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AGRICULTURAL PARTNERSHIPS FOR PRODUCTIVITY & PROSPERITY (AP³)

Final Report

September 30, 2004 – December 31, 2006

DISCLAIMER

The author’s views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.
Contract Information
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I. BACKGROUND

Begun in September 2004 as a task order under the Environmental Education and Communication (GreenCOM) II IQC, “AgComm”, which subsequently became *Agricultural Partnerships for Productivity and Prosperity (AP³)*, was designed to apply lessons learned from past USAID-funded and other communication projects, such as GreenCOM, “Communication for Technology Transfer in Agriculture Project (CTTA)”, ICRAF’s “Scaling-Up Agroforestry”, and FAO’s “Strategic Vision and Guiding Principles” on “Agriculture Knowledge and Information Systems for Rural Development (AKIS/RD)”, to a range of current agricultural challenges. More specifically, AP³’s goal was two-fold: to demonstrate how the strategic use of improved development communications can contribute to greater agricultural (development) impacts; and to strengthen the capacity of USAID staff and partners to incorporate and manage such programs. As for the latter, anticipated training results for the 27-month project included:

1. Training USAID staff (Bureau, Regional and Mission AG and NRM Officers, technical specialists, and Mission FSNs) in the effective design and management of individual communication programs and/or how to include communication activities as part of larger agricultural programs as a means to increase development impact;
2. Preparation of modules for future AG/NRM Officer training (such as the EGAT “Competency-Based” Training);
3. Incorporation of the *System Wide Collaborative Action for Livelihoods and the Environment (SCALE™)* methodology into a minimum of three USAID and partner programs; and
4. Bolstering of in-country capacity to design and manage communication programs.

AP³ would incorporate three components to accomplish the overall objective - Training, Field Activities, and Institutionalization - by applying models of community and participatory development to create new methods for reaching a wider audience for effective and lasting change. Past experience indicated that effective and sustainable development communications initiatives must be: be made in the context of sound policy and incentives framework that justifies the investment; be responsive to client demands for information and services and facilitates their participation in planning and implementation; be linked to multi-channel mechanisms for delivery of information and services through both public and private institutions; and, include a sustainable communications system for affecting lasting change.

Although the Task Order was never fully funded (the project received almost 30% less funding than originally anticipated) forcing the scaling back of multiple activities (e.g., conducting one global and one regional training for USAID program officers rather than the originally planned one global and two regional events, and implementing field demonstrations in two rather than three USAID/partner programs, it did make significant contributions to advancing the state-of-the-art and state-of-practice of applying new development communication strategies and approaches to select agricultural development challenges.
II. RESULTS

A. Documentation of the History of Agricultural Communication and Extension in Development

AP³ published a report written by Randy Chester (USAID) about the evolution of agricultural communication and extension over the last forty years. The publication was disseminated at various conferences and workshops that AP³ representatives participated in during project duration.

B. USAID staff training

AP³ was tasked with training USAID Bureau, Regional and Mission AG and NRM Officers, technical specialists, and Mission FSNs in how to effectively design and manage stand alone communication programs, and incorporate communication activities into ongoing or future agricultural programs as a way to increase development impact.

DC-based Training. AP³ conducted a global training activity for visiting USAID program officers in December 2004. This gathering included Bureau, Regional and Mission AG and NRM Officers, technical specialists, and Mission FSNs. During the one-hour training, the SCALE™ process was introduced and a mapping activity was implemented to give participants a taste of what was to come in the AP³ field demonstration activities. Several participants later applied for AP³ to be demonstrated in the countries where they work.

Regional Training. A regional training activity was conducted for 30 USAID staff based in Nairobi in late October early November 2006. This three-day event introduced SCALE™ to staff representing the USAID Missions of Kenya, East Africa and Sudan. The workshop, entitled “Scaling Up Development Impact: Operationalizing the new Foreign Assistance Framework Workshop”, used case studies, small group work, and hands-on exercises to assist participants to:

- Analyze why multiple USAID projects are coming to similar conclusions about a development approach and the implications that this has in their work.
- Explain the SCALE™ approach and list at least three types of impact it can make on their projects.
- Analyze the barriers and incentives to making the paradigm shift that SCALE™ and other similar approaches entail.
- Incorporate a SCALE™ approach in the design, implementation, and evaluation of their projects.

The workshop methodology, notebook, PowerPoints and other materials were made available to all participants.
**SCALE™ Workshop for Local Practitioners.** AP³ conducted a one-week training in Nairobi, Kenya November 6 – 10, 2006 with ICRAF /AP³ fodder tree project partners. Twenty-eight participants representing 21 organizations and all four sectors - private, governmental, environmental, and civil society - participated in the workshop.

At the conclusion of the workshop, participants were asked to complete a pre-designed self-reporting feedback form on various aspects of the training in order to help the team fine-tune the training for final submission as a GreenCOM deliverable. Participants reported that they had greatly increased their knowledge and skills on each of the SCALE™ training objectives after the workshop. Although this doesn’t measure actual increases in knowledge and skills, it does measure their increased perception of self-efficacy which can be linked to actual behavior.

**Joint SCALE™ Training with CATIE (cancelled).** For more than eight months, AP³ worked closely with the Tropical Agricultural Research and Higher Education Center (CATIE) in Costa Rica to develop a three-week international course, “Increasing Impact at a Landscape Scale: New Approaches for Rural Development” that was to be offered September 25 – October 13, 2006. This strategic course was designed to assist governmental, non-governmental and private sector managers, directors and technical staff to lead a systematic, participatory management process and apply practical tools and techniques that will help them increase the scale and impact of their rural development and natural resource management projects and programs. The course was organized around the SCALE™ process combined with CATIE’s best practices synthesized from their extensive research and experience in natural resource use management to create a unique training experience that combined social and technical approaches to sustainable rural development and natural resource management. Unfortunately, although the course was ready to be held, it was subsequently cancelled when USAID, AP³, and CATIE jointly determined that would not be cost effective to do so, as an insufficient number of participants were able to secure funding to hold the course as planned.

**C. Training Modules developed for future AG/NRM Officer Training**

AP³ developed SCALE™ training modules from lessons learned in collaboration with CATIE and through its field demonstrations. AP³ tailored its training activities to build the internal and external capacity of partner institutions and USAID to scale-up agricultural and rural development programs while monitoring and evaluating SCALE™s application in the field.

AP³ made several attempts to work with FAO to incorporate the SCALE™ training modules into the organization’s long distance learning program. Meetings were held in Washington, DC and in Rome with FAO representatives. A good deal of interest was displayed, but the process of FAO taking on the training modules never materialized for a variety of reasons internal to FAO. Consequently, AP³ was unable to obtain any solid commitments from FAO before the writing of this report.
AP³ has also developed a one-week SCALE™ training designed for natural resource use managers, practitioners and communication specialists. Training objectives were built around the five SCALE™ principles (i.e., Map the Context; Catalyze Partnerships and Coalitions; Create Collaborative Solutions; and Value); each session had specific objectives that contribute to these overall objectives and content was organized around the SCALE™ process. This training was pre-tested and revised from 2004 to 2006 with field practitioners in Ecuador, Panama, and Kenya. The one-week training has since been packaged in both hard copy and CD for distribution. A SCALE™ CD includes: a facilitator’s overview that contains the training methodology, notebook materials, PowerPoint presentations; and additional instructional materials and resources.

D. Methodology Integrated into USAID/Partner Programs

1. Introduction

Past successes in agricultural development have demonstrated that when stakeholders across sectors are engaged to work towards common goals, projects have a greater chance to achieve large-scale sustainable impact. Such collaborative efforts and relationships require efficient and regular communication within the system for better coordination, synergy, and impact. Yet to work at scale, many stakeholders must be actively engaged.

To achieve this, AP³’s applied System-wide Collaborative Action for Livelihoods and the Environment (SCALE™), a five-step communications-driven management methodology that applies the following core aspects:

- Takes a system-driven approach and recognizes the relationships and connections of the systems around the development issue.
- Identifies key leverage points to prioritize investments and interventions based on the demands of the commodity/value chain.
- Fosters early participation of a diverse group of stakeholders along the commodity/value chain: government (national and local), farmers, industry leaders, NGOs, input markets, media, and private sector representatives through a whole-system-in-the-room planning workshop.
- Supports stakeholder groups to find common interests, builds coalitions, and engages in self-sustaining collaborative actions.
- Pursues common objectives that are achievable and compatible with local abilities, resources, and cultural practices.
- Integrates the application of multiple social change methodologies for greater impact.
- Enables stakeholders’ short and long-term plans to drive the implementation schedule and support their needs and innovations in a timely fashion.
- Empowers local capacity to design, implement, manage, and monitor new enterprises and activities that emerge from the process.
2. The SCALE™ Process

The SCALE™ process provides a road map to initiate, implement, and evaluate this system-wide approach. Its components are described below.

- **Map the Context:** The SCALE™ process begins with a thorough understanding of the context within which the issue resides. Principal issues addressed include: governance (agricultural policies and strategies), economics (agricultural commodity pricing, marketing and trade), civil society (current agricultural knowledge, attitudes, and practices), and environmental systems (the most appropriate environment-friendly technologies and practices for the specific agricultural production, marketing or other kind of issue).

- **Catalyze Coalitions:** SCALE™ initiates system-wide collaborative action from the outset by bringing fifty to potentially hundreds of representatives from all sectors of the agricultural supply and demand system into one room to find common ground and develop shared goals. These whole-system-in-the-room planning sessions are critical because they accelerate the process of starting at scale by broadening the base of people creating solutions for the issue.

- **Create Collaborative, Sustainable Solutions:** SCALE™ assists coalitions and partners generated during whole-system-in-the-room planning workshops in applying information gathered and analyzed in Map the Context and Create Coalitions and Partnerships to:
  - Generate options that address policy, structural, technological, economic and social solutions;
  - Help groups to generate and analyze a variety of options and their implications;
  - Negotiate and prioritize collaborative solutions;
  - Identify specific opportunities to work toward together as partners; and
  - Define objectives and indicators of success.

- **Act:** SCALE™ uses multiple social change methodologies to support and strengthen local individuals, organizations, institutions, and communities as they develop and strengthen necessary policies, technologies, input supplies, infrastructure, export markets, farmer associations, and community groups to increase farm production and income growth. As activities generate change, SCALE™ helps stakeholders, organizations, and communities assess where they are in the process and supports them in moving one step forward toward their objectives. SCALE™ continuously seeks to maintain a balance between the “task”—achieving objectives—and the “process”—strengthening stakeholders’ capacity for informed decision making and sustainable, collaborative action.

- **Value (Monitoring and Evaluation):** This component’s name was intentionally chosen for its multiple meanings. The SCALE™ process helps stakeholders place
a higher value on the resources on which they all depend. It also helps stakeholders value other stakeholders’ perspectives, roles, and contributions. Finally, this is the moment in the SCALE™ process to value what is working and what can be improved— as well as to evaluate impact. Because rural growth, environmental enhancement, and poverty reduction require a system-wide approach that takes into consideration governance, economic, social, and environmental interests, SCALE™ monitoring and evaluation helps stakeholders assess the impact of their activities in each of these areas. SCALE™ encourages the use of participatory monitoring and evaluation as a process for collaborative problem solving.

This approach offers promise to donor agencies, host country governments, NGOs, and international organizations as they work to address various development issues throughout the developing world. A summary graphic of the SCALE™ process follows.
3. Assisting Others to Work at Scale through AP³

AP³ technical assistance was provided through demonstration projects in Morocco and Kenya.

In Kenya, AP³ provided technical assistance to the International Center for Research in Agroforestry (ICRAF) to improve feeding systems for small-holder dairy farmers. During the previous 12 years, ICRAF had conducted extensive research and trained 40,000 farmers, mostly women, to plant drought-resistant dairy fodder trees in the Central Highlands region of Kenya. By building the capacity of ICRAF to mobilize partners in its efforts, AP³ Kenya aimed to help it reach an additional 100,000 farmers in one year.

In Morocco, AP³ provided technical assistance to the Economic Development Office of USAID/Morocco to strengthen the national medicinal and aromatic plants (MAP) sector, improve rural livelihoods in the Atlas Mountains by increasing the value of MAPs, and assure biodiversity conservation of Moroccan forests, from which 90% of the country’s MAP exports originate.

In both demonstrations, AP³ applied integrated communication interventions to encourage greater information flow, cooperation, coordination, and collaborative efforts. Demonstration activities were selected by a USAID/Washington Steering Committee. To be considered, projects had to meet the following criteria:

- Be demand-driven and promote incentives for stakeholders to work together.
- Promote long-term sustainability by engaging well-established output markets.
- Work cross-sectorally and integrate natural resource and agriculture sector efforts, among others.
- Ensure active participation of stakeholders throughout the value chain — from pre-production, production, harvesting, post-harvest handling, marketing, etc., to engaging the private sector, including producer organizations, NGOs and CBOs.

Summaries of each country’s activities and results are provided in the following sections.

4. Field Demonstrations

A. AP³ Kenya

| Goal: Enrich Feeds to Improve Productivity and Livelihoods of Small-holder Dairy Farmers in Central Highlands |
| Partner: International Center for Research in Agroforestry (ICRAF) |
| Date of Intervention: October 2005 – December 2006 |
Map the Context

AP³ Kenya, in collaboration with ICRAF, established a Steering Committee comprised of representatives from organizations working in the small holder dairy feed sector to determine who should be invited to a “Whole System-in-the-Room” (WSR) planning session to be held in March, at which common goals of all stakeholders in a selected value chain would be determined. During several meetings in February 2006, the committee selected “enriched feeds” as the development issue to bring stakeholders together. They then identified the essential stakeholder groups and invited their representatives to the WSR workshop. More than one hundred and twenty participants attended the workshop from the following stakeholder groups: farmers, trainers, policy makers, NGO extension, Government of Kenya extension, milk collectors and processors, feed companies, seed dealers, researchers, microfinance, media, donors and other service providers.

Catalyze Coalitions

The WSR workshop in March 2006 engaged key stakeholders to elaborate their ideas about how best to improve the enriched feeds sector. During three days, participants self-managed a series of exercises that led them to determine their common goals and develop action plans that focused on collaborative actions for the short, medium, and long-term. Common goals shared by participants called for specified improvements in:

- Credit accessibility;
- Enhanced information dissemination;
- Marketing;
- Scaling up the use of fodder shrubs and other enriched feeds;
- Research and extension services;
- Policy development; and
- Stakeholders linkages and collaboration.

After determining their common goals, stakeholders created work plans and committed themselves to taking specific actions. Illustrative examples of commitments by different stakeholder groups included the following:

- **Researchers** – Update existing information on enriched feeds.
- **Private Companies** – Assist in seed distribution and information dissemination.
- **Microfinance Institutions** – Create awareness of services in the dairy industry.
- **Media** – Increase information dissemination about fodder shrubs feeding systems.
- **Donor-funded Projects** – Share information on fodder shrubs with targeted farmers.
- **Extension Services** – Expand outreach of farmers with enriched feeds messages.
Negotiate Collaborative, Sustainable Solutions

AP³ Kenya technical assistance focused on strengthening communication and collaboration among stakeholder groups to help them realize one of their common goals: promoting large-scale adoption of fodder shrubs as an essential way to enrich dairy feeds. AP³ Kenya built the capacity of ICRAF and other key stakeholder groups to mobilize the system to fully support the fodder shrub initiative through interweaving the following components:

- **Strengthened communication and collaboration among the stakeholder groups** by improving information flow among stakeholders involved in enriching the dairy feeds, increasing the number of new alliances among stakeholder groups, and strengthening existing alliances. Tactics included: widespread dissemination of the names and contact information for fodder shrub seed and seedlings suppliers (nursery list); a monthly newsletter; standardized informational materials including modules for trainers, farmers, NGOs, and extension agents; stakeholder engagement meetings; and media outreach that provides farmers with key information throughout the fodder shrub agricultural calendar.

- **Capacity building** through trainings for diverse stakeholder groups on the skills needed to become partner extension agents that can effectively attract farmers and help them plant fodder shrubs. Five regional stakeholder meetings were held, offering a chance for key players in the dairy feeding systems to find ways to coordinate their activities and collaborate more fully. AP³ Kenya assisted seed dealers in organizing themselves as a professional entity and forming a national level association, Kenya Association of Tree Seeds and Nursery Operators (KATRESNO). AP³ Kenya helped this association improve the network of seed dealers by linking them to the Kenya Forestry Research Institute (KEFRI) and ICRAF Genetic Resource Unit (GRU). Trainings were conducted for ICRAF and other key stakeholder partners on how to apply SCALE™ to this and other efforts.

- **Monitoring and evaluation** of communication and collaborative actions taken by and among stakeholders as well as the impact on large-scale adoption of fodder shrubs and improved livelihoods. AP³ Kenya collected information from seed dealers on how many farmers were beginning to participate in growing fodder shrubs and the quantity of seed and seedlings that were being distributed. By the end of the project, AP³ Kenya had assisted in training 9,248 farmers on fodder shrubs and had distributed 2,000 newsletters and 1,000 fodder shrub flyers. The project also coordinated the gathering and distribution of 17,278,500 fodder shrub seeds (*Calliandra, Sesbania, Tricandra* and *Tree Lucerne*) and 3,500 fodder shrub seedlings (*Calliandra* and *Tricandra*).
The following collaborative actions were initiated through the AP³ Kenya demonstration:

- **Strengthened MAP collaboration (networks) and communication**
  - AP³ Kenya promoted fodder shrubs with an exhibit at the April Farmer Prize Giving Day Celebration organized and hosted by Africa Harvest and the Rockefeller Foundation. The event gathered more than 2,000 farmers and extension staff. AP³ Kenya invited seed dealers from the region to display their merchandise and leaf meal, transforming its exhibit into a forum for dissemination of information and distribution of planting materials.
  - AP³ Kenya linked ICRAF with the Agricultural Information Center (AIC), based in Nairobi, to disseminate information about fodder shrubs. This center is the custodian of Kenyan agricultural information.
  - AP³ Kenya encouraged collaboration between ICRAF and the Farmers Training Centres (FTCs). These centers conduct demonstrations for farmers and extensions personnel on performance of various agricultural innovations.
  - AP³ Kenya helped ICRAF enter into a partnership to promote fodder trees with the Kenya National Federation of Agricultural Producers (KENFAP), a lobbying group for farmers.
  - AP³ Kenya coordinated the efforts of ICRAF, farmers, and two television stations (CITIZEN and KBC TV) to develop documentary footage for broadcast. Field trips for representatives of major media outlets were organized to improve their understanding of the benefits of fodder shrubs and encourage responsible reporting about fodder shrubs. An awards program for journalists was established and the first set of awards for best coverage of fodder issues were given out at a gala event in November 2006.
  - Through AP³ Kenya efforts, Land-o-Lakes and Technoserve shared information with ICRAF on dairy farmer cooperatives around the country and helped to develop seed distribution networks. Some of these cooperatives agreed to create fodder shrub nurseries to assist with dissemination of seedlings.
  - AP³ Kenya helped Ministry of Livestock Development staff from Kirinyaga District to organize a technical training on fodder shrubs for 25 staff members.
  - The ICRAF training unit organized a technical workshop for staff from partner institutions throughout East Africa. The AP³ Kenya team participated and presented the SCALE™ approach in how it was applied to promote the use of fodder shrubs.
Micro-enterprise and business development
- AP³ Kenya distributed a list of more than forty-five fodder shrub seed dealers in Kenya at many events.
- AP³ Kenya conducted seed dealer workshops to assist an informal network of seed dealers in developing business plans and distribution outlets.
- AP³ Kenya connected two micro-finance institutions, FAULU Kenya and Highlands, with farmers and seed dealers. At AP³ Kenya-sponsored farmer meetings, these institutions were better able to understand farmer opinions and input as they developed a dairy farmer-friendly credit product.

Value
AP³ Kenya monitored and evaluated the following changes in approaches to enriching dairy feeds: new alliances formed; existing alliances strengthened; flow of information; and collaborative actions.

A collaboration rating form developed for this analysis was based on lessons learned by AP³ Morocco. The form was administered to the WSR participants before the workshop. Information collected included: type of relationships among participating stakeholders; strength of relationships in the dairy sector; strength of relationships in other agricultural activities (non-dairy); and strength of relationships in non-agricultural activities.

B. AP³ Morocco

<table>
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<tr>
<th>Goal:</th>
<th>Increase the Value of Medicinal and Aromatic Plants (MAP) and Improve Rural livelihoods in the Atlas Mountains</th>
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<tr>
<td>Partner:</td>
<td>Economic Development Office, USAID/Morocco</td>
</tr>
<tr>
<td>Date of Intervention:</td>
<td>May 2005 – December 2006</td>
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Map the Context
AP³ Morocco established a Steering Committee comprised of representatives from the Medicinal and Aromatic Plant (MAP) sector. During several meetings from May to September 2005, the committee identified stakeholder groups that represented the MAP value chain and invited their representatives to a planning (“Whole System-in-the-Room”) workshop in September 2005. More than one hundred representatives from the following stakeholder groups participated in the workshop: farmers, certifying entities, media, national and regional government authorities, international buyers, MAP researchers, collectors and processors, as well as officials from development organizations, donor-funded projects, investment organizations and NGOs.
Catalyze Coalitions

The WSR workshop engaged MAP stakeholders from various sectors to discuss their ideas about how to improve the value of MAPs. Participants self-managed a series of exercises that led them to develop common goals and action plans that focused on collaborative actions for the short, medium, and long-term. Common goals that emerged sought to improve:

- Organization of the sector;
- Organic certification and labeling;
- Training, information, and research;
- Commercialization and investment;
- Preservation and development;
- Government policies;
- Insurance and risk management; and
- Monitoring and evaluation.

After determining their common goals, stakeholders created work plans that included specific, detailed actions that each would take. Examples of stakeholder commitments included:

- NGOs would train trainers in MAP issues, increase awareness, and design MAP projects to profit rural women.
- Foreign buyers would publish articles about Moroccan MAPs in international journals, and provide information about commercialization and technical issues.
- Media representatives would cover MAP events more closely, publish one or more articles each month, become trained to better disseminate information, and create a national network of journalists specialized in MAPs.
- Donor-funded projects would attempt to better link producers with certification process, provide certification training, and improve information flow within MAP sector.

Negotiate Collaborative, Sustainable Solutions

AP³ Morocco developed a scaling-up strategy to target leverage points within the MAP value chain and encourage system-wide change. The strategy integrated the simultaneous use of multiple communication methodologies for sustainable results through interweaving and supporting components:

- MAP collaboration (networks) and communication were used to increase information flow among MAP stakeholders along the MAP value chain, increase the number of new alliances, and strengthen existing alliances to form a strong and vibrant MAP sector. Tactics included: marketing and sales support; stakeholder engagement meetings to increase the involvement of members and assure implementation of their action plans; a monthly newsletter; a MAP web
Microenterprise and business development strategies were used to increase investment in MAP by improving key stakeholders’ capacity in business management and by catalyzing and supporting the Moroccan micro and small business development sector (i.e., financial lending institutions) to develop tailored financial products and services for MAP producers, collectors, and processors. Tactics included joint venture development.

Sustainable MAP wildcrafting training was made available to interested practitioners to increase knowledge and skills needed to improve livelihoods. Tactics included: group certification of the forest for wildcrafting MAP; development and implementation of a management plan for organically certified forestry; testing a new MAP distilling technology that will increase MAP value; improving MAP distillation standards and practices to help stakeholders process MAP products in-country; improving sustainable harvesting practices from the wild, increasing MAP quality and value; and generating more jobs in the MAP sector.

Capacity building efforts were realized through training and guided practice to build skills needed by local stakeholders to implement the SCALE™ process.

Monitoring and evaluation was conducted to measure communication and collaborative action among stakeholders as well as impact on the adoption of MAP best practices and improved livelihoods.

Act

The following collaborative actions were supported by AP³ Morocco. These actions were system-driven (i.e., originated from and inspired by system stakeholders) and not expert-driven (i.e., introduced by external technical experts). Activities and accomplishments included:

Strengthened MAP collaboration (networks) and communication

Marketing and sales support: By connecting important European and North American industry leaders and buyers with Moroccan suppliers, AP³ Morocco coordinated the flow of information about markets for several MAPs: khella, cedar oil, rosemary, verbena, and argan oil. In some of these negotiations, the project took an active role, as was the case with AP³ Morocco representation of women argan oil cooperatives in sales discussions with major US buyers.

Stakeholder engagement meetings: By bringing together local experts to speak about issues of stakeholder group concern, AP³ Morocco assisted the flow of information within stakeholder groups as well as exchanges within the sector. These sessions renewed stakeholder commitments to fulfill their pledges (discrete actions) made at the WSR workshop. For example, AP³
Morocco helped MAP researchers in the formation of a professional organization to serve as a national level MAP advisory board (SOMAPAM – Moroccan Federation for Medicinal and Aromatic Plants). Project staff also helped with the formation of a national-level association of herbalists (AMAPAM – Moroccan Association of Medicinal and Aromatic Plants).

- **National strategy:** One of the final activities of AP³ Morocco was to convene a WSR-style event in which stakeholders came together to review four proposals for a national strategy to consolidate them and present a single, comprehensive plan to the Prime Minister. Proposals were presented by the Ministry of Agriculture, the Department of Water and Forests, SOMAPAM, and INPMA. The one-day workshop, which was attended by more than 100 stakeholders; included presentations and deliberations that resulted in the formation of a committee that would present the final recommendations to the Prime Minister. Many stakeholders noted that this event was instrumental in improving the attitudes of officials from the Department of Forestry towards their role of strengthening the MAP sector.

- **Publications and press articles:** 130 articles in three languages were published in the Moroccan press and international publications. The UN journal, “Market News Service”, featured Moroccan MAPs three times.

- **Television coverage:** AP³ Morocco worked with local and national television networks to improve their coverage of MAP sector events, resulting in 18 radio and 10 television broadcasts.

### Sustainable MAP wildcrafting

- **Inter-sectoral seminar on organic certification:** In 2006, AP³ Morocco gathered 50 MAP value chain representatives in Oujda to raise awareness about organic certification and to encourage greater collaboration towards improving the MAP value chain. Representatives from local cooperatives, private processing companies, Ministry of Agriculture officials, NGOs, universities, and the Department of Forestry took part in the event. During the seminar, participants learned about the organic certification process and standards and developed action plans for certification in the Oriental region national forests.

- **Development of international standards for MAP sustainable wild collection:** IUCN, GFN, WWF, FAO, and other development organizations formed an advisory board to develop international standards for MAPs collected from the wild. AP³ Morocco brought representatives of this board to Morocco to facilitate negotiations between the advisory team, the High Commissioner of Forests, and other local partners. A field demonstration is scheduled to start in April 2007.

- **Negotiations between private companies, forestry officials, and MAP collection cooperatives:** During the last several years, Moroccan private sector processing companies did not invest in the wild collection of MAPs in Morocco’s northwest region due to misunderstandings and lack of coordination with the Department of Forestry and the MAP collection cooperatives. In an effort to attract private investment, AP³ Morocco served as
a mediator at a series of meetings among these key stakeholders. This resulted in the ending of the private sector boycott and their active participation in this year’s forestry concession process. One of Morocco’s major private sector companies, SANTIS S.A.R.L. purchased a forestry concession, putting hundreds of MAP wild crafters back to work.

- **Training:** AP³ Morocco completed training for five institutes/shops on how to cost-effectively build distillation units that comply with organic certification standards and improve quality of distilled MAPs. Project staff also helped a cooperative in Jerada (northern region) to build a distillation unit and trained its members how to use it. The project also trained 250 members of the local cooperatives and their families, including 44 women, on sustainable wild harvesting techniques.

### Value

The project monitored and evaluated changes within the MAP sector to measure indicators of success, most notably: the number and kind of new alliances formed; improvements or strengthening of existing alliances; flow of information; collaborative actions; stakeholder knowledge and attitudes; and changes in the number of farmers and collectors participating in organic MAP activities.

### III. Monitoring and Evaluation

#### A. Introduction

AP³ introduced a monitoring and evaluation methodology that would enable USAID, donor agencies, project managers, and stakeholders to collect quality information that can be used to shape decision-making and measure progress – most notably, the outcomes and impact of their activities. The AP³ monitoring and evaluation conceptual model tracked outcomes at both a **systems level** (such as network size and structure) and an **organizational level** (such as examining individual organizations’ ties to other organizations). In Morocco, an individual assessment of knowledge and practices was also analyzed; however, this was dropped from the follow-up and the Kenya studies. Measurable outcomes also included quantifying specific collaborative actions, such as increased media coverage and joint program implementation. The conceptual model used did not attempt to lay out specific causal pathways and relationships but rather is a way to visualize the AP³ results in impact on the environment and livelihoods in a broad way.

In Morocco, AP³ staff tracked the following outcomes:

- Number of new alliances formed among stakeholders in the MAP value chain towards the goal.
- Number of existing alliances strengthened among stakeholders working in the organic MAP value chain towards the goal.
- Change in flow of information among stakeholders about organic MAP.
• Change in stakeholder knowledge about the MAP sector and MAP.
• Change in collaborative actions related to the goal.
• Change in coverage (number and location of articles in three priority Moroccan newspapers) on organic MAP.
• Change in numbers of farmers participating in organic MAP sector activities. (Farmer participation at technical trainings, meetings, etc).

These outcomes are expected to lead to the following impact in the years to come (although these were not measured by AP³):

• Increase in the number of stakeholders adopting and correctly using MAP best practices (i.e., those actions necessary for organic MAP certification and marketing.
• Improvements in livelihoods of rural participants from involvement in organic MAP harvesting, production, processing, marketing, etc.
• Conservation practices adopted and routinely used by stakeholders that lead to biodiversity, soil, water, and other land use improvements.
• Increase in civil society participation, equity, and accountability.
• Enhance local, regional, and national governmental capacity to manage and support organic MAP harvesting, production, processing marketing, etc.

**B. Evaluation Questions**

The evaluation design drew from systems theory and social network analysis, both of which emphasize the importance of understanding where organizations sit within the whole system, what role they play, and how they are connected to other organizations within the system. The research questions and indicators were as follows:

<table>
<thead>
<tr>
<th>Evaluation Question</th>
<th>Indicators (partial list)</th>
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| How are organizations connected with regards to specific purposes and strength of relationships, including exchange of information, coordination of programs, and contractual relationships? | Organizational network density and centralization  
Number of organizations not connected to anyone else (isolates)  
Sub-groups or coalitions within the larger network |
| Which organizations are particularly important for promoting MAP (as assessed through their positions within the network structure)? | Organizations with ties to many other organizations (high measure of degree centrality)  
Organizations who are closely connected to most other organizations (high measure of closeness centrality) |
| How did inter-organizational relationships change over time, including development of new relationships and coalitions, new organizations becoming engaged and the overall structure of the network? | The number of new alliances formed among stakeholders* in the MAP value chain  
The number of existing alliances strengthened among stakeholders working in the organic MAP value chain towards the goal  
Increased flow of information among stakeholders about organic MAP |
| How did the SCALE™ approach work to engage stakeholders to enhance their efforts to | Increase in numbers of farmers participating in organic MAP sector activities. (Farmer participation at |
develop and implement specific programs and interventions?  

| technical trainings, meetings, etc.)  
| Participation of diverse stakeholders in project activities  

What are the collaborative actions that resulted from implementation of the SCALE™ process?  

| Increased collaborative actions related to the goal  
| Increased stakeholder knowledge about the MAP sector and MAP  
| Increased coverage (number and location of articles in three priority Moroccan newspapers) on organic MAP  

C. Data Collection and Analysis

Before, during, and after WSR workshops were held in both Kenya and Morocco, AP³ staff applied the following instruments to provide baseline measures for each project:

- **A Collaboration Rating Form** survey was administered to all participants the week before the workshop to assess information flow and relationships between and among stakeholder groups. This survey was reapplied in Morocco in late 2006 and will be reapplied in Kenya in March 2007.

- **A self administered Stakeholder Assessment** of knowledge, attitudes, and commitment to the MAP goal was completed by participants immediately before and after the WSR in Morocco only.

- **In-depth interviews** were conducted with leverage stakeholder representatives, facilitators, and program staff to define the context of the MAP sector in Morocco and the Dairy Feeding sector in Kenya.

- **Activity sheets** were created from telephone interviews to create an inventory of current activities and organizations and to provide information that will help support sector development.

- **A collaborative action log** was kept to capture new collaborations as they develop, recording brief descriptions of each new activity and which organizations were involved.

The data from the collaboration rating was analyzed using Ucinet 6 (Borgatti et al. 2002)¹, with a focus on the overall structure of the networks within and across stakeholder groups, and with a view to identifying opportunities to strengthen value chain relationships. Measurement of centrality of organizations was noted, including:

- **Strength (based on the frequency of exchange of information) and type of relationship** (customer, supplier etc),

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• **Degree centrality** which assessed which organizations have the most connections to other organizations (Wasserman and Faust 1994)\(^2\).

• **Eigenvector centrality** was used to address the strength of an organization’s connections to other organizations and how central those other organizations are to the network (Faust 1997)\(^3\).

• **Betweenness centrality** looked at where organizations sit on the paths to other organizations (for example if many organizations must go through organization X to get to organization Y, then organizations X has a high degree of betweenness centrality). (Wasserman and Faust 1994)\(^2\).

• **Closeness centrality** assessed how close an organization was to all other organizations in the network.

1. **Selected Results from Morocco**

• SCALE™ built social capital within the MAP sector in Morocco. Stakeholders saw tremendous value in the relationships they had built. These relationships and connections enhanced their reputation and ability to do work efficiently.

• The evaluation found that the overall size of the MAP network increased greatly over the one-year of project implementation. Sixty percent of respondents reported at least a few new relationships with other stakeholders with 6 organizations reporting more than 20 new relationships and 2 organizations reporting 100 new relationships with other MAP stakeholders.

• The role of the media was critical to facilitating the flow of information and maintaining interest in the sector. There were 130 print articles about MAP and the AP\(^3\) project during a one year period. In other media, there were 18 radio broadcasts and 10 TV broadcasts on issues related to the project.

• In the beginning of the project, there was a general lack of linkages and coordination among MAP stakeholders. Locally, the MAP sector was said to suffer from a “lack of organization”. Many stakeholders were unaware of the role of other stakeholders, unaware of which organizations were working in the MAP sector, and information flowed poorly among stakeholders. A year later, there are indications of greater awareness of all stakeholders in the MAP sector. Respondents often commented that the sector is more “organized” now.


Large parts of the private sector were not connected to the rest of the MAP system. Many processing companies were working in isolation. Through the SCALE™ approach, the private sector has become more engaged and built connections with other stakeholders in the MAP system.

Government and research organizations had the highest centrality, by any measure. When looking at betweenness centrality, the list of top 10 organizations includes 2M in media and Taromed, a producer.

The end of a private sector boycott of the forest concession process has meant the creation of over 800 new jobs4.

2. Kenya Baseline Assessment

A baseline assessment of collaborative relationships was completed immediately prior to the WSR in March 2006. In total, 86 collaboration forms were completed from WSR participants. This data was entered into custom software and exported to Ucinet for analysis. On the last day of the WSR, two sociograms were given to stakeholder groups for their analysis and reflection. Participants were very engaged and appreciated seeing the results of their forms immediately.

Some of the comments made by WSR participants were:

- Surprised that Egerton University is so small and has no link to its graduates.
- Processors were too far from the farmers.
- A couple groups are missing (artificial insemination group, and Holstein breeding group).
- Farmers are not connected enough to the larger system.
- Congratulations to American Breeding Society for having the biggest dot!

A follow-up assessment is planned for March 2007.

IV. LESSONS LEARNED5

The demonstration projects in Morocco and Kenya have provided a number of lessons learned for the application of the SCALE™ approach. One of the principal differences between traditional approaches to communication and SCALE™ is the application of systems thinking and a systems approach. Using a systems approach is also the greatest challenge to implementing SCALE™ because it requires a major paradigm shift around the issue of control. Most international donor and national projects are initiated with a

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4 Calculation made based on Santis reporting a total of 32,000 working days over 2 months or 40 working days.
5 Booth, Elizabeth et al (2006), Strategic Communication to Catalyze System-Wide Change: Experience and Results from the Medicinal and Aromatic Plant Sector in Morocco, World Congress on Communication for Development, Rome, Italy.
contractually predetermined set of best practices or technologies, inputs, expected outcomes, and impact. Even with the trend towards increased stakeholder participation and cross-sectoral coordination, the process tends to be characterized by expert-driven, top-down actions. Typically, project implementers enter the process with the pressure of achieving these contractual obligations.

However, one of the key principles of a systems approach is that the system works best when stakeholders have the power to determine the direction and path of their goals and activities. As Barry Richmond said, “It takes courage and strength for people to believe that they can make a difference in the way a system works. We can’t control the whole system the way we might a specific piece of it. Ultimately using a systems approach means trading control for influence” (Richmond, 1991).

As demonstrated in Kenya and Morocco, when using the SCALE™ systems approach, all stakeholders in the system have the potential to contribute to and be affected by the solution, and therefore, should have the right to participate in the decision-making process. Stakeholders bring their experience, talents, and financial resources to the system. Donors and their project implementers need to recognize that they are just one stakeholder group in the system and that their role is the same as other stakeholders — to negotiate collaborative action towards a common ground vision. The role of the “outside communication practitioner” in this approach is to strengthen stakeholder capacity to facilitate and support the communication needed for the system to “self-organize” toward the common goal. This issue of control manifests itself in a variety of ways:

- The SCALE™ approach is **system driven, not expert driven**. It is sometimes difficult to balance donor needs for measurable results (preferably quick ones) with sometimes unpredictable systems approach. By involving donors in the process, they have the opportunity to adjust their expectations and indicators as the system defines itself more accurately.

- It is difficult to articulate the results and impact of a systems approach in a traditional cause-and-effect linear logic model. Needed are new ways to articulate and visualize results and impact of a systems approach to agricultural and other development issues.

- Ideally, a project or program’s detailed **work plan should be developed after the WSR Planning Workshop** in order to identify strategies that respond to and support stakeholders’ short-term and long-term plans, strengthen collaborative action, and improve communication. Many donors, however, expect project implementers to provide detailed work plan complete with anticipated results upfront, often during the pre-award bidding process. If the donor agrees, this can simply be articulated in the first draft work plan as something like, “The work plan will be finalized after the WSR workshop”. It is much more difficult,

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however, to internalize and implement because it means giving up a great deal of control over the process, the inputs, and the outcomes to system stakeholders.

- The question of control includes the concern that stakeholders may not choose “the right strategies or technologies” suggested by science and research. By best practices, we mean the behaviors and technologies that have been demonstrated to have an impact on a problem, such as organic certification, improved fodder trees, or integrated pest control. Communication initiatives that have focused on individual behavior change have had a great deal of impact on increasing the correct use of these types of best practices over the last twenty years. For example, correct use of oral rehydration therapy, family planning products, and immunizations have increased in many countries around the globe by using this approach. An effective SCALE™ process should introduce and provide access to information about “best practices” so that stakeholders can make informed decisions and adapt them to the local context.

- Some communication practitioners feel that there is an inherent tension between the structured individual behavior change approach and the non-linear systems approach. SCALE™ attempts to combine the two by starting with the system approach during Map the Context and Catalyze Partnerships and Coalitions steps of the process. Once stakeholders have determined the broad brush strokes of their common vision, they move on to Creating Sustainable Solutions. It is during this component that they work with technical experts to negotiate best practices for their specific context.

Kenya will be an interesting test of how well the SCALE™ methodology combines individual and systems approaches since ICRAF has a specific objective to achieve – increase the numbers of farmers using improved fodder trees on their plots. This objective is one that would traditionally be accomplished with an individual behavior change/technology transfer approach. The upcoming evaluation (March 2007) will seek to measure if the SCALE™ approach significantly increases the numbers of farmers using improved fodder trees while also measuring the “value added” of a strengthened social system network and its impact on improving small farmer feeding systems and livelihoods.

- The transfer of control can also create tension regarding the involvement of the media and the production of education and communication materials. SCALE™ generally involves the media as a stakeholder group in WSR planning workshops because they are an intricate part and key leverage point of almost any social system, regardless of the issue. The role of the media as partner, rather than a channel for the dissemination of information or public relations/advertising vehicle, can be threatening to international donors and national decision-makers because of the potential for negative coverage. This risk aversion can miss the opportunity to harness the tremendous power of the media as a committed partner which can facilitate the free-flow of information among the entire stakeholder system.
This same issue arises in terms of the production and distribution of print and other mass media materials and the sometimes lengthy donor review and control over print and other communications products. In the SCALE™ approach, many communications materials are generated to respond with speed and agility to the emerging needs of the stakeholders partnerships and coalitions strategies and activities, and, as such, are a part of a horizontal communication process among these stakeholders. Sometimes the professional quality of these materials is not as important as the process inherent in creating them. For example, one SCALE™ communication tool is participatory newsletters that allow stakeholders to communicate quickly and freely with each other. In Morocco, the first MAP sector newsletter was a collection of ideas from the stakeholders, written by them in their sometimes informal language. This caused some conflict with the donor who felt they needed to edit the newsletter before authorizing its dissemination, greatly slowing down the newsletter’s distribution.

- **SCALE™ facilitators/implementers must remain a neutral player within the system, not linked philosophically to any one stakeholder group or limited by another project action plan.** SCALE™ is an innovative approach that can be misunderstood and threatening to practitioners who are accustomed to implementing more traditional management approaches. Besides the issue of relinquishing control that is extremely uncomfortable for many people, once the stakeholders have made their commitment in the WSR planning workshop, SCALE™ implementers must move much more quickly and innovatively than many traditional projects in order to support and respond to the stakeholders changing needs. The SCALE™ approach is unlikely to be successful if it is unable to respond quickly, flexibly, and innovatively to system changes.

- At the same time, the **transfer of control is one of the major strengths of a systems approach for donors.** When stakeholders take the lead in defining their common ground goal and activities, the donor, investor, or other outside agency can then carefully select (cherry pick) those specific “leverage points” where their investment can have the most impact. They can enhance what stakeholders do, rather than supplant, control, or duplicate it. They can examine which stakeholder groups can advance their proposed plans through minor adjustments or additions, and which require larger inputs to move forward effectively. They can examine existing linkages and communication among the set of stakeholder groups and within each respective sector, and then determine where opportunities exist for strengthening and expanding collaboration and communication. Finally, they can be more flexible and responsive, adapting their inputs to the changing panorama of the stakeholders’ collaborative action and the self-organization of the system.

- Because of the exchange of control inherent in a systems approach, **international donors and national policy makers must be willing to take risks.** AP³ received great support from USAID, particularly the GreenCOM project Chief Technical
Officer, the AP³ Steering Committee, and USAID/Morocco. It would not have happened without their support and willingness to take risks.

Translating systems thinking and social network analysis more widely into an applied setting and providing an accessible set of practical tools that can be implemented easily by a variety of local stakeholders will take considerable effort. Potential future applications include adapting systems thinking tools from the SCALE™ process, such as system behavior-over-time graphs, cause loop diagrams, flow diagrams, systems archetypes, and outcome mapping.

Likewise, the evaluation process, tools, and analysis are still too complex for stakeholders to use as a practical decision-making tool. There is some tension between the need to collect data that will prove or disprove the SCALE™ framework hypothesis, and the need to collect data to strengthen stakeholders’ informed decision-making. In these demonstration sites, the evaluation team is leaning towards the former, but with the vision that the process, instruments and analytical tools will ultimately be “boiled down” to something more practical and useful for stakeholders. For example, in Kenya, AP³ staff tested, with a fair degree of success, the use of the pre-WSR social network maps as a tool for stakeholders to analyze during the WSR workshop, in order to prioritize the relationships in need of strengthening as part of their action plans.”

V. RECOMMENDATIONS

The SCALE™ hypothesis that collaborative, sustainable action and increased communication among stakeholders will lead to positive governance, environmental, economic, and social impacts, still remains untested due to the short duration of the project. As mentioned, the AP³ evaluation team could only measure indicators of communication and collaborative action among stakeholders, and not the broader impact of a full SCALE™ process over time. While conceptually the SCALE™ framework and hypothesis can appear simple — strengthening the network of people and institutions working on a problem will increase the impact in multiple levels — it requires considerable managerial, organizational, and facilitative skills and know-how to properly execute. This hypothesis needs to be tested in a fully funded multi-year study in multiple sites. Other significant recommendations of AgComm/ AP³ include:

“1. Employ a system-driven approach.”

- A “system” is the intricate network of people, their communities, organizations, and institutions, which have an effect upon or are affected by the issues surrounding a development topic.

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7 GreenCOM: Thirteen Years of Innovation in Strategic Communication for Environmentally Sustainable Development by Richard P. Bossi, Elizabeth Mills Booth, Tito Coleman, and Roberta Hilbruner, submitted to the 2006 World Congress on Communication for Development, Rome Italy.
• The social system (rather than outside experts) related to an environmental or other development topic must decide what needs to be done and where to put the capacity for sustainability.

• The system must respond to people’s needs rather than telling people what do.

• A system-driven approach must take a broad perspective – this means not endorsing one solution to the exclusion of others (e.g., instead of focusing on promoting one or two medicinal herbs, opening up the perspective to include the entire value chain of the medicinal and aromatic plant sector).

• A system-driven approach helps donors to leverage limited funds to achieve their impact goals.

2. **Work cross-sectorally and be inclusive of all stakeholders within the system.**

• Sectors include: **Environment** (biodiversity, soil and water conservation), **Economic** (macro- and micro-, trade and investment, finance, enterprise development, and livelihoods), **Governance** (policy, legislation, regulation, enforcement, and citizen participation in decision-making), and **Social** (health, education, gender, culture, safety, and security).

• Consider issues and identify key stakeholders from each of these sectors to frame the context of the development objective.

• Technical assistance must not be housed within a single entity as is typically done (usually a Ministry). Rather, an attempt should be made to keep it neutral at all times and not become attached to any one stakeholder group, perspective, or approach.

• Cross-sectoral participation from the on-set of a project makes it more sustainable because multiple sectors, institutions, and organizations are all taking action.

3. **Build networks of stakeholders that take collaborative action towards a common goal.**

• Simultaneously engage *all* stakeholders from the beginning of a project, rather than sequentially and through one-to-one meetings.

• Provide participatory processes and support for simultaneous linkages, interaction, and collaborative actions among large numbers of stakeholders – building networks for action.

• Foster interaction among networks of stakeholders to broaden impact and ensure sustainability after a project ends.
• Recognize that healthy, productive, and durable relationships need continual, open, and clear communication.

4. **Concurrently employ multiple social change methodologies.**

• Think outside the box about how information flows. Everyone in a social system related to an agricultural, environmental or development issue becomes a channel, a receiver, and a source of information.

• Simultaneously support vertical and horizontal communication, creating an information highway that infuses society with messages from multiple sources of information, thereby helping people to make better informed decisions.

• Apply technical assistance to support and train stakeholders on communication needed to initiate, forge, and strengthen relationships.

5. **Consider the media as a partner, not just a channel.**

• Include the media as a stakeholder from any project’s inception.

• Prevent members of the mass media from simply reporting the news or controlling interviews. Instead, engage the media by convening events for them around an issue, training them how to cover it, providing access to information and key individuals, and facilitating regular interaction with them and other stakeholders.

6. **Help donors and other investors coordinate activities and leverage resources.**

• Donors can jointly identify gaps and pool or coordinate resources to support specific related objectives, avoid duplicated or isolated activities, and make donor funding more effective.

• Engage the private sector from the outset, rather than trying to integrate or coordinate activities with them after a project is already underway.

7. **Adopt an innovative, pioneering attitude.**

• Break with tradition and try new things outside of normal approaches and comfort zones.

• Reach out to new, non-traditional stakeholders (e.g., religious leaders, Ministry of Finance, the Ministry of Education, herbalists, seed dealers, etc.).

• Facilitate and reward originality, inventiveness, and creativity – champions, innovators, and risk takers.
• Go where the energy is and support people who care about the issue. They are or will become the champions and will be working on the issue long after funded projects are gone.

• If something is slowing a project down, find ways to change it or go around it.

• Recognize that success attracts success. Everything is an opportunity to create support for the issue.

• Never say no. You never know where an idea can lead. Say, “let me/us think about it”.

Systems thinking in general and SCALE™’s applicability in particular, should not be limited to future agricultural, environmental, or natural resource management issues. Both offer promise in assisting development practitioners to address other current or emerging challenges such as scaling-up health, poverty reduction, global climate change, and economic growth activities.