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Transforming the Kenyan Dairy Feeds System to Improve Farmer Productivity and Livelihoods

A SCALE CASE STUDY

KENYA

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The stakeholders of the Kenyan Dairy Enriched-Feeds System who are working together to transform their sector, their economy, and their lives.

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Across the world development practitioners are faced with a common challenge: how to scale up activities to reach thousands of women instead of dozens, tens of thousands of farmers instead of hundreds, and millions of babies instead of thousands? **SCALE**, **System-wide Collaborative Action for Livelihoods and the Environment**, is a communications-driven management approach that results in greater impact at scale, creating social capital, strengthening governance, and increasing sustainable economic growth and livelihoods.

Fodder Shrubs: Enriching the Dairy Feeds System, Improving Lives

SUMMARY

WHAT: Agricultural Partnerships for Productivity and Prosperity Project (AP³) demonstration of the application of SCALE (System-wide Collaborative Action for Livelihoods and the Environment) to "Enriched-feeds for Improving the Productivity and Incomes of Small-holder Dairy Farmers."

WHERE: Central Highlands of Kenya

DURATION: One Year (February 2006–March 2007)

RESULTS: A strengthened dairy enriched-feeds system through:

- Increased social capital, networks, and communication.
- Reported sales of seeds and seedlings from only one-third of the KATRESNO seed dealers would support an estimated 112,000 farmers to adopt the fodder shrub technology. In one year, SCALE had more than tripled the number of farmers ICRAF had reached in the previous eight years.
- Creation of the first Kenyan national fodder shrub seed dealer association that would provide a viable private sector partner in seed distribution and extension services—a major barrier to scaling up the adoption of fodder shrubs in the past.
- Involving the media as partners from the start resulted in extensive unpaid media coverage on radio, television, and newspapers.

Imagine a technology that, in less than two years, could almost double farmers' incomes in poverty stricken East Africa. Imagine that this technology could improve 600,000 small-holder dairy farmers' productivity and livelihoods in Kenya alone. Imagine that you had worked for eight years and had only reached 48,000 of those farmers.

That was the situation the International Center for Research in Agro-Forestry (ICRAF) was facing in 2005 when they first partnered with the United States Agency for International Development and its Agricultural Partnerships for Productivity and Prosperity (AP³) Project. For more than two decades, ICRAF had been working in eastern Africa to respond to the challenges facing small-holder dairy farmers in raising healthy livestock. They had found that drought-resistant supplemental fodder shrubs, such as *Calliandra calothyrsus, Leucaena trichandra,* and *Morus alba* (mulberry), improve both the quality and quantity of dairy products.

In a country where the average income is around $300.00 (USAID, 2007), fodder crops can generate $100.00 per cow per year from increased milk production, dramatically increasing revenues for farmers, milk collectors and processors, and other dairy value chain stakeholders. Fodder shrubs also provide other benefits to farm families including firewood, natural fencing, and erosion control.

However, ICRAF had found that despite the great potential that fodder shrubs offer, "knowledge of and access to quality planting materials was a major constraint and institutional mechanisms for widespread adoption were limited."[1]

> We had plenty of what we call in agroforestry "islands of success." By that I mean we work in a very small area and farmers adopt a practice. We work with them very closely. But then the big problem is how to communicate, how to spread the use of these practices across very large areas.
>
> —STEVE FRANZEL, *Principal Scientist–Agricultural Economist, ICRAF*

[1] Steve Franzel, et al., *Fodder shrubs for improving incomes of dairy farmers in the East African highlands* (O'Mara, F.P., Wilkins, R.J., and Mannetje, L.XX International Grassland Congress: Offered papers. Wageningen Academic Publishers. Wageningen, The Netherlands, 2005) p. 31.

Taking the Kenyan Dairy Enriched-Feeds System to Scale with SCALE

Fodder shrubs were first introduced in the East African highlands in the early 1990s as a solution to a problem that has plagued dairy farmers for generations—the lack of an inexpensive and plentiful source of high-protein animal feed. These shrubs provide reliable fodder year-round, are easy to grow, and improve soil fertility by fixing atmospheric nitrogen. They can withstand repeated pruning and do not compete with food crops.

Shrubs are planted along farm and field boundaries, around homesteads, and across contours to help curb soil erosion, making it an appropriate technology for smallholder dairy farmers who are constrained by resource availability, especially land. The plants mature in about twelve months, after which they can be fed to livestock for many years.

Fodder shrubs allow farmers to save money that would otherwise have been used to purchase dairy meal and improve soil for better yield, reducing food insecurity. It is estimated that supplemental fodder shrubs generate an additional $100 per cow per year from increased milk production.

(http://www.worldagroforestrycentre.org /accessed 4/07)

ICRAF invited the AP³ project to work in Kenya because it believed the dairy feeds system and wide-spread adoption of fodder shrubs would be fertile ground for a demonstration of a new communication methodology called SCALE—System-wide Collaborative Action for Livelihoods and the Environment. SCALE had only recently been developed as a transformational methodology based on lessons learned from the thirteen-year, thirty-country experience of the USAID Environmental Education and Communication Project (GreenCOM). SCALE's systems-wide social change framework, participatory management process, and set of tools interweave governance, economic, environmental and social interests in a way that manages and conserves resources while also creating new economic opportunities (see box on page 7).

ICRAF believed that the SCALE systems approach could take the fodder shrub technology to scale, improving the livestock feeding system and increasing livelihoods for thousands of low-income smallholder dairy farmers and their families. The challenge was to demonstrate what could be achieved with the SCALE approach in only one year with:

Support from USAID:

- Approximately 150, 000.00 for in-country costs, including local staff.
- Three local full-time staff—two technical and one administrative.
- Technical assistance from the AP³ team through e-mail, phone calls, and intermittent field visits.

Support from ICRAF:

- 80% time of a senior Dissemination Scientist/Team Leader and 25% time of an Economist and an Agricultural Ecologist.
- $100,000 in-kind.

WHAT IS SCALE?

SCALE is a systems approach to program management that catalyzes simultaneous action:

- Among multiple players from multiple sectors (economic, environmental, government, and social)
- At multiple levels (national, regional, community, and family)
- Supporting multiple behavioral and technological options
- Through the application of multiple social change methodologies

The SCALE process provides a road map to initiate, implement, and evaluate this system-wide development approach. Its components—Map the Context, Catalyze Coalitions and Partnerships, Create Collaborative Sustainable, Solutions, Act, and Value—are briefly described below.

The SCALE™ Process

MAP THE CONTEXT

Define and understand the larger "system" around a development goal by identifying the related environmental, economic, governance, and social issues and the multiple stakeholders related to an issue.

CATALYZE COALITIONS AND PARTNERSHIPS

The Whole-System-in-the-Room (WSR) planning workshop brings 100 or more stakeholder representatives from the four sectors together to collectively define their common vision and commit to actions to achieve their shared goals. This puts the stakeholders in the driver's seat from the start and strengthens and expands existing social networks to accelerate the process of going to scale.

CREATE COLLABORATIVE AND SUSTAINABLE SOLUTIONS

Generate options and negotiate solutions that address the issues identified in Map the Context. By encouraging collaborative actions, SCALE builds the social capital needed for sustainable change.

ACT

Strengthen stakeholders' capacity to carry out solutions through the simultaneous application of multiple social change methodologies—mass communication, civil society participation and mobilization, advocacy, social marketing, education, organization development, and conflict resolution.

VALUE

Monitor progress, measure impact, and reintroduce "lessons learned" in a continuing process. Use social network analysis to understand changes in vertical and horizontal communication and relationships throughout the system and to identify leverage points.

SCALE on the Ground

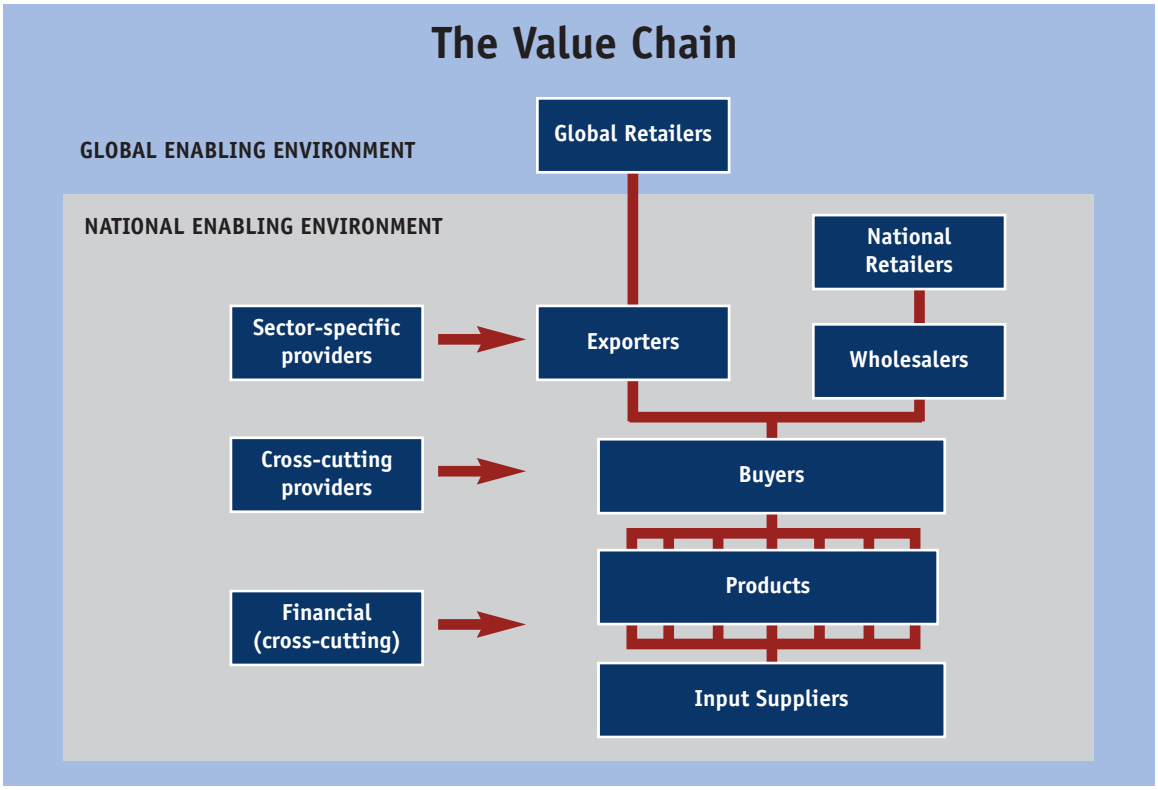
MAP THE CONTEXT
(February 2006)

> Too often there are too many feasibility reports and too much discussion about where the needs are. Lots of very smart people standing around the pool discussing for hours whether or not the water is cold while the rest of the party, the real PARTY, is swimming and splashing around, getting on with it... Development projects need to find ways to support the movers and shakers as they attract other movers and shakers.
>
> —PATRICK PAPANIA,
> *AP³ Project Director*
> *E-mail Communication from Nairobi, March 2006*

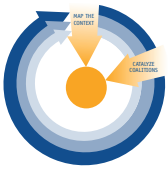
The lessons learned from the first SCALE demonstration experience in Morocco and the extensive knowledge base and professional connections of ICRAF made the Mapping the Context process move forward quickly and efficiently. In just a few weeks, a nine-person Advisory Committee was formed with representation from government, private sector, NGOs, community-based farmer organizations (CBOs), donors, and agricultural research organizations. The committee immediately started to work mapping the context and planning for the Whole-System-in-the-Room (WSR) Workshop.

Their most challenging decision was the "frame" or task of the workshop—how broad or narrow should it be? Some committee members thought the issue should be strengthening the Kenyan dairy sector as a whole while others wanted to focus on promotion of fodder shrubs. After much discussion, the committee decided the system they wanted to bring together was the "Enriched-feeds for Improving the Productivity and Incomes of Smallholder Dairy Farmers".

The committee then worked together to identify the range of stakeholders connected to this task. Getting the right mix of stakeholders representing all four sectors—private, civil society, governmental, and environmental—would be critical to the success of achieving system-wide change. To assist them in understanding the system, the committee analyzed the dairy value chain—from milk production to processing and marketing of milk and dairy products. The final list of stakeholder groups invited to the WSR is illustrated on page 10.



Kula Olaf, et al., *Globalization and the Small Firm: An Industry Value Chain Approach to Economic Growth and Poverty Reduction* (Washington, DC: USAID, 2006), p. 13.



CATALYZE COALITIONS AND PARTNERSHIPS
(March 2006)

> When I first arrived at the workshop, I didn't understand why I had been invited. There were so many important people. So I just listened. And by the end of the first day I realized— they couldn't do anything without me!
>
> —JUMA GICHOH,
> *Small-holder Dairy Farmer*

The "Enriched-feeds for Improving Productivity and Livelihoods of Small Holder Dairy Farmers Workshop" brought together more than one hundred participants from a diverse cross section of stakeholders. Many of these participants did not know each other, even though they were working in the same dairy value chain. Participants quickly learned that this was not just another traditional meeting with "expert" presentations and lectures. Within the first hour, they were on their feet, collaboratively creating a visual timeline of their common past the personal, national, and global events that had shaped the current dairy sector.

Over the next two days, participants continued to self-manage a series of exercises that helped them collectively analyze the present, including global trends, develop ideal future scenarios, and identify seven "common-ground" goals. Each group then developed a short-term (three-month) and medium-term (three-

ENRICHED-FEEDS FOR IMPROVING THE PRODUCTIVITY AND INCOMES OF SMALLHOLDER DAIRY FARMERS WHOLE-SYSTEM-IN-THE-ROOM PARTICIPANTS

year) action plan to achieve these goals. Finally, participants stood in front of their peers and made commitments—personal and organizational—of what they would do to implement these action plans. More than 60 people stood up to make personal commitments, delaying lunch by more than two hours. For example, the media stakeholder group committed to increasing the number of stories on dairy enriched-feeds and improving their linkages with a variety of stakeholders, while the milk processors committed to increasing purchasing and marketing of fodder-enriched milk. The microcredit stakeholder group committed to creating awareness about their services in the dairy industry while extensionists committed to conducting training of trainers workshops with NGOS and CBOs. These commitments and the relationships that were forged during the workshop would be the engine for transforming the small dairy farmer enriched-feeds value chain.

It's important to note that the workshop helped participants find common ground, not to resolve conflict. As part of the process, participants also developed a list of "Not Agreed On" topics, such as "regulation of commercial feed" and "proper and better services from the government"—topics that would not be resolved in this forum.

Dairy Enriched-feeds System WSR Common Ground Goals

1. Improve credit accessibility with affordable and accessible farmer-friendly credit facilities.
2. Improve communication about enriched-feeds through more involvement of the media in helping to disseminate agricultural information and easy access to adequate and timely information related to markets, inputs, technological information, etc.
3. Improve marketing with stable and efficient marketing systems.
4. Scale up adoption of fodder shrubs and other enriched-feeds through organized distribution, propagation, and promotion.
5. Improve research and extension services by strengthening extension provider and farmer group capacity on improved feeds production, management, and utilization, and expanding information dissemination.
6. Improve policy development through more participatory policy formulation and implementation.
7. Strengthen dairy enriched-feeds system stakeholder linkages and collaboration.

The Whole-System-in-the-Room was very important. This is where we were able to map the real context of the issue. That's when we knew the depth and the breadth of that issue. And that's when we realized who in that system could be able to solve the issue. During the workshop, people were able to identify their common ground or common objectives. And from the common objectives, people were able to identify the common solutions, the sustainable solutions. And from this, people made commitments of how to solve the problems.

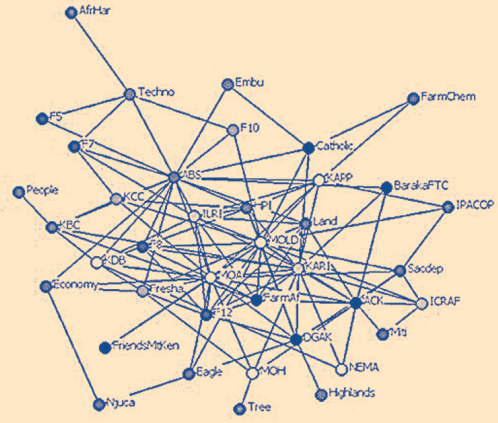
—CHARLES WAMBUGU,
Dissemination Scientist and SCALE/ICRAF Team Leader

SOCIAL NETWORK ANALYSIS
A PROMISING PARTICIPATORY PLANNING TOOL

One of the innovations introduced to the WSR methodology was the use of social network analysis as a participatory planning tool. Before the WSR, participants had completed a Social Network Analysis Collaboration Rating Form that asked them a series of questions about their organizations' relationships with all of the other organizations attending the WSR. This information was illustrated in sociograms and distributed to the participants after they had decided on their common-ground goals, but before they began working on their action plans.

In stakeholder groups, participants were asked to analyze "Who are you currently connected to? What relationships would your stakeholder group need to strengthen in order to improve the dairy enriched-feeds system? Why are these relationships important?" This analysis helped participants recognize several important issues that strengthened their short and long-term action plans, for example:

- Universities needed to expand their networks and link more with their graduates;
- Dairy processors were too far from farmers in their network relationships;
- Several important stakeholder groups were missing from the WSR, for example the artificial insemination organizations and the Holstein breeding groups; and
- Farmers were not connected enough to the larger system.

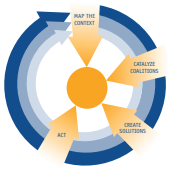


Sociogram of the Dairy Enriched-feeds System in March 2006. The dots represent organizations and the lines represent relationships.

What Makes the WSR Different from Other Participatory Meetings?

Everyone came. There were no technical presentations, and everybody's idea was valued. So this helped people to speak out. They gave out ideas that would be valuable to the entire system. This also helped in the sense that we could identify with the farmers, get to know their needs, and also get to hear their solutions.

—ESTHER KARANJA,
SCALE/ ICRAF Team member



CREATE COLLABORATIVE, SUSTAINABLE SOLUTIONS AND ACT
(October 2005 – September 2006)

Following the workshop, a variety of activities began to happen simultaneously, many without the financial or technical support of the SCALE/ICRAF team. The WSR had put the stakeholders in the driver's seat. They were now taking responsibility for the commitments they had made during the workshop and were moving forward with their action plans.

The SCALE/ICRAF team recognized that the project would only be in place for a short time while the dairy feeds system stakeholders would continue to work together to strengthen the sector long after the project was over. They felt strongly that their role was to support the stakeholder action plans and only implement specific activities that were significant leverage points. Finally, they knew that it would be extremely important to "go where the action is"—to be able to respond quickly and flexibly when opportunities arose. They decided to focus on the three common-ground goals where the SCALE/ICRAF team had the most technical expertise and experience:

- Improve communication about fodder shrubs and other enriched-feeds.
- Strengthen stakeholder linkages and collaboration.
- Scale up increased adoption of fodder shrubs and other enriched-feeds.

Improve Communication about Fodder Shrubs and Other Enriched-feeds

The SCALE/ICRAF team used a combination of communication channels and tools to achieve this objective:

- **Simple, low-cost print materials** provided basic information on feeding system topics, especially fodder shrubs, to a variety of audiences.
- **Monthly newsletters** served as the flag bearer for the dairy enriched-feeds network with progress reports, recognition of model farmers, and contact information for fodder shrub seed dealers. These newsletters were published on monthly basis from June 2006 to February 2007 and distributed both electronically and in print.
- **Web presence** also included five articles on "Transformations," a weekly newsletter posted on the ICRAF Web site.
- **Regular phone calls with all stakeholders** to maintain contact and assess needs (part of monitoring and evaluation).
- **An event log** to track stakeholders' collaborative actions.

Strengthen Stakeholder Linkages and Collaboration

> The idea of working together is very important, because you find that we need to have a system that is involving a lot of people, working together towards a common objective. And in this case, we have seen the seed dealers working together, helping in linkages for markets.
>
> —CHARLES GITHAE, *IPACOP (Kenyan NGO)*

Beginning immediately after the WSR, the team began to strengthen horizontal communication (communication *among* the stakeholders, rather than vertically from the project to the stakeholders), collaboration, and networking among the WSR participants and new actors as they became involved. To initiate this process, the team sponsored a series of outreach and networking meetings to increase the involvement of other stakeholders and finalize and implement stakeholder group action plans. This increased the flow of information and relationships within stakeholder groups, as well as exchanges amongst the different stakeholder groups.

To facilitate participation, the workshops were organized into five "regional meetings" where participants from three to four districts converged at a central location. The meetings addressed specific needs of the region and provided a forum for training, sharing experience, enterprise development, and marketing of seeds and seedlings.

Partnerships Produce Mutual Benefits

Dairy processors proved to be powerful partners. The industry had an extensive collection network which was leveraged to distribute information and educate farmers. The dairy industry was eager to get involved, because planting fodder shrubs enabled farmers to produce more high-quality milk.

—GEORGE OBANYI,
ICRAF Communication Officer

To me, if the farmers improve their milk production, it is very, very important to us because we are assured of a constant milk supply. Again, this shrub improves the quality of the milk. And if it improves the quality of the milk, we will be able to improve the quality of our product in the market. So we will encourage them as much as we can to grow these fodder shrubs so that we are also assured of a constant supply of quality milk.

—DAIRY PROCESSOR

The team realized that the media had unique needs and required special attention. Field trips for media representatives gave them first-hand experience with the farmers' challenges and successes using enriched-feeds technologies. After recognizing the growing interest of the media representatives in the issue, the team established an awards program, offering prizes for the best coverage of fodder shrub activity in print, radio, and television. Within weeks, coverage dramatically increased, leading to a series of free "advertising" for the program—articles in newspapers, radio, and television. Several months later, the team held a gala awards dinner and offered modest gifts as prizes, many of which were donated by local businesses.

Enriched-feed specialists were invited to be part of national and local language radio programs. These live broadcasts provided opportunities for listeners to call in to the show asking questions and talking about their experiences with fodder shrubs. Finally, the Kenya Broadcasting Corporation and Citizen TV stations developed documentaries; these that were made into DVDs and VHS and used in workshops, presentations, and other meetings to increase awareness about fodder shrubs. This work with the media—as partners from the beginning with their participation in the WSR—established new relationships between the media and an array of stakeholders that continues to grow and flourish.

Scale Up Adoption of Fodder Shrubs and Other Enriched-feeds

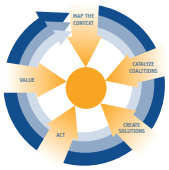
The team strengthened capacity of a number of organizations and individuals through training and guided practice. Workshop topics included fodder shrub production, management, utilization, marketing, and access to micro-credit. The team also organized workshops for farmers and CBO farmer representatives that focused on marketing and distribution of fodder shrubs planting materials. During the first workshop, participants decided to form a seed dealers association—KATRESNO—that would increase promotion, distribution, and marketing of fodder shrub seeds and seedlings and improve members' incomes. Within six months, there were more than 55 members in the association. Finally the Kenyan government and ICRAF had a viable private sector partner in seed distribution and extension services—a major barrier to scaling up the adoption of fodder shrubs in the past.

The Birth of KATRESNO Seed Dealers Association at the Eros Hotel, Nakuru June 2006.

The real actors aren't always present from the outset. These actors are often too involved and committed to what they do to spend time on donor-funded development projects. It is only through implementation of a project from a position of neutrality that we can identify the real leverage points. We can't predict in advance where the greatest action in the system will be or who will really be the strongest partner. If we had depended on an assessment [to identify the players in the value chain] . . .we would never have supported a group of professional seed dealers because one did not exist.

Start working with the system demands and let the real players have a chance to emerge. Support them in actions that they will sustain with or without you. Look for the action spots in the system and do all you can to keep them heated and moving. Actions, even small ones, lead to other actions. Small commitments lead to greater commitments. There isn't time to spend assessing one leverage group in relation to the other. First come, first serve, so to speak. It is often the movement of less powerful leverage points that break the inertia of the more powerful leverage points."

—PATRICK PAPANIA,
AP³ Project Director
E-mail Communication from Nairobi, January 2007

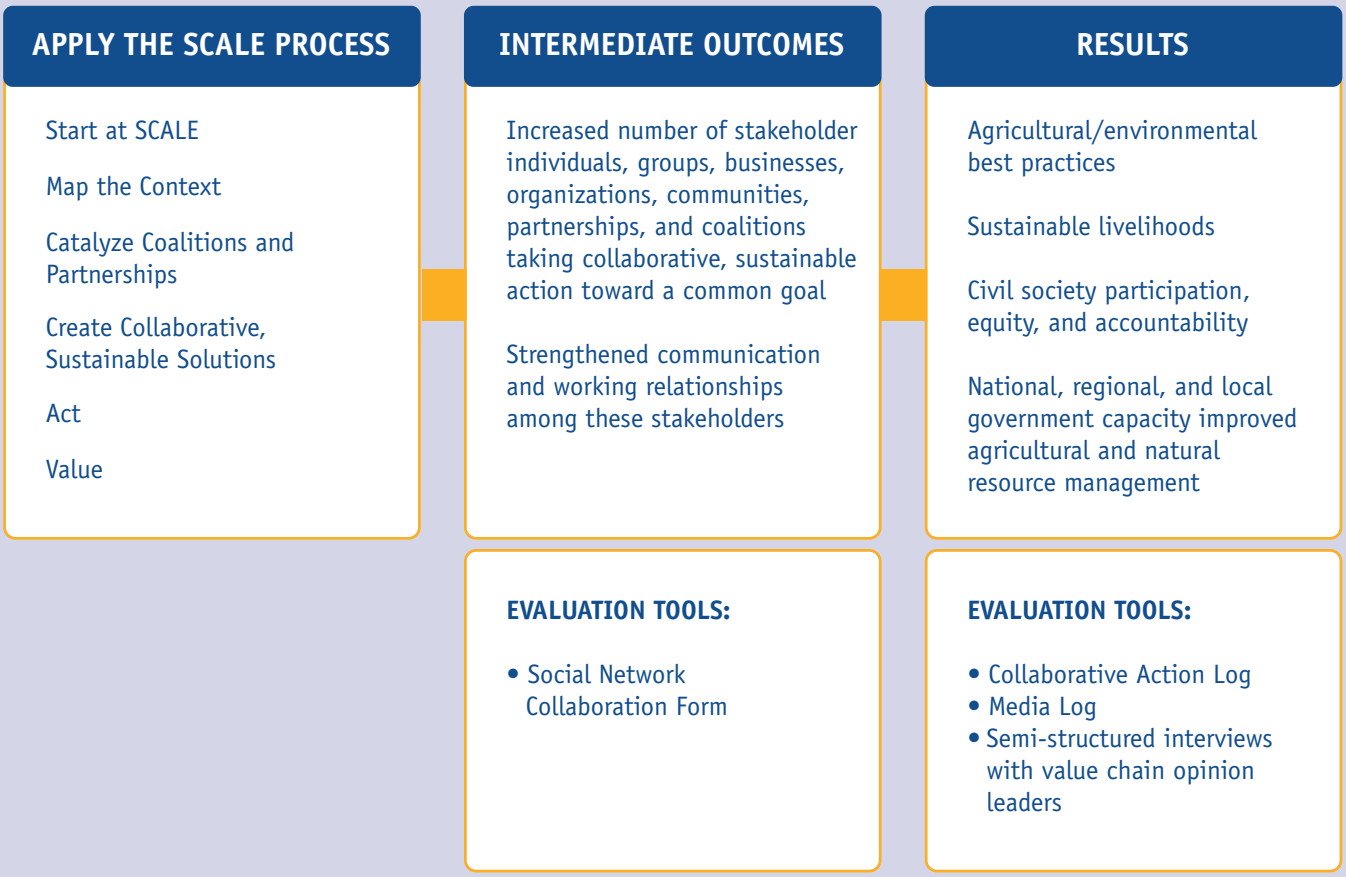


VALUE
(March 2006 to March 2007)

The following SCALE framework graphic illustrates the model that guided the design of the evaluation and the tools that were used to implement it. Due to the short duration of the project (approximately 12 months), the evaluation focused primarily on intermediate outcomes and some short-term results indicators. More time would be needed to measure changes in the impact indicators. Unfortunately, funding was not available to continue the demonstration project.

SCALE FRAMEWORK AND EVALUATION TOOLS

This graphic illustrates the model that guided design of the evaluation.



Evaluation Tools

The following describes the evaluation tools illustrated in the framework graphic:

- **Social Network Collaboration Form** collected information before the March 2006 WSR. Respondents were asked four questions about their organizations' relationship with the other organizations attending the WSR. The first question assessed the type of relationship and the last three questions assessed the degree to which information is exchanged. These data were collected again one year later (March 2007).

- **Collaborative Action Log:** The team kept a running log of stakeholders' collaborative actions as they became aware of them. The log was used to capture new collaborations as they developed, record brief descriptions of each new collaborative action, and which organizations were involved.

- **Media Log:** The team monitored and recorded articles on enriched-feeds that were carried in the print media and broadcast over radio and television. Since some of these were broadcast in local languages, the team identified individuals conversant with these languages to monitor the content and feedback from the audience.

- **Semi-structured interviews** were conducted one year after the WSR. Two members of each stakeholder group were purposely selected based on their active involvement in the sector. The questions focused on what had been accomplished over the past year, what relationships had been strengthened, and what challenges remained.

Results and Lessons Learned

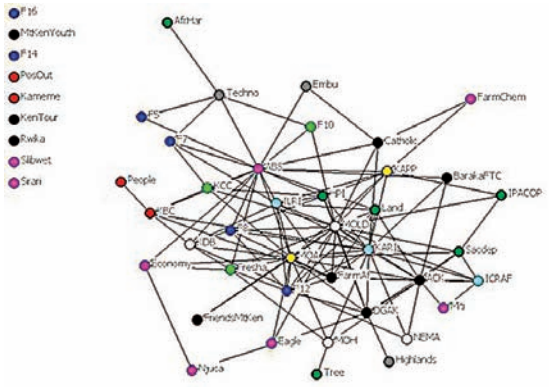
Following are some of the most salient results and lessons learned:[2]

- **Reported sales of seed and seedlings from only one-third of the KATRESNO seed dealers would support an estimated 112,000 farmers to adopt the fodder shrub technology.** In one year, SCALE had more than tripled the number of farmers ICRAF had reached in the previous eight years.

- **Formation of a Seed Dealers Association** was viewed by many stakeholders as an important and significant achievement that will ultimately lead to increased profits among both seed dealers and farmers.

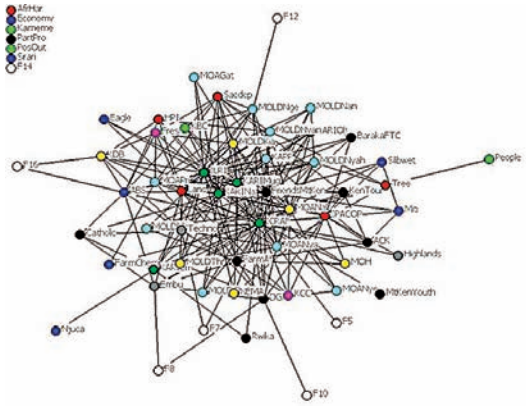
- **Significant changes in the network structure,** as can be seen in the following graphics, occurred in **both the number and strength of relationships among stakeholders,** which increased and created a stronger enriched dairy feeding system and value chain.

MARCH 2006



Relationships among the organizations in the dairy enriched-feeds system in March 2006. Colored circles represent different organizations attending the WSR. Lines between the dots indicate that the two organizations have a "strong" relationship. i.e., they are currently working on projects together.

MARCH 2007

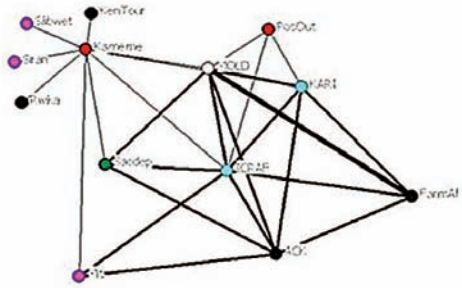


Relationships among the organizations in the enriched dairy feeds system one year later.

[2] Karabi Acharya, et al., *Relationships Matter: Using Social Network Analysis to Evaluate Social Capital in the Kenyan Dairy Sector, Evaluation of the Agriculture Partnerships for Productivity and Prosperity (AP³) Project* (Washington, DC: AED/USAID, 2007).

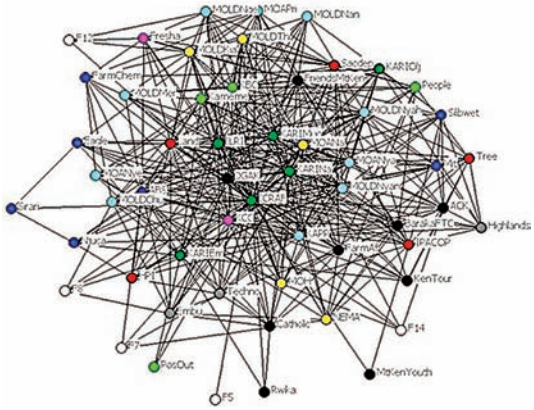
- **Research institutions increase their power and role.** ICRAF now has a host of nontraditional partners, including seed dealers, dairy processors, and the media. This is important since research organizations create new best practices that need to be adopted and promoted by the rest of the system.

MARCH 2006



ICRAF's relationships with other organizations in the dairy enriched-feeds system as of March 2006. As in the previous example, colored circles represent different organizations attending the WSR. Lines indicate "strong" relationships, in this case, organizations that frequently exchange information and/or are working on projects together.

MARCH 2007



ICRAF's relationships with other organizations in the dairy enriched-feeds system one year later.

I think there were two unique things about SCALE... Number one is contact with new, what we could call non-conventional, partners. We had good contacts with partners like extension services and NGOs. But what SCALE helped us with were other kinds of partners, for example, feed companies, dairy companies, religious leaders, who are very influential in Kenya, the media— all of these non-conventional partners... The second thing that was really unique about SCALE was how to relate to these partners...you really treat partners as equals.

—STEVE FRANZEL,
Principal Scientist–Agricultural Economist, ICRAF

My network has increased with different partners. I can easily refer or get information from the appropriate sources. It has made it easy to promote new technologies including fodder shrubs.

—DAIRY ENRICHED-FEEDS SYSTEM OPINION LEADER
(during the semi-structured interview)

The mass media played a big role in creating awareness about the different fodder shrubs. Then secondly, it played a big role in creating demand, by getting people to start seeking out the different shrubs and the services of extension agents to encourage them to use these fodder shrubs properly. Then thirdly, it legitimized the whole enterprise of fodder shrub production, because when people hear about fodder shrubs the popularity of the shrubs— you find that many rural farmers are now looking at it as an alternative and an income generating activity.

—GEORGE OBANYI
ICRAF Communication Officer

14 THE PEOPLE DAILY, Tuesday, April 25, 2006

AGRICULTURE

Fodder shrubs perk up farmers' livelihoods

By WANJOHI KABUKURU

- **Involving the media as partners from the start with their participation in the WSR resulted in extensive media coverage** on radio, TV, and newspapers, as well as two 30-minutes documentaries.

- **SCALE was institutionalized.** The AP3 project conducted a one-week SCALE training workshop with the dairy enriched-feeds system partners. Twenty-eight participants representing twenty-one organizations and all four sectors—private, governmental, environmental, and civil society—participated in the workshop. The workshop was organized around the essential skills needed to implement each of the SCALE process components. A three-day regional USAID workshop—*"Scaling Up Development Impact: Operationalizing the New Foreign*

Assistance Framework Workshop"—was conducted for thirty USAID Nairobi-based staff representing USAID Missions of Kenya, East Africa, and Sudan. Finally, the team also shared the SCALE process and their experience and results with fifty-three Tanzanian participants in a national workshop on fodder shrubs. The SCALE concept attracted the participants who started to put mechanisms in place for implementing the process in several projects in Tanzania.

- **Social Network Analysis** is a promising tool to strengthen collaborative planning for building networks and social capital.

I would really like to see the SCALE approach being applied in several other sectors besides fodder shrubs. Through the SCALE approach, many, many people would be reached within the shortest time possible.

—CHARLES WAMBUGU,
Dissemination Scientist and SCALE/ICRAF Team Leader

While we saw this [$100,000.00 funding for activities] as a major constraint at first, what I think we're finding is that the system is self-organizing in really healthy, sustainable ways to achieve measurable effects with very little outside input. It's really kind of amazing to watch. Both Morocco and Kenya have taken on a life of their own at multiple levels—policy, best practices, technology transfer—that will last long after our little demonstration project ends. Systems theory talks a lot about self-organization…one of the things Morocco and Kenya may teach us is that it really is much more powerful in both the short and long term than we ever imagined.

—PATRICK PAPANIA,
AP³ Project Director
E-mail Communication from Nairobi, August 2006

Kenya is the dairy sector leader in East Africa and the sector within the country is growing. For the past decade, the message about enriched-feeds has only reached a targeted few and adoption even fewer. In only one year, SCALE created a broad-base of sustainable support for the widespread adoption of enriched-feeds that can improve the productivity and livelihoods of thousands of rural poor throughout the country.

SCALE began to revolutionize the way we perceive the integrated extension approach… It really is a step up in the effectiveness of the scaling up methods that ICRAF has been involved with in the past.

We know now that it's not just reaching the farmers now, it's reaching the media. It's reaching all kinds of groups such as village groups and church groups in innovative ways… The project has now engaged with seed dealers, private sector organizations, cooperatives, NGOs, ministry officials, feed manufacturers, and universities…

We hadn't imagined that it was possible to aspire to reaching 100,000 farmers in one year, but this has now become possible applying the SCALE methodology in an integrated cross sectoral way. We believe that SCALE could be an effective and innovative component in other development efforts.

—DENNIS GARRITY,
ICRAF Director General

Implementing SCALE Checklist

This checklist gives some of the guiding principles that both drove and emerged from the SCALE demonstrations in Kenya and Morocco. They are intended to serve as a point of departure for future programs.

- ❒ **Start at the geographical scale you wish to influence** rather than "pilot projects" that are to be expanded or rolled out over time.
- ❒ Start with **the frame of a broad development goal** rather than a specific solution (technology, behavior).
- ❒ Identify and analyze the system **(the social, environmental, economic, and governmental sectors)** related to the development goal, including the issues related to that goal and all of the stakeholders related to each issue.
- ❒ Bring **representatives from stakeholder groups of all four sectors** (including the media, businesses, and other donors) **into a Whole-System-in-the-Room (WSR) planning workshop at the onset** of the project to define their common-ground goal and commit to collaborative actions toward their common goal. Use every opportunity (meetings, workshops, trainings) to bring representatives from multiple sectors and multiple levels into the same room and experience. Diversity is the mother of innovation.
- ❒ **Starting immediately after the WSR, strengthen horizontal communication and social networking among stakeholders.** Normally, project staff and counterparts are the "hub" who then build relationships with specific stakeholders. Instead, strengthen system-wide relationships and collaborative actions. Create innovation networks that will continue after the project ends, thus creating sustainability.
- ❒ Work to catalyze **movement in multiples**—multiple sectors, multiple levels, and multiple solutions—accelerating existing trends and changes in societal norms.

- ❒ Put the **stakeholders related to the development goal in the driver's seat** of deciding how the system should organize.
- ❒ Ensure that the project strategy and staff support stakeholder action plans. Implement in a way that acknowledges the **project as a transitory stakeholder** in a system of inter-related relationships that will continue long after the project is over.
- ❒ Ensure that the project strategy and staff **remain neutral players in the system** and don't become linked to one stakeholder group (including other donor projects). This may mean having a separate office from the traditional ministries or other donor projects.
- ❒ Apply **multiple social change methodologies simultaneously**, including social marketing, mass communication, conflict resolution, education, civil society participation, and organization development.
- ❒ Maintain a pioneering attitude, implementing the project with the **flexibility and freedom to be opportunistic**.
- ❒ Include **increased social networking (number and strength of relationships) and the creation of social capital throughout the system as outcomes** for project success and measure them as part of the monitoring and evaluation plan.

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