

Strengthening Knowledge Management for Greater Development Effectiveness in the Near East, North Africa, Central Asia and Europe

Social Network Analysis for Improving Design and Practice of Knowledge Management

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3rd July 2020, SKIM Learning Week





Science for resilient livelihoods in dry areas





Overview



- 1. What is Social Network Analysis (SNA)?
 - Nodes
 - Relations
 - Patterns
- 2. Why SNA?
 - Individual vs Group
 - Connections matter
- 3. SNA for Design Knowledge Management Interventions
 - What to work on?
 - Who to work with?
- 4. SNA for Practice of Knowledge Management Interventions
 - What works?
 - What to change?
- 5. Questions and Answers
 - SNA
 - Use of SNA for Knowledge Management

References

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Scaling Readiness

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Multi-stakeholder

processes in Central Africa

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RESEARCH ARTICLE

Effects of multi-stakeholder platforms on multi-stakeholder innovation networks: Implications for research for development interventions targeting innovations at scale

Murat Sartas^{1,2,3}*, Marc Schut^{1,2}, Frans Hermans⁴, Piet van Asten⁵, Cees Leeuwis¹

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RESEARCH ARTICLE

Social network analysis of multi-stakeholder platforms in agricultural research for development: Opportunities and constraints for innovation and scaling

Frans Hermans¹, Murat Sartas^{2,3,4}, Boudy van Schagen⁵, Piet van Asten⁶, Marc Schut^{2,3}*

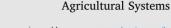
1 Leibniz Institute for Agricultural Development in Transition Economies (IAMO), Theodor-Lieser-Strasse 2, Halle (Saale), Germany, 2 Knowledge, Technology and Innovation Group, Wageningen University, EW Wageningen, The Netherlands, 3 International Institute of Tropical Agriculture (IITA), Kacyiru, Kigali, Rwanda, 4 Swedish University of Agricultural Sciences (SLU), Department of Urban and Rural Development, Ulls väg Uppsala, Sweden, 5 Bioversity International, Quartier Kabondo, Rohero 1, Avenue 18 Septembre 10, Bujumbura, Burundi, 6 International Institute of Tropical Agriculture (IITA), Kampala, Uganda

Agricultural Systems 183 (2020) 102874



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Scaling Readiness: Science and practice of an approach to enhance impact of research for development

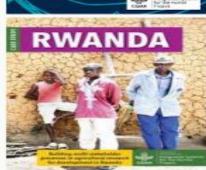
Murat Sartas^{a,b}, Marc Schut^{a,b,*}, Claudio Proietti^c, Graham Thiele^c, Cees Leeuwis^a

^a Knowledge, Technology and Innovation Group, Wageningen University, P.O. Box 8130, 6700 EW Wageningen, the Netherlands ^b International Institute of Tropical Agriculture, Kacyiru, KG 563 Street #3, Kigali, Rwanda ^c CGIAR Research Program on Roots, Tubers and Banana (RTB) 1558, Av. la Molina 1895, La Molina 15023, Peru

RESEARCH ARTICLE Factors influencing participation dynamics in research for development interventions with multi-stakeholder platforms: A metric approach to studying stakeholder participation Murat Sartaso^{1,2}*, Piet van Asten³, Marc Schut², Mariette McCampbell Moureen Awori³, Perez Muchunguzi³, Moses Tenywa⁴, Sylvia Namazzi⁵, Ana Sole Amat³, Graham Thiele⁶, Claudio Proietti⁶, Andre Devaux⁷, Cees Leeuwis¹ 1 Knowledge, Technology and Innovation Group, Wageningen University, Wageningen, The Netherlands, 2 International institute of Tropical Apriculture, Kigali, Nexanda, 3 International Institute of Tropical Apriculture, Kampata, Uganda, 4 Materner University, Kampala, Uganda, 5 International Vegetable Center Kampala, Uganda, 6 International Potato Center, Lima, Perú, 7 International Potato Center, Quito, Ecuado * m.sartas@cgiar.org G OPEN ACCESS Citation: Sartas M, van Asten P, Schut M, Abstract INNOVATION PLATFORMS MARCHICE, MARCHINE URDING KORDIN DEVELOPMENT Guidelines for Innovation Platforms in Agricultural Research for Development RAPID APPRAISAL OF tard billather and Wenny's Mis-TOTAL COLUMN RWANDA through during any flow the Place Terror tarban enigning and implementing of for Developer



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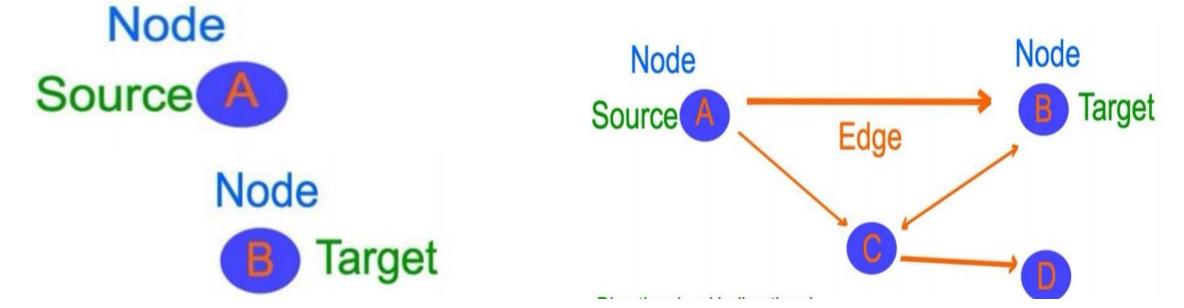
for Greater Development Effectiveness in the Near East. North Africa. **Central Asia and Europe**



What is Social Network Analysis (SNA)?

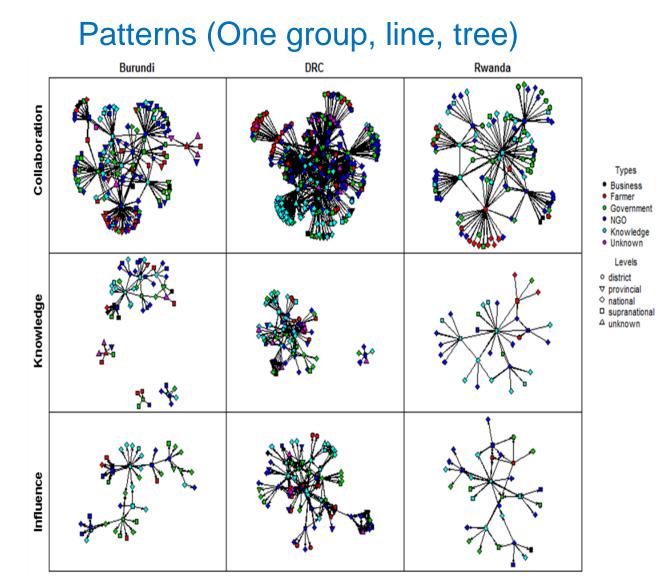
Nodes (Person, Project or Innovation)

Edges (Collaboration, knowledge exchange)

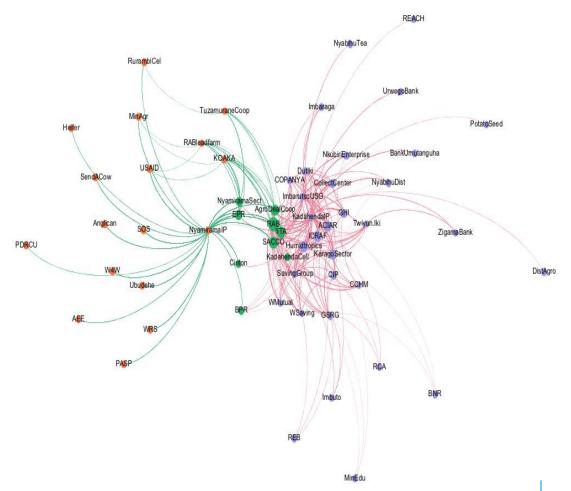




What is Social Network Analysis (SNA)?



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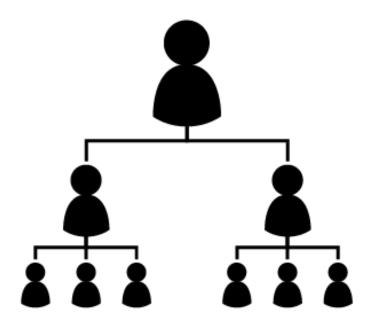


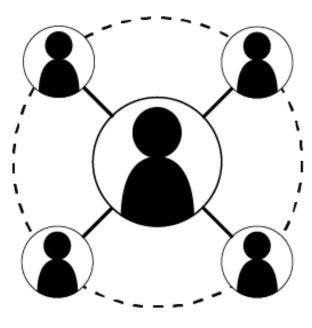


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Why SNA?

Individual in a group









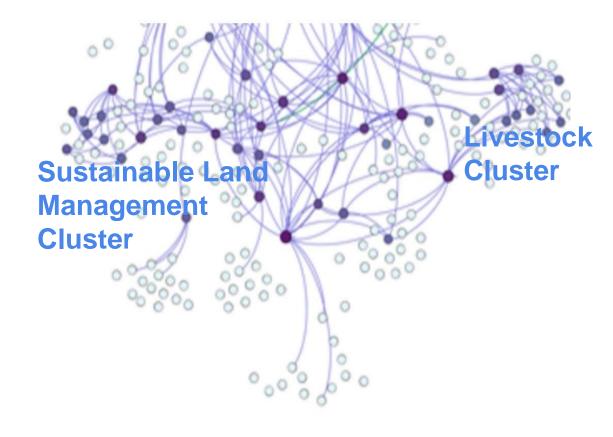


Connections matter

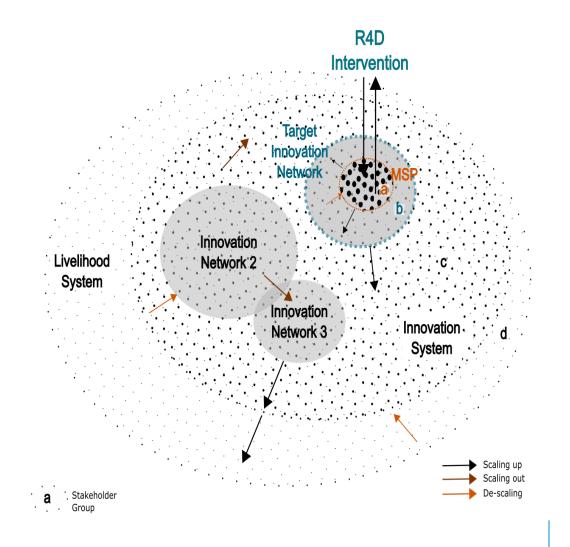
Factors and variables		Incumbents staying (Leave: 0, Continue: 1)						N	New stakeholders joining (Incumbent: o, New: 1)					
		Collaboration		Knowledge exchange		Influence	e spread	Collab	oration	Knowledge ex- change		Influence spread		
		Exp (ß)	Wald	Exp (β)	Wald	Exp (β)	Wald	Exp (β)	Wald	Exp (β)	Wald	Exp (ß)	Wald	
Innovation	Number of			.85+	23.9	.93+	74-9							
characteristics.	Number of connections at ti	3.8+	54	2.64+	9.6			-47+	41.3	.17+	22.9	.28+	19.9	
	Type configuration													
	Business	2.4*	4.9											
	Government	2.1+	6.9					.5+	9.7					
	NGO	1.9+	5.9							-4*	4.1			
	Research	2.7+	8.3							.2+	9.4			
	Scale configuration													
	District	.18+	11.11											
	Provincial	.54+	4.73			.3*	4-3							
Funding provided by MSP	To organizations	1+	13.3	1+	6.3	1.1+	7.7							
	To events	.01+	71.7					38.5+	43.6	196+	52	47.8+	53	
Types of problems argeted by MSP	Change in the number	.63+	11.1					1.4 st	6					

SNA for Design of Knowledge Management Interventions

What to work on?

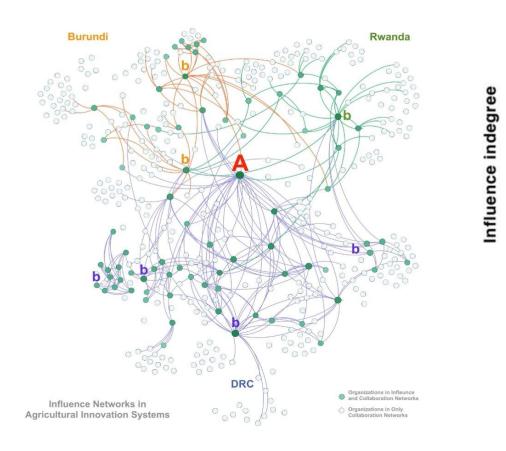


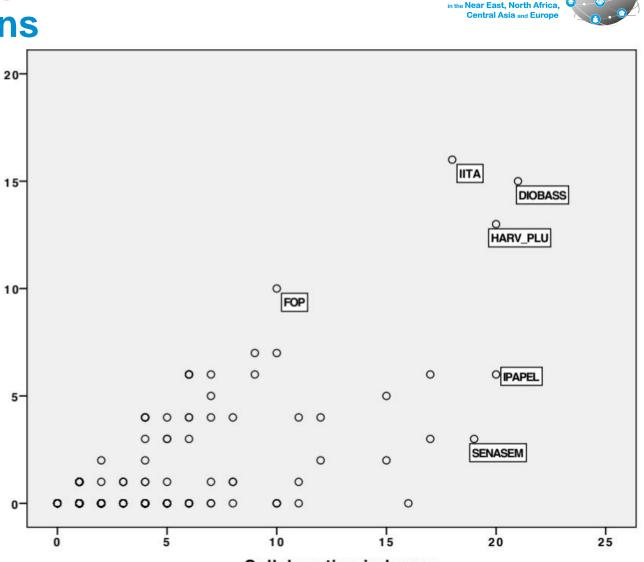




SNA for Design of Knowledge Management Interventions

Who to work with?





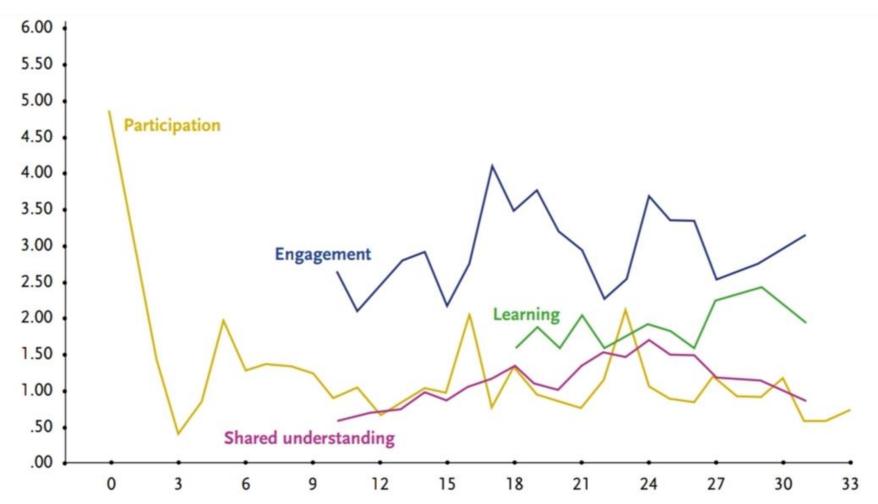
Collaboration indegree

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SNA for Practice of Knowledge Management Interventions

What works?

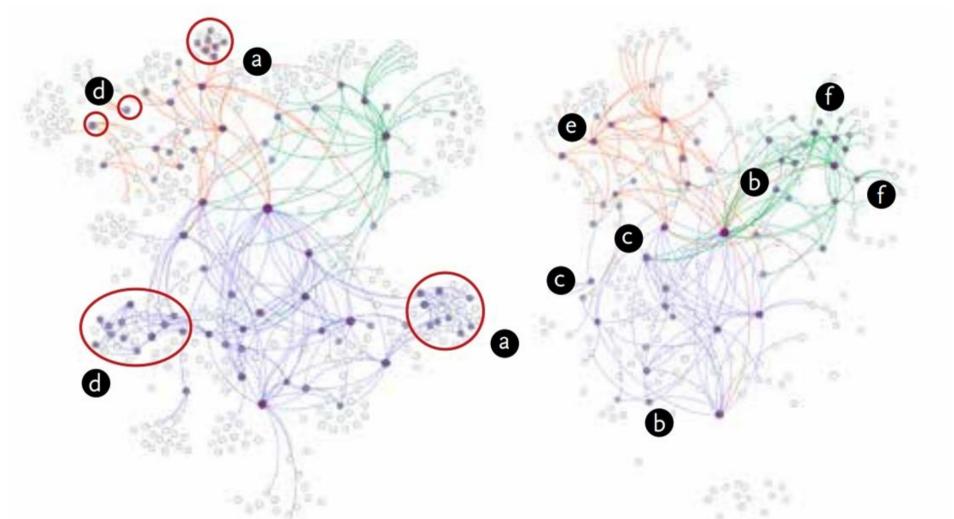




SNA for Practice of Knowledge Management Interventions



What to change?







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Thank You

SKiM





