- PROGRAM MGR
- Male involvement
- Brings new users
- Informed choice



- END-USER
- Knowing others share common life issues
- Couple communication
- PROGRAM MGR
- Gender equity
- Breaking FP stigma
- Social development

MEASURING INSTITUTIONALIZATION



DIFFERENCES IN MEASURING

- **INTEGRATION INTO NORMS & POLICIES**
- **INTEGRATION INTO SUPPORT SYSTEMS**

Institutionalization



Health service delivery

- Defined by MOH norms and procedures
- Integration into MOH subsystems, eg, reporting, supervision, procurement

Community service delivery

- Defined by organizational priorities
- Support functions integrated into existing org subsystems
- Volunteer network resides within social groups – institutionalization based on interest in continuing innovation offering



Environmental scanning & Measuring the unexpected

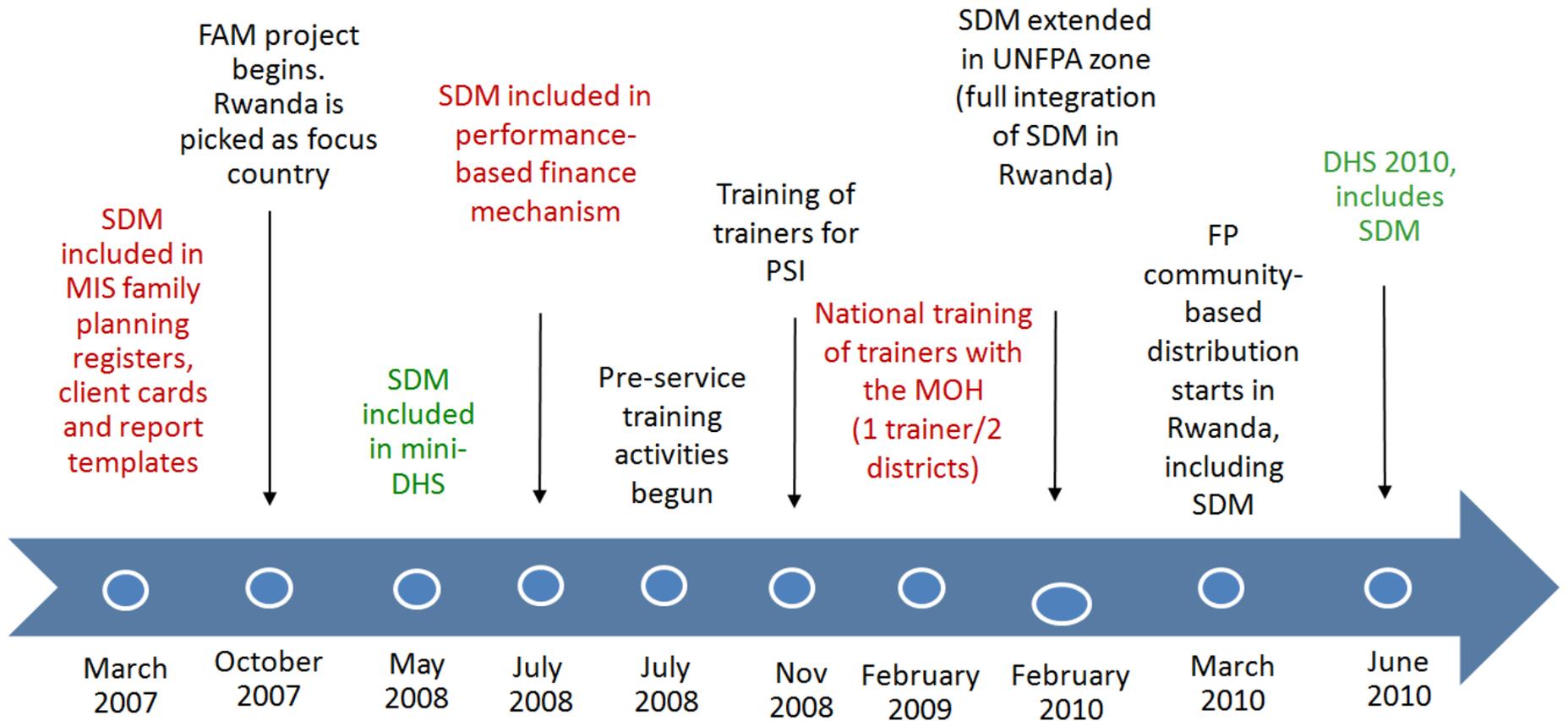
Key events tracking

Open ended eval tools such as Most Significant Change



Environmental Scanning Using Key Events Timelines

Rwanda, through June 2010



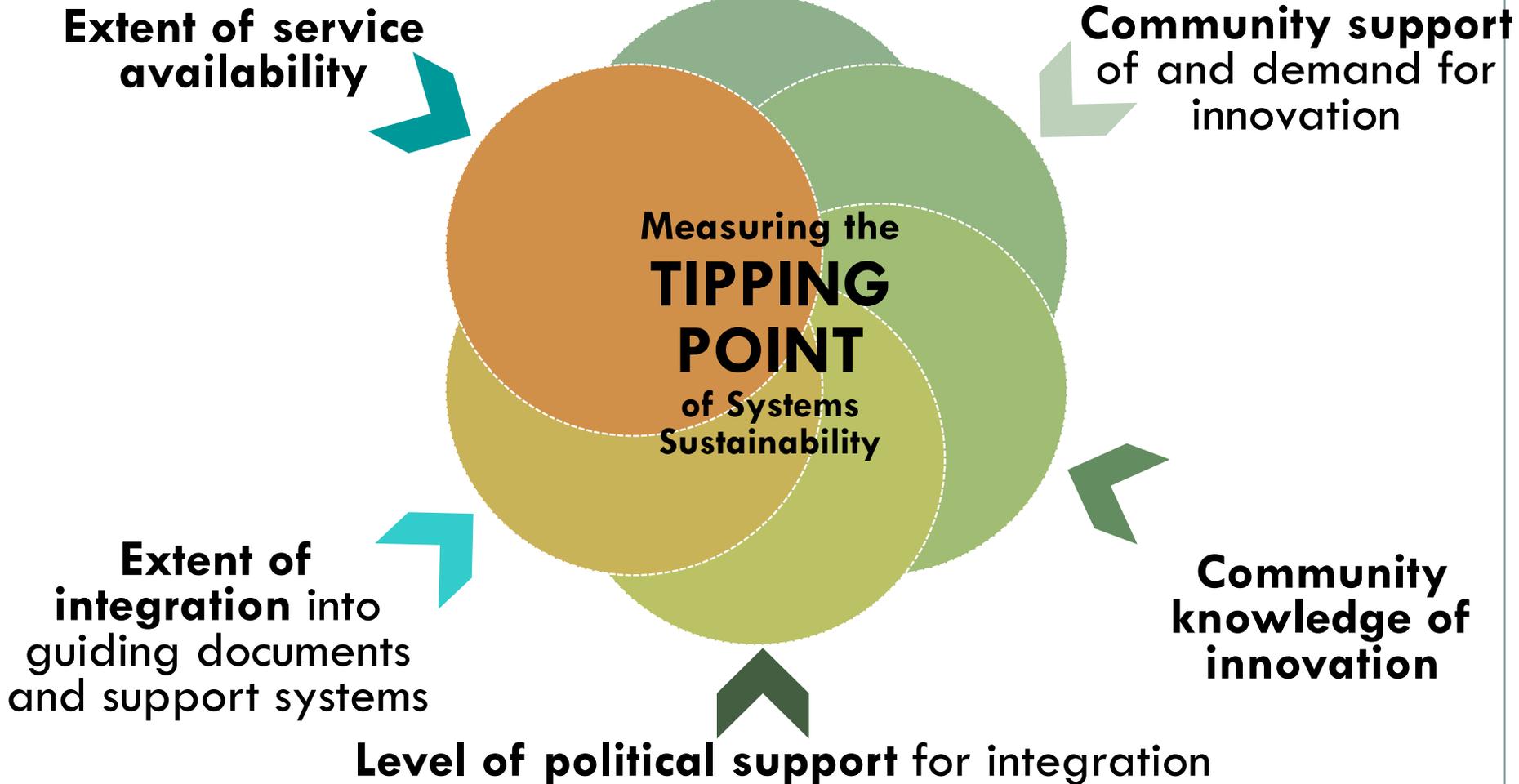
SUSTAINABILITY OUTCOMES IN COMPLEX SYSTEMS



- **DEFINING WHAT CONSTITUTES A SUSTAINABLE OUTCOME**
- ***(HINT: IT IS NOT JUST NUMBERS OF PEOPLE REACHED BY THE INNOVATION!)***



Interplay of macro-level forces influencing FP, including government and donor support





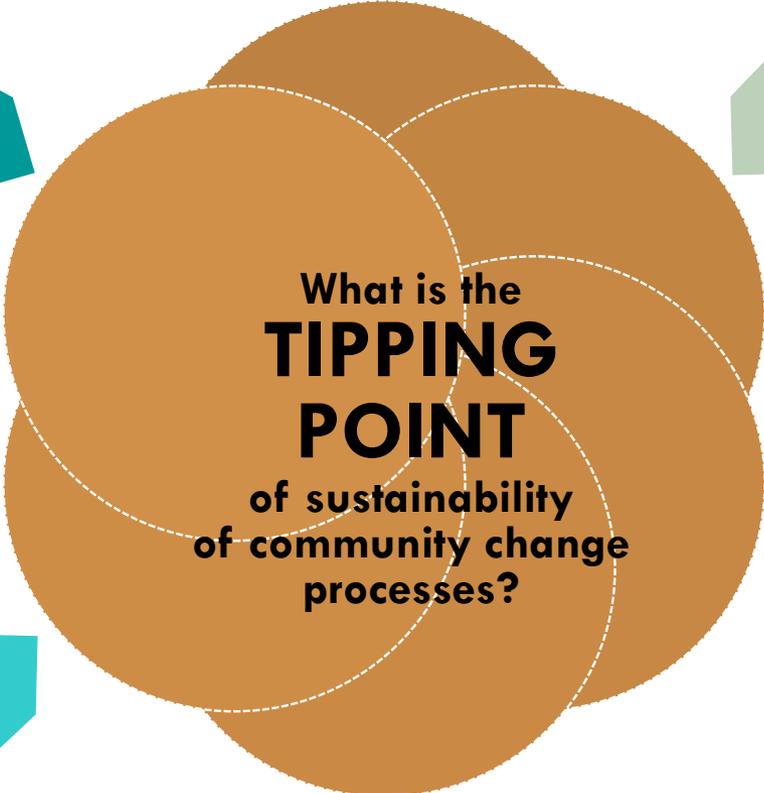
Interplay of macro-level forces influencing demand side of FP, including government and donor support



Community support and demand for innovation



New NGO support and demand to integrate the innovation



How much normative change is needed to ensure sustainability?



Extent of integration into NGO priorities and support systems



Level of org'al leadership support for integration



Some key takeaways



Use the same scale-up M&E domains

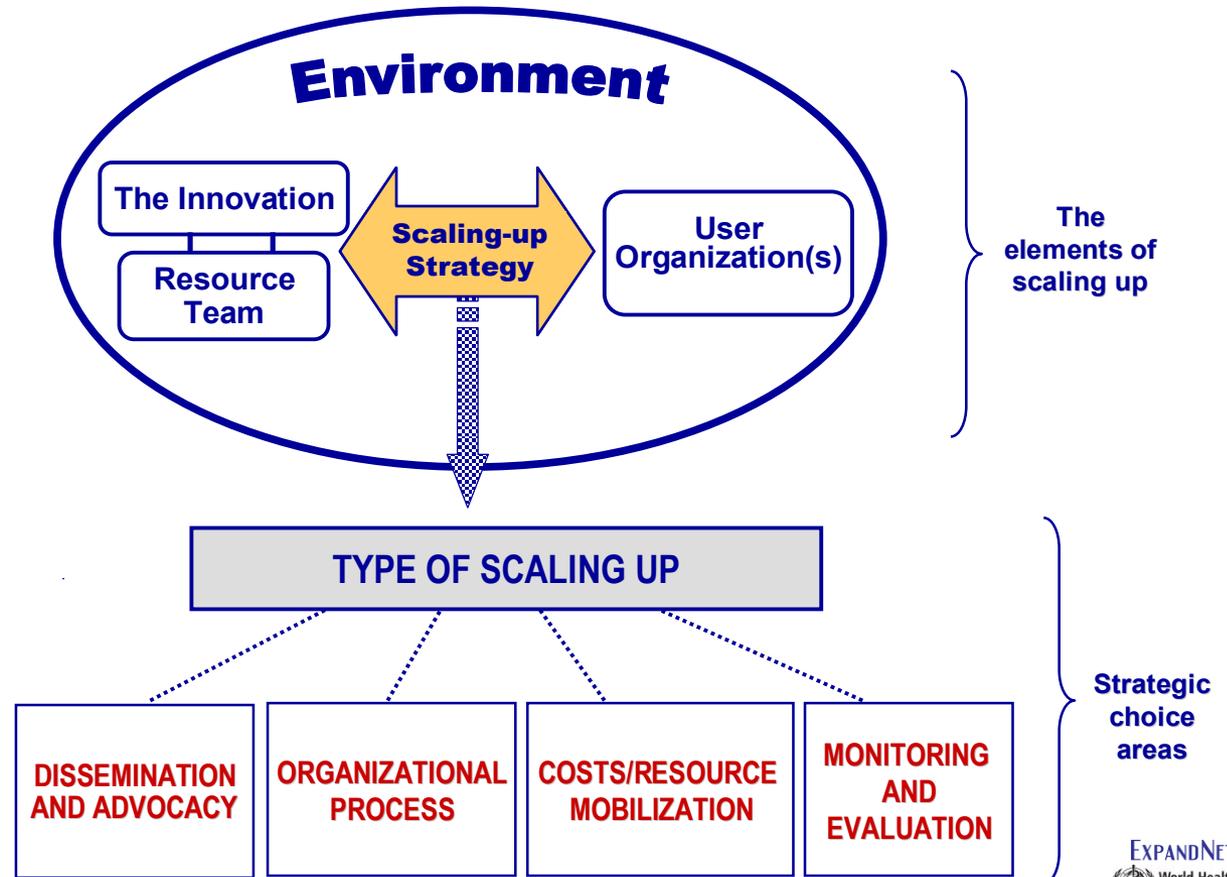
but

Innovation and receiving system determine how M&E is structured

Different stakeholders require different feedback processes

M&E tools & how used may shift

Community systems often not part of MOH reporting systems – no 2ary data





Importance of frequent feedback loops for data use

Quarterly feedback to a core group at different levels

Data visualization

Participatory, problem solving approaches





Planning must be intimately linked to M&E

Define the innovation completely—a package being integrated into support systems receiving the innovation

Plan & monitor globally and within participating organizations





Community based, social change programs can be designed to go to scale

Focus on scalability
during pilot phase -
simplicity, cost, ease of
adoption by new users

Greater M&E focus –
and measurement
challenges – needed for
normative change
processes & outcomes

Beginning with the end in mind

Planning pilot projects and other programmatic
research for successful scaling up



World Health
Organization

EXPANDNET



Available on the www.irh.org website, in the scale-up focus area



- *Doing it right: Monitoring, Learning, and Evaluating for Sustainable Scale-up (2013)*
[http://irh.org/wp-content/uploads/2013/04/Scale Up MLE 8.5x11 Revised 2013.pdf](http://irh.org/wp-content/uploads/2013/04/Scale_Up_MLE_8.5x11_Revised_2013.pdf)
[http://irh.org/wp-content/uploads/2013/04/Scale Up MLE FR 8.5x11 Revised 2013.pdf](http://irh.org/wp-content/uploads/2013/04/Scale_Up_MLE_FR_8.5x11_Revised_2013.pdf)
(FRENCH)
- *A systems approach to M&E of scale-up: Report of a technical consultation (2012)*
http://irh.org/wp-content/uploads/2013/09/ME_Scale_Up_Tech_Consult_Report_Final.pdf
- *Theory and practice: Monitoring and evaluating scale-up of health systems innovations (2013)*
<http://irh.org/resource-library/theory-and-practice-monitoring-evaluating-scale-up-of-health-system-innovations/>
- *Promising scale-up ML&E practices: A compendium of resources (2014)*
<http://irh.org/scale-up-mle-compendium-of-resources/>

Title:

M&E of scale up of innovations in complex health service systems versus complex community systems: How systems, methodological approaches, stakeholders, and use of M&E data differ

Presenter1Abstract:

Two innovations going to scale – one a health services-based innovation aiming to increase access to a new family planning method in Rwanda, the other a community-based innovation aiming to reduce social barriers to seeking family planning services in Benin – provide an opportunity to contrast scale-up monitoring and evaluation (M&E) in formal health delivery and less structured, community service delivery system contexts. M&E frameworks for both innovations were informed by complexity theory and the application of a systems and values-oriented conceptual scale up framework, ExpandNet, developed by WHO. Scale up variables remained unchanged to monitor coverage, quality, institutionalization, sustainability, and adherence to innovation fidelity. Applying a systems-oriented M&E framework to scale up of a community-based innovation, though, required adaptations, including defining parameters of community systems, operationalizing process and outcome indicators, identifying stakeholders relevant to guiding a community scale-up process and modalities of ensuring use of information for scale up decision-making.

Relevance:

Sustainable scale up of new products, services, and approaches is a key goal of Ministries and civil society organizations intent on improving a population's health outcomes. Scale up and monitoring of a scale up process and outcomes is often simplified and not viewed using a complex systems lens, though, and many efforts lead only to short-term program impacts. This is particularly true for community-based innovations that do not benefit from being situated within a formal service delivery system, are rarely designed to go to scale, yet have potential to reach the significant number of people who do not actively seek preventive health services. Using a systems-oriented scale up model should lead to more sustained integration of new services and approaches in differing system contexts. Likewise, M&E systems need to be designed to capture community systems dynamics, environmental changes, and the complexity of multi-year and multi-organizational efforts. The presentation will explore similarities and differences in designing and implementing monitoring and evaluation of health innovations going to scale in different kinds of systems and will add to a relatively small body of knowledge of good evaluation practice of scale up of community-based efforts and to understanding scale up as a process that occurs within complex systems that requires specific evaluation strategies.