

Getting the Word Out About Agroforestry

A Case Study on Knowledge Transfer in Western Kenya

By Claire LePage Morgan
MPA Candidate, UNC-Chapel Hill

Roadmap

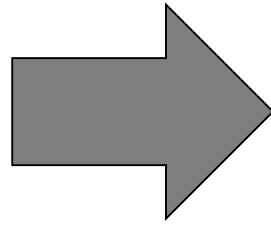
- Research Question
 - Background
 - Methodology
 - Literature
 - Findings
-

Research Question:

What are the most effective methods of transferring information from a research institution to the field?



**World
Agroforestry
Centre**



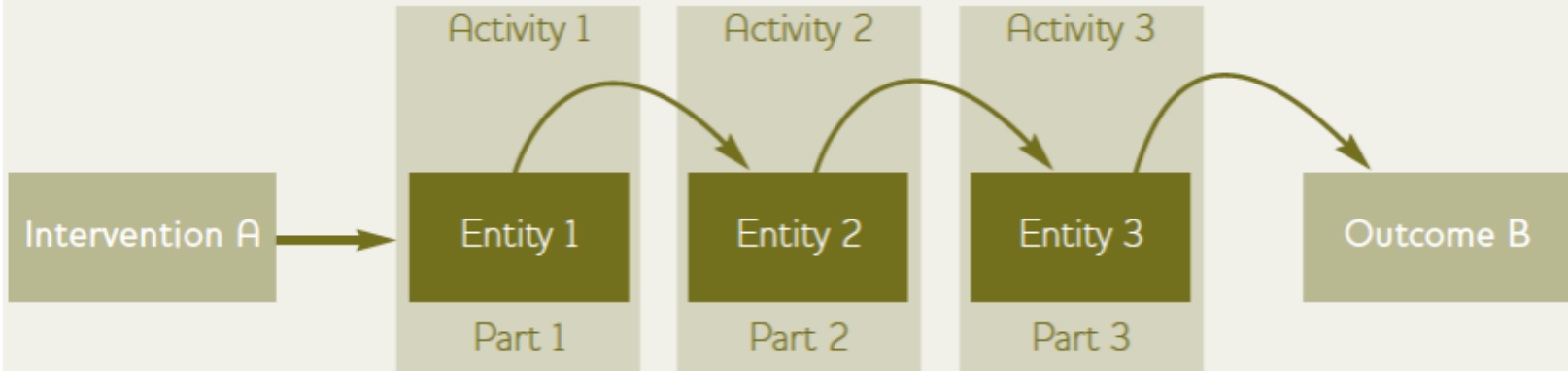
VI-AGROFORESTRY

Methodology



Process Tracing

Figure 2 A causal mechanism in process tracing



Source: Adapted from Beach and Pedersen (2013).

Semi-Structured Interviews

Organization:	Total Number of People Interviewed:
Vi Agroforestry	21
World Agroforestry Centre (ICRAF)	13
Kenya Agricultural and Livestock Research Organization (KALRO)	2
EcoAgricultural Partners	1
Swedish University of Agricultural Sciences (SLU)	3
Canadian Foodgrains Bank	1
Seed Dealers - various organizations	6
Total:	47

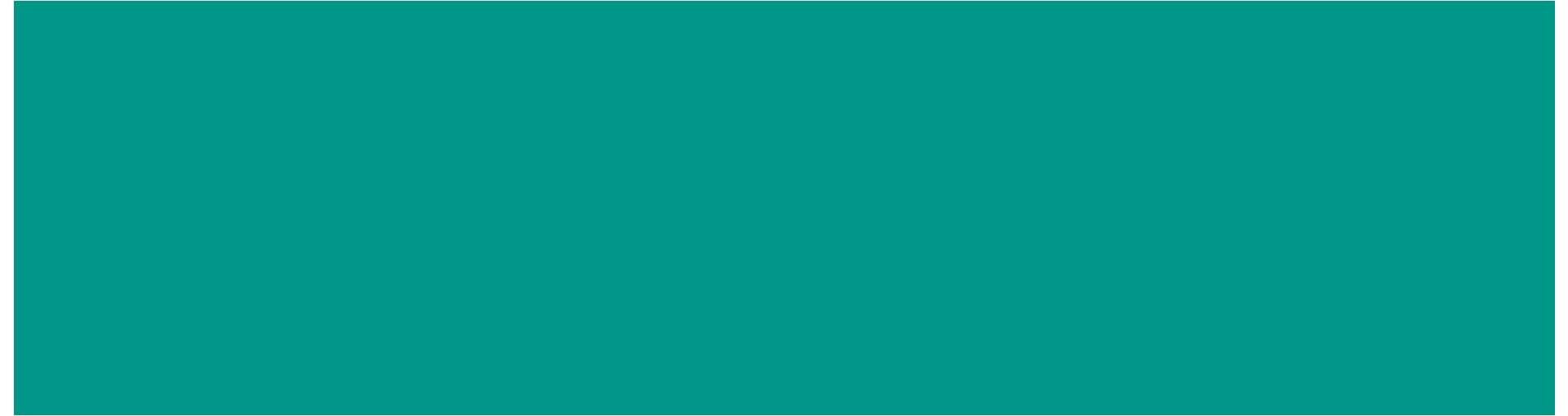
Proposed Causal Mechanism



Causal Mechanism



Literature



Granovetter, *The Strength of Weak Ties*, 1973

“The strategy of the present paper is to choose a rather limited aspect of small-scale interaction - the strength of interpersonal ties - and to show, in some detail, how the use of network analysis can relate this aspect to such varied macro phenomena as diffusion, social mobility, political organization, and social cohesion in general” (pg 1361)

Granovetter, *The Strength of Weak Ties*, 1973

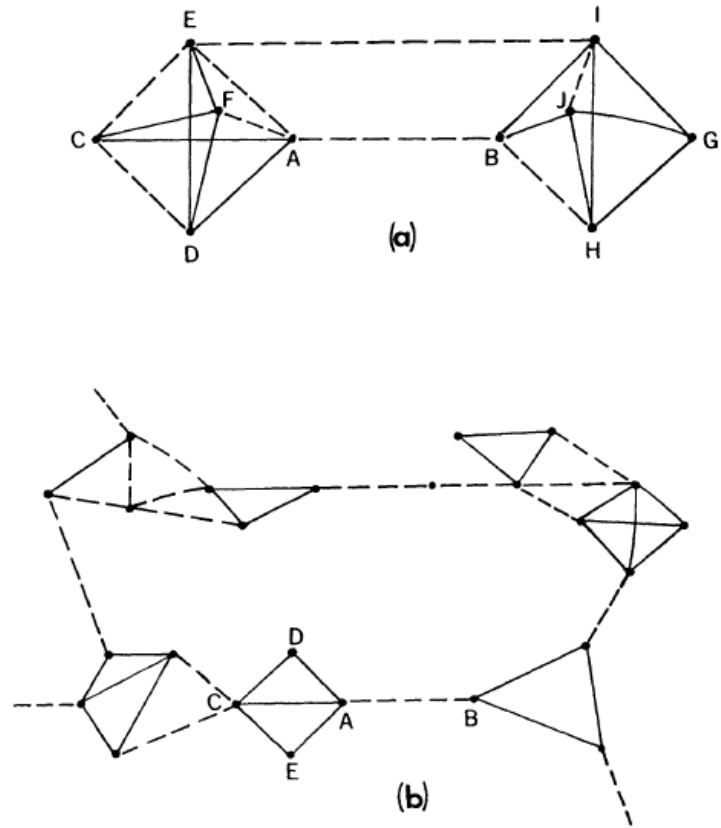


FIG. 2.—Local bridges. *a*, Degree 3; *b*, Degree 13. ——— = strong tie; - - - - = weak tie.

**Jack,
*The Role, Use and
Activation of Strong
and Weak Network
Ties: A Qualitative
Analysis,*
2005**

“In reality, it would seem that the usefulness of a network is dependent upon the strong ties that form the network. Strong ties can remain latent and dormant until re-activated. Nevertheless, even inactive ties remain within the network as latent knowledge and resources.”
(pg 1254)

Levin & Cross, *The Strength of Weak Ties You Can Trust,* 2004.

“First, we show that benevolence- and competence-based trust mediate the link between strong ties and receipt of useful knowledge. . .

Second, once we hold constant these two perceived trustworthiness dimensions, we uncover the benefit of weak ties to the receipt of useful knowledge. . .

Third, we show that while benevolence-based trust improves the usefulness of both tacit and explicit knowledge exchange, competence-based trust is especially important for tacit knowledge exchange” (pg 1486)

Mitton et. al., 2007

- Found value in relationships that had built up trust over time (pg 737)
- Found value in reports with “clearly worded recommendations” (pg 738)
- Found value in face-to-face exchanges (pg 754)

Pentland et. al., 2011

- Found value in collaboration between nurses and researchers
- Found value in “specialist knowledge brokers” to connect researchers, —nurses, and decision-makers (pg 14)

Mitton et. al., 2007

“ Key Knowledge Transfer and Exchange (KTE) Strategies Identified in the Literature

- Face-to-face exchange (consultation, regular meetings) between decision makers and researchers
- Education sessions for decision makers
- Networks and communities of practice
- Facilitated meetings between decision makers and researchers
- Interactive, multidisciplinary workshops
- Capacity building within health services and health delivery organizations
- Web-based information, electronic communications
- Steering committees (to integrate views of local experts into design, conduct, and interpretation of research)” (pg 744)

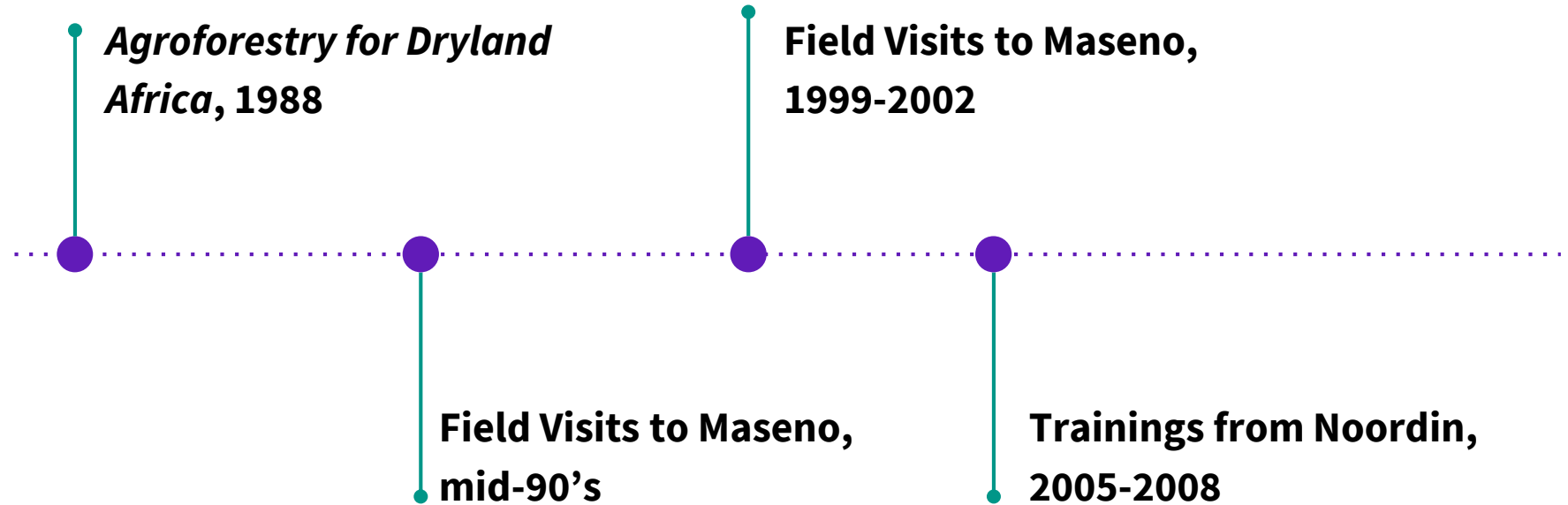
Findings



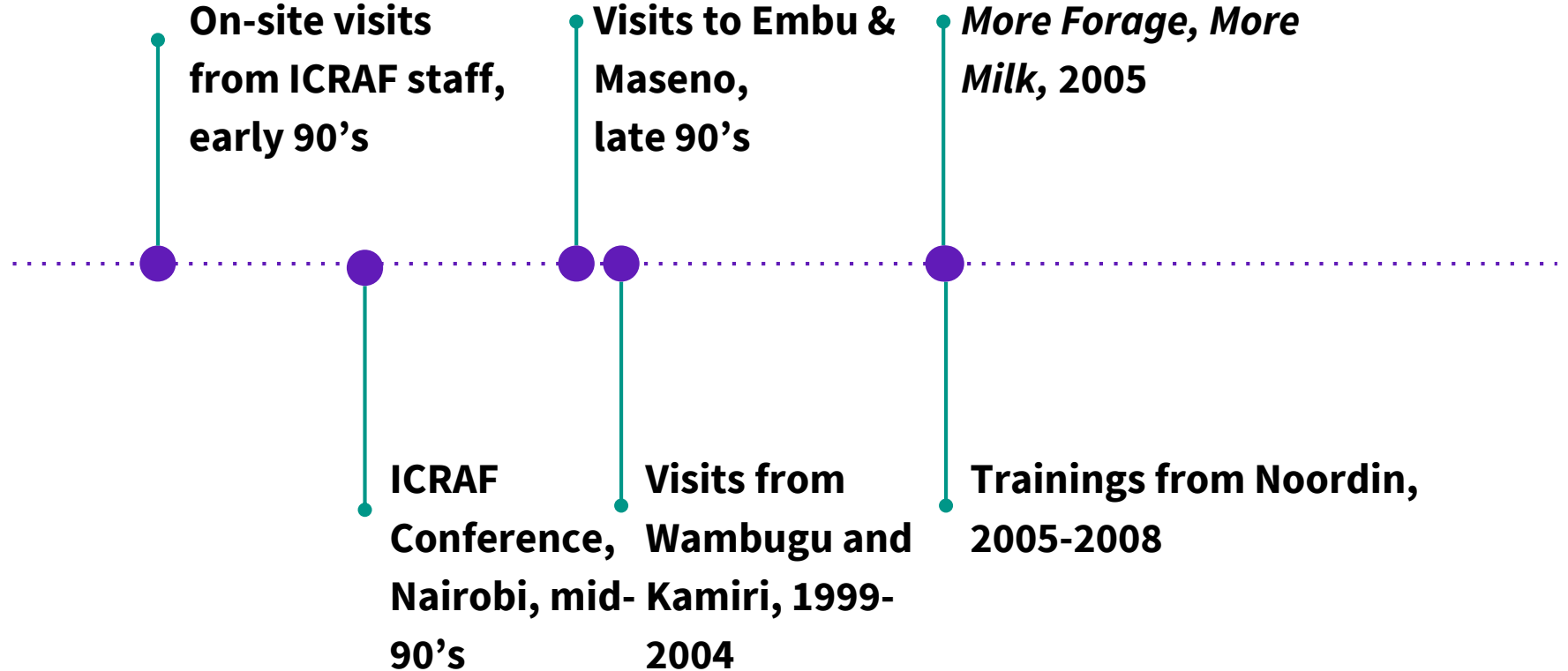
Evidence for Knowledge Transmission in Three Primary Categories:

Program Element	Evidence for ICRAF-CGIAR Research Contribution?	Evidence ICRAF research was transmitted to Vi?	Evidence Vi promoted the research in the project area?	Hypothesis:
Fodder Shrubs	Doubly Decisive	Doubly Decisive	Doubly Decisive	Confirmed
Improved Fallows	Doubly Decisive	Doubly Decisive	Doubly Decisive	Confirmed
Alley Cropping	Doubly Decisive	Doubly Decisive	Doubly Decisive	Confirmed

Information Transfer on Improved Fallows



Information Transfer on Fodder Shrubs



Information Transfer on Alley Cropping

**KEFRI training in
Nairobi, 1993**

**ICRAF trained Vi
staff in Kitale on
alley cropping,
1994**

**Training at
Maseno,
early 90's**

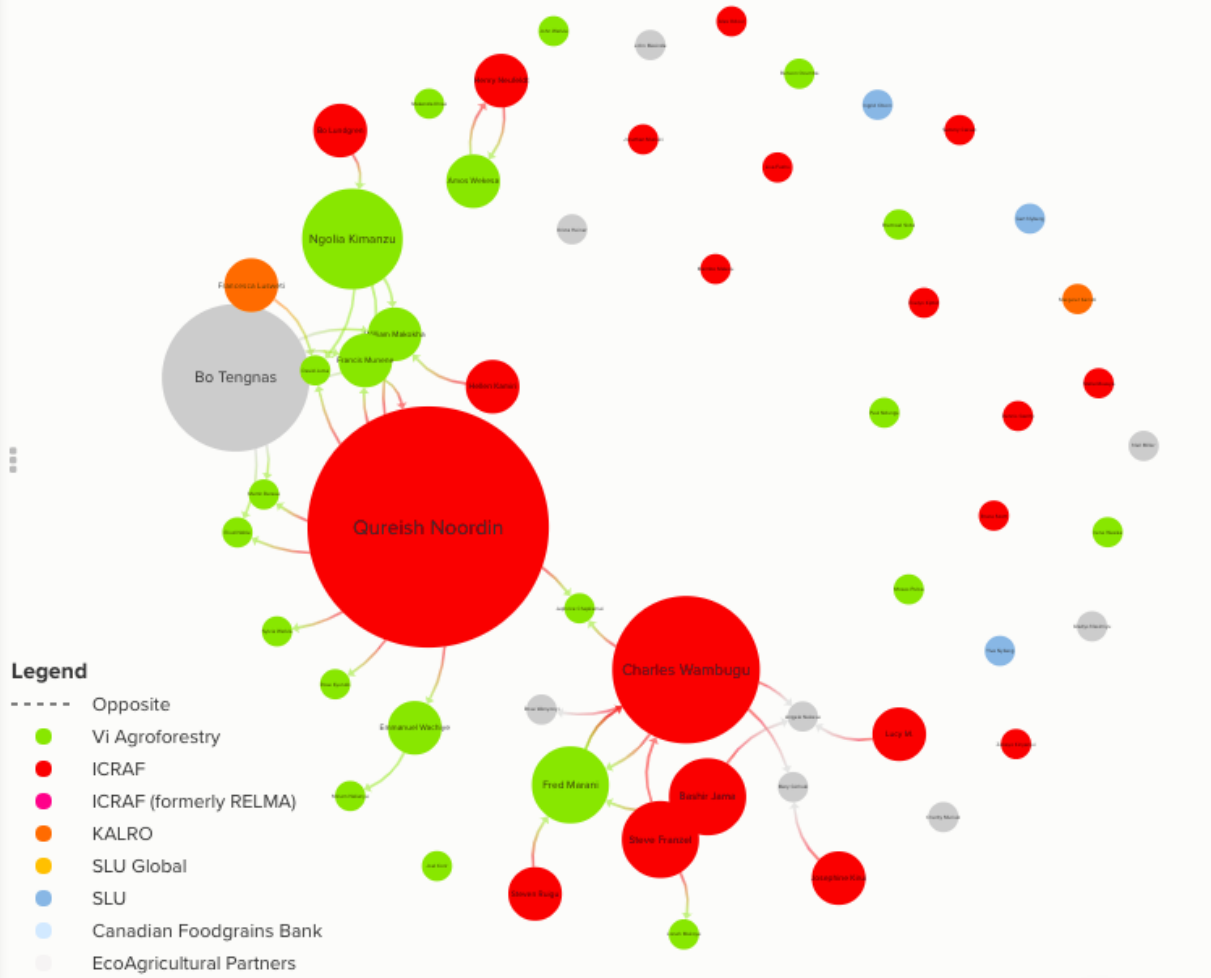
A Change In Strategy

“ICRAF understands the encouragement by the Science Council for us to **shift our capacity-building towards research** . . . ICRAF’s MTP 2007-2009 reflects that we understand and accept the rationale for this evolution in our mission.”

--ICRAF Medium Term Plan 2007-2009, pg 7

Interview Map

Size of circles represents how many other individuals named a person as a source of new information

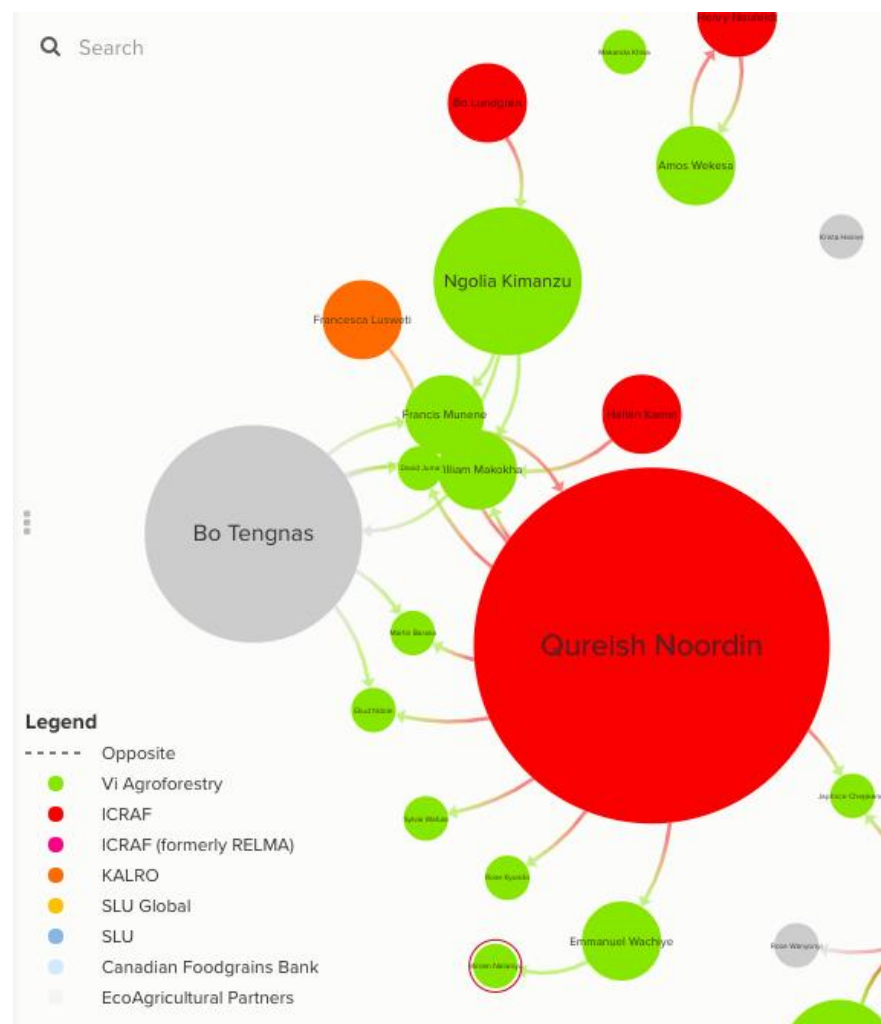


Map Detail 1

Mr. Noordin worked for ICRAF from the early 90's - around 2008, and then acted as a consultant through 2013

Mr. Tengnas was a manager at Vi in the 80's, and worked as a consultant for ICRAF in the 90's and 2000's. He wrote many of the manuals that Vi staff cited as being helpful.

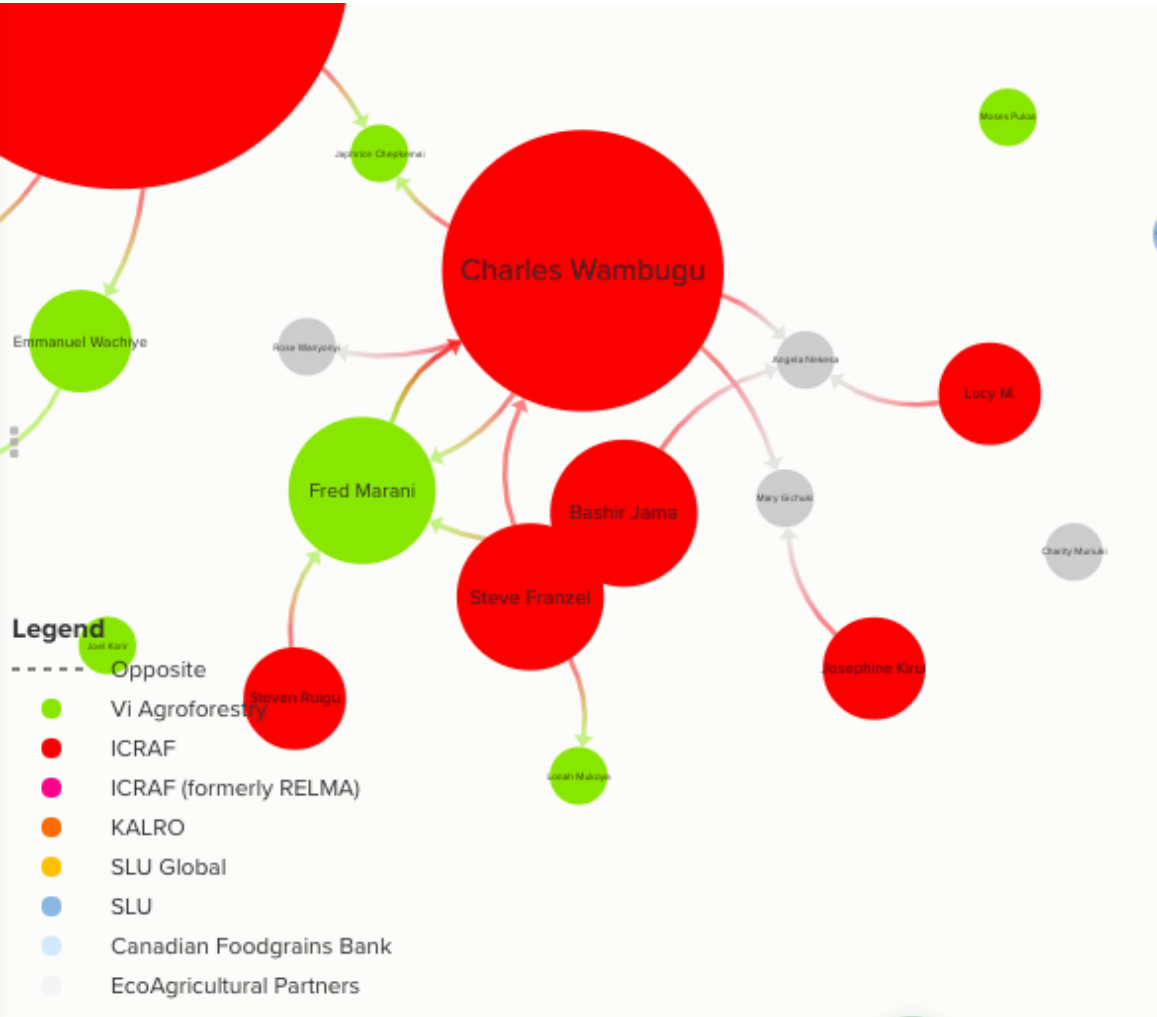
Mr. Kimanzu started as a manager at Vi in 1987, and is still employed with them in Sweden.



Map Detail 2

Mr. Wambugu was employed with ICRAF from 1998 - around 2008 as a Dissemination Officer on the topic of fodder shrubs.

Many of the other ICRAF individuals in this cluster are researchers and managers who were long-term employees of ICRAF.

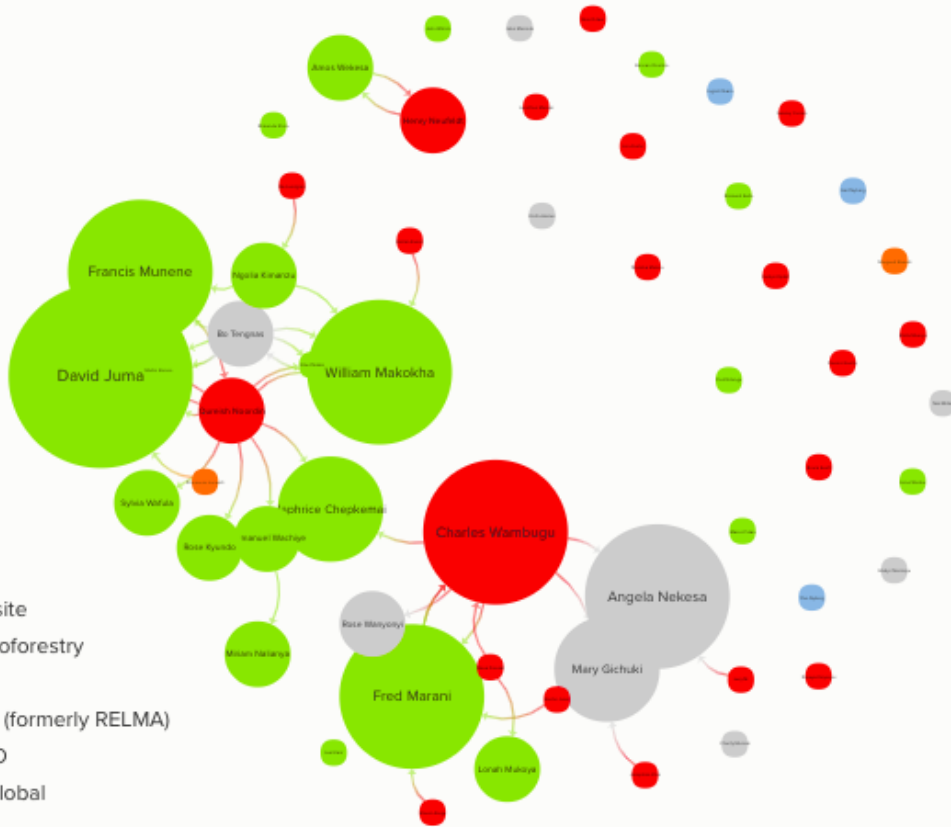


Interview Map 2

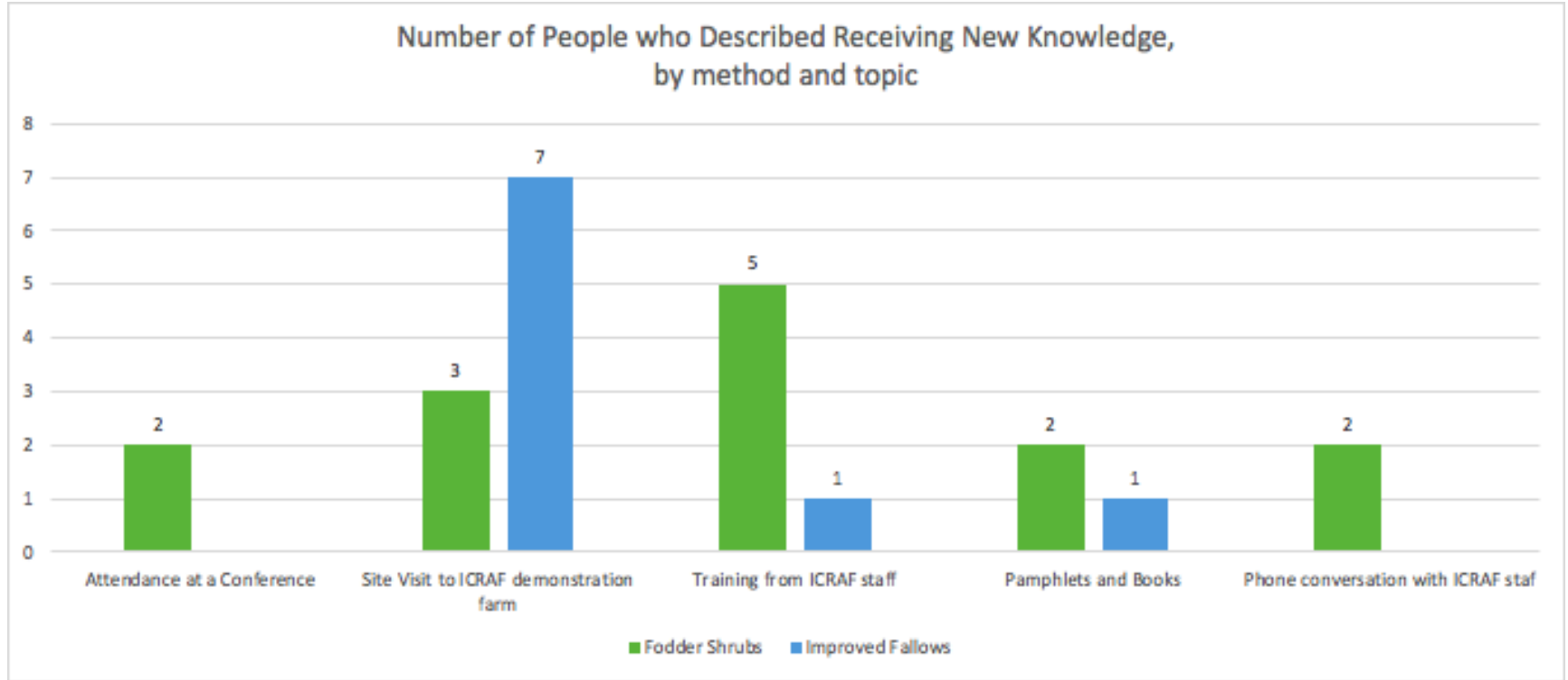
Circles are sized according to how many times individuals were listed as receivers of new information

Legend

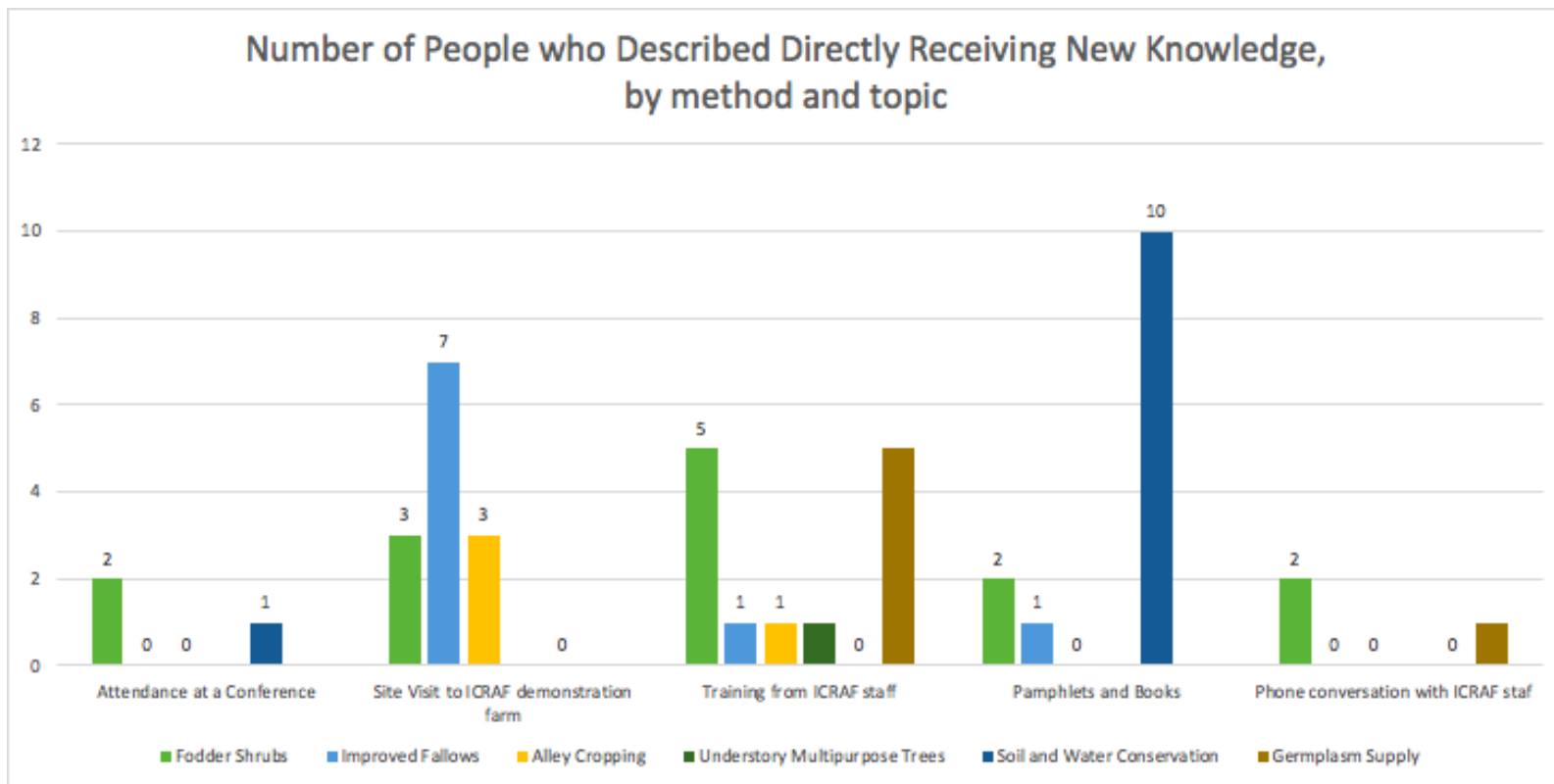
- Opposite
- Vi Agroforestry
- ICRAF
- ICRAF (formerly RELMA)
- KALRO
- SLU Global
- SLU
- Canadian Foodgrains Bank
- EcoAgricultural Partners



Methods of Knowledge Transfer



Methods of Knowledge Transfer, Expanded

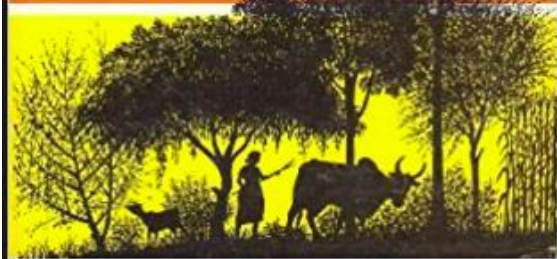




ICRAF Science and Practice of Agroforestry

AGROFORESTRY IN DRYLAND AFRICA

D. ROCHELEAU
F. WEBER
A. FIELD-JUMA



TECHNICAL HANDBOOK No. 35

Useful trees and shrubs for Kenya

Edited by Patrick Maundu and Bo Tengnäs
Principal illustrators: Nicholas Muema and Ann Birnie



TECHNICAL HANDBOOK No. 33

More forage, more milk

Forage production for small-scale zero grazing systems



Aichi Kitayli
David M. Miano
Sandra Mwebaze
Charles Wambugu



Findings

- This case study is in line with Levin & Cross's finding that competence-based trust is important for tacit knowledge exchange. It's also in line with Jack's finding that strong ties are critical to a useful network
- Suggests that organizations should invest in retention of long-term trainers and production of audience-specific literature to get the word out.

Discussion Questions

- If we were to do a similar study with the people in this room, what would you say were the ways that you have transmitted or received new information?
- What's the last new thing that you learned and put into practice? How did you learn it?
- What do you think we can do to build trust between trainers and practitioners in this new technology-heavy environment?

Thank you!