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**FINAL EVALUATION:  
INCREASING THE CAPACITY OF  
REGENERATIVE AGRICULTURAL  
RESOURCE CENTERS  
(RARCs)**

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## **LIST OF ACRONYMS**

### *GENERAL*

Ag&NRM	Agriculture and Natural Resource Management
BHR/PVC	Bureau for Human Response/Office of Private and Voluntary Cooperation [of USAID/Washington]
DESFIL	Development Strategies for Fragile Lands Project
DIP	Detailed [Project] Implementation Plan
EOP	End of Project
FAO	Food and Agriculture Organization [of the United Nations]
FSR&E	Farming Systems Research & Extension
FTE	Fulltime Employee
GO	Governmental Organization
LOP	Life of Project
M&E	Monitoring and Evaluation System
MIS	Management Information System
NGO	Non-governmental organization
NRM	Natural Resource Management
PC(V)	Peace Corps (Volunteer)
PP	Project Paper
PVO	Private Voluntary Organization
RI	Rodale Institute
RARC	Regenerative Agricultural Resource Center [of RI]
R-RARC	Russia RARC
SANET	Sustainable Agriculture Network
SARD-FORUM	Sustainable Agricultural Research and Development Forum
SEEL	Sustainable Earth Electronic Library
TA	Technical Assistance
USAID	United States Agency for International Development
WID	Women in Development

### *SENEGAL*

CRCAD	
ISRA	Institut Scientifique de Recherche Agricole
SENPAC	
SODEVA	Societe de Developpement Agricole
S-RARC	Senegal RARC
NRBAR	Natural Resource Based Agricultural Research Project
ORSTOM	Organisme Regionale Scientifique et Technique d'Outre Mer
VITA	Volunteers in Technical Assistance

## *GUATEMALA*

<b>BANDESA</b>	<b>Banco Nacional de Desarrollo Agricola</b>
<b>ARCAS</b>	<b>Asociacion de Rescate de Animales Silvestres</b>
<b>CATIE</b>	<b>Centro Agronomico de Investigacion y Ensenanza [in Costa Rica]</b>
<b>CECI</b>	<b>Centro de Estudios y Cooperacion Internatcional [of Canada]</b>
<b>CI</b>	<b>Conservation International</b>
<b>CONAP</b>	<b>Consejo Nacional de Areas Protegidas</b>
<b>CUDEP</b>	<b>Centro Universitario del Peten</b>
<b>CIMMYT</b>	<b>Centro Internacional para el Mejoramiento de Maiz y Trigo</b>
<b>DIGEBOS</b>	<b>Direccion General de Bosques [Forestry Service]</b>
<b>DIGESA</b>	<b>Direccion General de Servicios Agricolas [Crop Service]</b>
<b>DIGESEPE</b>	<b>Direccion General de Servicios Pecuarios [Livestock Service]</b>
<b>FORPETEN</b>	<b>[Unknown]</b>
<b>G-RARC</b>	<b>Guatemala RARC</b>
<b>GOG</b>	<b>Government of Guatemala</b>
<b>ICTA</b>	<b>Institutio de Ciencia y Tecnologia Agricola</b>
<b>IICA</b>	<b>Instituto Interamericano de Cooperacion para la Agricultura</b>
<b>INTA</b>	<b>Institucion Nacional de Transformacion Agraria</b>
<b>LUMP</b>	<b>Land Use Management and Planning</b>
<b>MAGA</b>	<b>Ministerio de Agricultura</b>
<b>MBR</b>	<b>Maya Biosphere Reserve Project</b>
<b>MSI</b>	<b>Management Systems International</b>
<b>ProPeten</b>	<b>The name for CI in the Peten</b>
<b>RISPAL</b>	<b>[Unknown]</b>
<b>SEGEPLAN</b>	<b>Secretaria General de Planificacien</b>
<b>TNC</b>	<b>The Nature Conservancy</b>
<b>USAC</b>	<b>Universidad Nacional de San Carlos</b>
<b>USPADA</b>	<b>Unidad Sectorial de Produccion Agricola [of the MAGA]</b>
<b>VOCA</b>	<b>Volunteers in Overseas Cooperative Assistance Program</b>

## *RUSSIA*

<b>FADR</b>	<b>Federation for Agrarian Development Research</b>
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# **EXECUTIVE SUMMARY**

## **1. INTRODUCTION AND BACKGROUND**

The Rodale Institute (RI) is piloting a model for Regenerative Agriculture Resource Centers (RARCs) to promote environmentally and socioeconomically sound and sustainable agriculture and natural resource management worldwide. The model emphasizes the integration of applied/adaptive agricultural research and demonstration, networking and communications, and education and training — all conducted by national staff within the Centers — to encourage men and women farmers to grow food using regenerative techniques. The RARC program also seeks to educate both national and international audiences about regenerative agriculture.

The first RARC was established in 1987 in Senegal (hereafter, the S-RARC) and the second in 1992 in Guatemala (G-RARC). A third has recently been developed in Russia; and negotiations are on-going for a fourth. In September 1992 RI and the Bureau for Humanitarian Response/Office of Private and Voluntary Cooperation (BHR/PVC) of the US Agency for International Development (USAID) signed a Cooperative Agreement to provide the first two RARCs with 3 years of Matching Grant funding aimed at increasing their operational capacities along a number of fronts vital to RARC effectiveness and sustainability:

- streamlining accounting and reporting systems;
- improving communications among RI, the RARCs, farmers, researchers, and program administrators;
- increasing training outreach by RARCs;
- developing and implementing a systematic methodology for monitoring and evaluation (M&E) of RARC impacts;
- planning for the institutional and financial sustainability of the RARCs; and
- developing new RARCs in other countries.

The present document constitutes the final evaluation of progress on these fronts. Conducted in May-June of 1995, the evaluation also speaks to the needs of a second, follow-on grant for the RARC program that was awarded for 3 more years (1995-1998), contingent upon RI's submission of a detailed implementation plan, which must explicitly address the issues raised in this evaluation.

## **2. STAFFING, REPORTING, AND ADMINISTRATION**

**Staffing.** S-RARC staffing follows the Center's three interactive subprograms — agriculture, women in development (WID), and communications — with a competent, energetic team of seven highly dedicated individuals. The G-RARC has approximately 50 core, associate, support, and collaborating extension staff operating in 5 program areas: soils, crops, sylvopastoral systems, forest management, extension and rural socioeconomy, and M&E. G-RARC professionals, too, deserve recognition for their intensive and truly interdisciplinary approach to the promotion of regenerative agriculture.

From the time of their establishment, both RARCs have enjoyed good continuity in staffing. However, program outreach and impact may have been hampered by vacancies or turnover among some of the principal RI and USAID players in the RARC effort, as well as by staffing gaps with regard to technical expertise in: socioeconomics at both RI and the RARCs; gender analysis at RI and the G-RARC; tropical agroecosystems at RI; and statistics and management information systems (MIS) for other than financial matters at both RI and the RARCs.

The major evaluation recommendations regarding staffing are that: the long-vacant RARC Coordinator position be filled immediately, preferably by a senior social scientist who can also provide expertise in gender analysis, M&E, and impact assessment; the G-RARC likewise should hire an equivalent national professional to handle both socioeconomic/gender analysis and M&E; and the G-RARC train all its professional and field personnel in gender issues.

**Financial Reporting.** RARC financial reporting is well-streamlined. Reports are timely and accurate, and they meet all USAID, RI, and RARC requirements. Consequently, funds flow without major problems from USAID to RI and from RI to the RARCs. However, the RARCs could benefit from broader training in financial and general data management and reporting. For example, more comprehensive training in the use of spreadsheets could expand RARC capabilities in the organization and management of technical databases, M&E systems, modelling, etc.

**Technical Reporting.** At present, technical and other non-financial reporting systems for the RARCs are overly cumbersome, both for the Director of RI's International Division and for Center staff. Across both RI and the RARCs, a standardized format is needed that would permit ready compilation of individual staffers' reports into team reports, for these to then be periodically collated into the necessary program-wide reports (as the G-RARC already does in its in-house annual reporting). Such a format should be a flexible one that can be easily broken down and re-packaged into other kinds of documents for multiple audiences. Both RARCs also require training in aspects of technical report content and writing (including data management and statistical analyses for this purpose) plus clearer delineation of reporting responsibilities in their job descriptions.

### **3. COMMUNICATION AND INFORMATION DISSEMINATION**

The evaluation found that communications between RI and the RARCs have improved through electronic networking and e-mail. It also supports changes already in progress to revamp the RI newsletter *International Ag-Sieve*. In tandem with this effort, the S-RARC bulletin *Entre Nous* should be phased out and S-RARC publishing and reproduction equipment upgraded for the production of training materials. The G-RARC's popular weekly radio show, "Chatting with the Farmer," requires great improvement in its technical quality, participatory focus, and gender content. For these reasons and for possible cost savings, the G-RARC should explore collaborating with CARE/Peten's more carefully crafted weekly radio show since both deal with nearly the same technical messages.

Radio interviews with S-RARC team members have been broadcast nationally and internationally; and some of their work has been published formally. News items pertaining to G-RARC activities have appeared in a variety of national and international print media; and the G-RARC is well-positioned to publish formally in conjunction with many of its partner organizations. An increase in all such information dissemination and public relations activities is strongly recommended for both RARCs, so as to raise RARC profiles and credibility, thereby attracting continued donor funding and advantageous other-agency partnerships.

### **4. TRAINING**

**Training of RARC Personnel.** Personnel of both RARCs have received highly effective training in two realms: budgeting and accounting procedures, from RI financial personnel; and logframing and workplanning, from RI's M&E consultants. Much more remains to be done in terms of MIS/M&E training, however.

**Training by RARC Personnel.** The S-RARC has been conducting on-farm training in regenerative agriculture techniques with both men and women producers for the past 7 years. (Only in response to this evaluation, however, were gender-disaggregated data on these activities first tabulated.) The S-RARC has implemented ambitious technology-diffusion and farmer-to-farmer training initiatives, and it has collaborated with researchers and other NGOs to conduct an impressive amount of group training in composting, gardening, and animal fattening. However, S-RARC input into training and follow-up activities for Peace Corps Volunteers (PCVs) falls far short of BHR/PVC-approved targets. A formalized arrangement between the S-RARC and the Peace Corps would correct this situation.

G-RARC training efforts have not been well-documented. No comprehensive listing of types of training delivered or of trainee numbers, their institutional affiliation, gender, etc. was available at the time of this evaluation. Nevertheless, it was clear that considerable training outreach has taken place with (almost exclusively male) farmers. But perhaps the most dramatic impact of G-RARC training has been on government agricultural personnel through workshops, role-modelling, and on-the-job training that instill its quintessentially interdisciplinary approach.

To date, however, the RARCs have done little to engage trainees in the evaluation and review of training curricula and materials, in order to re-tool or re-target training as needed and to gauge its immediate and longer-term impacts, especially in terms of sustained behavioral changes in agricultural practices among trainees. Aside from the shortcomings noted, however, both RARCs have far surpassed any training targets set for them at the beginning of the BHR/PVC grant.

**Training Materials and Curriculum Design.** Although training in regenerative agriculture is a major activity for both RARCs, their production of training materials and clear-cut curricula is as yet limited. RI backstopping in this arena has been minimal. There is a need for significant upgrading of facilities (e.g., the addition of desk-top publishing equipment) at both RARCs and, for the S-RARC, of human resources (through staff training). If RI is unable to provide such support, then other sources should be sought. This is an area where (among others) some targeted use of PCVs could be helpful.

## **5. MONITORING AND EVALUATION (M&E)**

A major task of this evaluation was to determine whether the BHR/PVC grant has enhanced RARC capacities to collect, analyze, and interpret data of various sorts and to monitor and evaluate program impacts. During the grant period, M&E needs have been addressed through technical assistance from two expatriate consultants, one for each RARC. USAID's logical framework has been used to clarify program goals, activities, and anticipated results, and to define indicators and measurements needed for M&E.

The RARCs appear to have mastered the use of logframes for a variety of purposes. However, most other aspects of M&E are still in evolution. RARCs need to do more by way of collecting (at least proxy) biophysical data on the impacts of the technologies they are promoting. Likewise for technical and socioeconomic data, so as to avoid a "one size fits all" approach to applied technology testing and information dissemination. All current recording forms should be critically re-examined for their usefulness and cost-effectiveness vis-a-vis M&E needs; their structure finalized; and their data integrated into an effective but parsimonious MIS.

Developing an effective MIS/M&E capacity requires a whole-team recognition of the usefulness of M&E, a sense of ownership in the design and implementation of an M&E system, and a commitment to making M&E an integral part of all on-going activities. These conditions have not yet been met at the RARCs, however. Until they are, the RARCs will find it increasingly difficult to evaluate the impacts of their efforts, to make needed programmatic corrections, and to convey to donors (and others) that they are doing credible work that is worthy of continued funding. Finally, an RI output of the BHR/PVC grant was to be the publication of a M&E manual to provide NGOs with general guidelines for a participatory approach to M&E that can be applied in a variety of situations. As of the present evaluation, however, there was little tangible progress on the manual.

## **6. SUSTAINABILITY, REPLICABILITY, AND OTHER ISSUES**

Because RARC sustainability is largely dependent on the ability to secure funding from a variety of donors, the RARCs need to do a better job of conveying to donors that their efforts are successful. As implied above, this requires constant M&E of the viability of messages plus careful, credible reporting of the impacts that donors are most interested in: technology uptake and the consequent qualitative and especially quantitative effects of technologies on crop/livestock yields, farm income and human well-being (including gender equity), the environment, and so forth. Without effective M&E and reporting systems, prospects for the long term sustainability of the RARC model are dim.

Hence RI's and USAID's very astute emphasis on these components in building the RARC model. Much remains to be done, though. Thus it is appropriate that the follow-on grant continue this emphasis. It would also be prudent to review the indicators planned for the follow-on in light of experience to date, to double-check that they are appropriate, clear, verifiable through credible means, reflect activity impacts as well as process, and — in addition to all the foregoing — that they are feasible to collect and cost-effective. Also, the RARC model must be validated not only as to whether it leads to "doing things right" but also to "doing the right things" in terms of the technologies offered to (and adopted by) different recommendation domains.

Depending upon a given RARC's context, another strategic move toward long term financial sustainability is the marketing of training services and materials. The S-RARC is already deriving significant income from this strategy via contracts with other NGOs. These efforts are commendable and, wherever possible, should be encouraged as part of the RARC model. Training is not the only viable marketing strategy, however. The G-RARC's main comparative advantage, for example, lies in its capacity to do agroecology-specific adaptive research and technology testing — a capability it is already exploiting to attract new donor funding.

In planning for institutional as well as financial sustainability, the RARCs would be well advised to further examine their actual and potential niches in the larger institutional landscape of which they are part, and to revise and refine their mission statements accordingly so as to make for more tightly reasoned and targeted use of scarce resources. RARC resources can also be deployed more efficiently through strategic partnerships with other development-related institutions. This is a particularly laudable and successful feature of the RARC model. Both the S- and G-RARC work closely with national research and extension services in their on-farm trials and technology diffusion, typically employing collaborative logframes to guide these joint efforts. Both have also collaborated with other NGOs in training or (for Guatemala) in planning geographically or otherwise complementary activities. And the G-RARC has taken advantage of university linkages to acquire students for special or supporting field studies. However, the RARCs could enhance their capacities — perhaps especially in data collection and management, but also in impact and point studies — and thus their effectiveness by striking formal partnerships with still other entities such as the Peace Corps or international volunteer groups (e.g., CECI, VITA, VOCA).

To be sustainable, the RARC model must also incorporate concerted attention to WID/gender. RI's and USAID's decision to focus the follow-on grant on WID is thus a very wise one. While the S-RARC seems to have done a creditable job in this regard, G-RARC staff require training and technical assistance in gender-sensitive interviewing, technology selection and testing, extension, etc. to facilitate the weaving of gender considerations into every aspect of RARC operations.

To conclude, RI and USAID have identified and prioritized the precise arenas in which the RARC model could most benefit from increased capacity-building in both the initial and follow-on BHR/PVC grants. Implementation of the follow-on, incorporating the lessons and recommendations from this evaluation, should make for a significant payoff on USAID's initial investment. The next external evaluation will find a useful and important yet highly flexible and dynamic model for the establishment of sustainable Regenerative Agricultural Resource Centers worldwide that has been well-tested and demonstrated to be replicable.

# **1. INTRODUCTION AND BACKGROUND**

## **1.1. RODALE INSTITUTE AND ITS REGENERATIVE AGRICULTURAL RESOURCE CENTERS**

The Rodale Institute (RI) is a 501(C)(3) nonprofit organization located in Kutztown, Pennsylvania that traces its roots to the Soil and Health Foundation, established in 1947 by J.I. Rodale. RI's mission is to promote the application of "regenerative" agriculture systems, which emphasize the use of practical technology to build rather than deplete local production resources. Fundamentally, the Institute works to educate a broad spectrum of the public, both domestic and international, about the links among farming practices, soil health, and human health. In its educational efforts, RI addresses itself to scientists, farmers, consumers and policy makers. The Institute's educational and communication activities are enhanced by its ability to conduct applied research. RI revenues derive from public support, government grants, program revenue and interest income. For 1995, the annual operating budget was \$3.5 million.

In the international arena, RI has focused on the development and implementation of the Regenerative Agriculture Resource Center (RARC) model. This model emphasizes the integration of applied/adaptive agricultural research and demonstration, networking and communications, and education and training on the part of sustainable national non-governmental organizations (NGOs) to encourage men and women farmers to grow food using regenerative techniques. Examples of such techniques are integrating soil-improving legumes and livestock into cropping systems. RARCs are all staffed by national professionals who focus upon on-farm research, the use of a variety of information exchange media, and farmer-to-farmer training. Staff also participate in short-term workshops, conferences, and consultancies.

The first RARC project was initiated in 1987 in Senegal, West Africa. A second RARC project was established in 1992 with the Centro Maya in Guatemala's forested Peten region. A third RARC has recently been developed in Russia (R-RARC) in collaboration with an established NGO there. And plans for a fourth RARC are under way. RI's International Division<sup>1</sup> also participates in a project called Development Strategies for Fragile Lands (DESFIL), which builds on applied research to develop policies related to sustainable natural-resource management (NRM).

The present evaluation focuses on the Regenerative Agricultural Resource Centers in Senegal and Guatemala (hereafter, S-RARC and G-RARC) in the context of matching-grant support from the U.S. Agency for International Development's (USAID) Bureau for Human Resources/Private Voluntary Cooperation Office (BHR/PVC) to RI to increase RARC capacities (Section 1.2). The next two sections briefly introduce the substance of the two centers and give a flavor of their work. Those aspects of the RARCs' work supported more or less directly by the BHR/PVC matching grant are examined in greater detail in subsequent chapters.

### **1.1.1. The Senegal RARC**

For the S-RARC, 1995 marks RI's eighth full year of applied research, communication, and education programs directed at improving the quality of agricultural soils. Environmental degradation resulting from inappropriate NRM in the face of a growing population has put Senegal's rural residents at risk of malnutrition. Thus, the long-term goal of the S-RARC project is to increase food sufficiency for farm families while decreasing their need to purchase inputs for food production. The short-term goal is to develop partnerships with farm associations and both governmental organizations (GOs) and other NGOs, all of which work together in networking, education and training, and applied research activities to promote and advance regenerative agriculture. Four objectives serve these goals.

- Gather and disseminate information about regenerative NRM as it relates to food production and environmental enhancement.
- Increase the capacity of local producer groups to conduct on-farm design and evaluation of regenerative agriculture technologies.
- Encourage men and women farmers to communicate technical information among themselves and with technicians, researchers, and extensionists.
- Spread the knowledge and use of regenerative agriculture technologies through educational media.

Such technologies are assessed in collaboration with Senegal's Agricultural Research Institute (ISRA) and a number of national and international NGOs. Collaborative research activities include: on-going long-term studies to improve soil moisture retention on croplands; screening soil-improving leguminous plants intercropped with millet and sorghum crops; assessing the response of millet and peanuts to improved manure and compost management systems; integrating livestock more closely into soil management systems; and evaluating biological plant protection methods in women's vegetable gardens. Most of this research is carried out on-farm.

In addition to applied research, the S-RARC provides training to farmers, cropping and stock raising technicians, and extensionists in regenerative agriculture techniques (Chapter 4). To date these have included composting, soil conservation, vegetable gardening, animal fattening, agroforestry, NRM, the integration of leguminous plants in cropping systems, and project administration.

The S-RARC also carries out a variety of communication and networking activities (Chapter 3). One example is the Annual Farmers Conference, conducted in the major native language of Senegal (Wolof). At this conference men and women farmer representatives can voice their opinion on the future direction of Senegalese agriculture to a national audience. Another example is RARC production of *Entre Nous*, a French-language bulletin on regenerative agriculture.

Finally, a participatory approach to the design of monitoring and evaluation (M&E) systems forms a central focus of the BHR/PVC grant (and thus of the S-RARC) in building the capacity of NGOs to assess their impacts in regenerative agriculture, communications, and education on the well-being of Senegalese farmers (Chapter 5).

### **1.1.2. The Guatemala RARC**

Housed in the local NGO "Centro para el Desarrollo Sostenido de Ecosistemas Mayas" — better known simply as Centro Maya — the G-RARC began its fourth year of applied research, demonstration, and education activities in 1995. An agreement to create the Center was signed between RI and USAID in 1991. As of February 1992, a Technical Coordinator was hired along with another professional who later became the M&E Coordinator, both fully supported by the BHR/PVC matching grant. At this time, too, a government of Guatemala (GOG) General Coordinator was appointed to manage PL416 monies allotted to the RARC. Also in February 1992, the RARC was granted legal status as a Guatemalan government project.<sup>2</sup> However, not until July 1993 was the full complement of professional staff assembled (Chapter 2).

Centro Maya is a partnership that includes the Instituto de Ciencia y Tecnologia Agricola (ICTA), the University of San Carlos (USAC) and its Centro Universitario del Peten (CUDEP), the Centro Agronomico Tropical de Investigacion y Ensenanza (CATIE), and Rodale Institute. It also works closely with all GOG agricultural service agencies represented in the Peten. Indeed, the Center has been given the mandate to coordinate the majority of GOG applied research and extension for the region as a whole.

In addition, since its inception Centro Maya has formed part of the consortium of institutions implementing USAID/Guatemala's project to protect the Maya Biosphere Reserve (MBR), which comprises the second largest contiguous tropical forest remaining in the western hemisphere. The major objectives of the MBR Project are to maintain biocultural diversity in the Reserve and to change human behavior in such a way as to diminish pressures on the natural and cultural resources of the Reserve.

The G-RARC's activities are focused in the transition zone ecosystem south of the Reserve. Currently, the RARC works in three Pilot Areas (Bethel, El Chal, Las Cruces),<sup>3</sup> comprising a total of 26 farming communities or cooperatives. This figure is down from nearly 50 in 1994.

Overall, the G-RARC seeks to improve the standard of living for current and future residents of the Peten — which is subject to enormous in-migration and high human fertility rates — while at the same time conserving the surrounding tropical forest and natural resources. The G-RARC's goal as enunciated in the Centro Maya logframe (translated from the Spanish) is to "Develop land use systems for the Peten region of Guatemala that are economically viable in the short term and ecologically sustainable in the long term, plus the establishment of a self-sustaining institutional structure that can continue in the future with the functioning of sustainable ecosystems." Paraphrased from the logframe, G-RARC purposes are as follows.

- Incorporate principles, components, and practices...from...prehispanic and native systems of production into present-day production systems, with the aim of increasing their sustainability.
- Support biological scientists in the analysis of economic, social and cultural variables throughout the process of validating and demonstrating crop, livestock, and forestry technologies.
- Communicate and transfer appropriate crop and livestock technologies to institutions and farmers in the Peten.

The foregoing purposes are accomplished through the implementation of six programmatic areas (see Chapter 2), all under the guiding paradigm of farming systems research and extension (FSR&E).<sup>4</sup> Research and extension activities to operationalize G-RARC purposes and objectives mainly address the regeneration, intensification, diversification, and stabilization of the current system of extensive swidden (slash and burn) farming by drawing upon both ancient Mayan and modern techniques of food production, and both old and new, indigenous and non-indigenous cultivars.<sup>3</sup> With a more stable and productive agriculture, it is reasoned, people will not be obliged constantly to clear new land from the forest.

A good example of the kinds of regenerative agricultural technologies being tested and extended by the G-RARC is inter- and relay-cropping of maize — the staple food and principal non-livestock cash crop — with soil-improving legumes like the velvet bean (*Mucuna* spp., hereafter simply mucuna). Referred to locally as *frijol abono* or 'fertilizer bean', this vigorous legume offers a multitude of farming and environmental benefits. In relay, it allows farmers to more than double their earnings from maize sales by harvesting and marketing their crop at the season when maize prices are highest in Guatemala, thereby realizing up to three times greater profits. Also, mucuna's aggressive growth smothers all weeds, freeing farmers from the chore of manual weeding or the need to purchase and apply chemical herbicides. At planting time, farmers need only chop back the dry stems of the mucuna, leaving them to fall where they lie; there is no need to plow them into the soil if farmers lack plows. Taken together, these features leave farmers more time and money to plant other crops at the normal planting time and to engage in other productive activities. All the while, mucuna serves as a groundcover to help ward against erosion. And after 3 to 4 years of use, the soil-enriching mulch that mucuna provides begins to increase maize yields; within 8 years, yields can double or triple. Meanwhile, when green the mucuna can be used judiciously as a cut-and-carry feed for ruminants, swine, and poultry.

Examples of still other kinds of promising regenerative and healthful interventions that the G-RARC is experimenting with or extending include: maize-bean intercropping, as in traditional Amerind agricultural systems; more sophisticated methods of seed selection before, instead of after, harvest; agrosylvopastoral systems (i.e., the integration of cropping, forestry, and stock raising) that make it possible to keep livestock on less land with less risks to herds and to the environment; and most recently, women's home gardening of nutritious indigenous and introduced vegetables plus improved cookstoves that burn half as much fuelwood as traditional stoves while also providing more food-preparation options.

With support from USAID/Guatemala and the Moriah Fund, Centro Maya is also gearing up its expertise in land use management planning (LUMP) in the Peten. The larger goal is to develop a working, replicable model for LUMP in communities that border or buffer the Maya Biosphere Reserve. The model will be characterized by community-based decision-making, agrosylvopastoral strategies, household income generation, and enhancement of natural resources.

With such interventions as those described above, it has been estimated that the average Petenero family will require only a fourth as much land as under current swidden systems, because plots cultivated under regenerative regimes can be used virtually indefinitely.

A signature communications activity of the G-RARC has been its support of a regional radio show entitled "Chatting With the Farmer" (Chapter 3). In training and information dissemination (Chapter 4), another initiative is the G-RARC's organization and on-the-job instruction of GOG agricultural service personnel from diverse agencies in the planning and conduct of interdisciplinary research, development, and extension. This effort spans mainly the GOG agencies for forestry, cropping, stock raising, and fruticulture (respectively, DIGEBOS, DIGESA, DIGESEPE, and PROFRUTA — see List of Acronyms).

Finally, as in Senegal, a central G-RARC focus is supposed to be elaboration and implementation of a participatory M&E approach to assessing the adoption and impact of technologies, practices, and information transferred or extended by Centro Maya (Chapter 5).

## 1.2. USAID'S BHR/PVC GRANT TO INCREASE RARC CAPACITY

On 29 September 1992, USAID's BHR/PVC Cooperative Agreement No. FAO-0158-A-00-2055-00 for a matching grant aimed at "Increasing the Capacity of Regenerative Agriculture Resource Centers (RARCs)" was signed (Table 1.1.). The BHR/PVC project thus created is funded for 3 years through its end-of-project (EOP) date of 28 September 1995 (Table 1.1). The life-of-project (LOP) funding from USAID is \$534,699, matched by \$1,545,410 in qualified funds from RI.

**Table 1.1. USAID-RI Cooperative Agreement Milestones**

<i>Date</i>	<i>Event</i>
Sep 1992	BHR/PVC Cooperative Agreement No. FAO-0158-A-00-2055-00 for a matching grant to RI for RARC strengthening signed for 3 years. Effort is headed up at RI by the Director of the International Division (DID).
May 1992	In addition, a RARC Coordinator is hired at RI headquarters and charged mainly with management of the S-RARC while the DID assumes primary responsibility for the G-RARC.
Jan 1994	The first DID resigns and the RARC Coordinator at headquarters is promoted to the directorship while also retaining his RARC Coordinator functions.
Nov 1994	Follow-on grant request for RARC support submitted to BHR/PVC for an additional 3 years.
Jan 1995	Follow-on grant approved at funding level requested.
Jan 1995	New USAID BHR/PVC Project Officer takes over.
May 1995	Final evaluation of BHR/PVC Matching Grant Project initiated.
Jun 1995	Final evaluation completed.
Jun 1995	Position of RARC Coordinator at RI headquarters advertised.
Jul 1995	Detailed implementation plan (DIP) for follow-on matching grant due to USAID for approval.
Sep 1995	End of first BHR/PVC Matching Grant.
Oct 1995	Beginning of follow-on grant, assuming USAID approval of DIP.

The goal of the BHR/PVC project is to increase the ability of low-income farmers to more effectively manage their natural resources to meet immediate needs for food, fiber, and fuel, while enhancing future resource productivity. To help achieve this goal, three purposes of the grant were identified.

1. Increase the effectiveness, efficiency, and impact of the RARCs.
2. Increase the availability and utilization of information on regenerative agriculture.
3. Replicate the RARC model elsewhere.

Items 1 and 2 above are operationalized in three overarching activities supported directly by the grant.

- \* Streamline accounting and reporting systems.
- \* Improve communication among RI, the RARCs, and farmers, researchers, and program administrators.
- \* Develop a systematic methodology for M&E of project impact.

The overall outputs of the BHR/PVC grant as enunciated in Attachment 2 to the 29 September 1992 Cooperative Agreement can be summarized as follows.

- \* Increased training for RARC staff in accounting, report preparation, information systems delivery, and M&E.
- \* Streamlined accounting and reporting systems.
- \* Improved information and communication between RI and RARCs and increased communication between RARCs and larger audiences.
- \* Increased training outreach by RARCs to other NGOs and the Peace Corps plus preparation of training materials.
- \* An effective M&E methodology and system.
- \* Organizational and financial sustainability plans developed for Senegal and Guatemala RARCs.
- \* Plans developed and implemented for new RARCs in other countries.

The foregoing are the major outputs addressed throughout the present evaluation. Where relevant and feasible, specific quantitative targets set in the Cooperative Agreement or in the logframe of the proposal for achieving these outputs are also evaluated.

In January 1995, a follow-on grant for 3 more years (Sep 1995-Sep 1998) was approved by the BHR/PVC Matching Grant Review Committee for an LOP total, as requested, of \$1,166,897 from USAID, matched with RI funding of \$1,232,753 (Table 1.1). The follow-on continues some of the emphases of the first grant, drops those slated to have been adequately addressed by then, and adds some new ones for RARC capacity building and outreach. The follow-on's purposes are listed below.

1. Increase the practical application of information on regenerative agricultural methods by farmers and NGOs.
2. Expand the use of the M&E systems developed under the initial matching grant.
3. Increase RARC responsiveness to women farmers.
4. Stimulate public interest in and increase marketing opportunities for organically grown home-garden crops.
5. Enhance RARC sustainability.

### **1.3. THE PRESENT EVALUATION**

The present evaluation concentrates on the operational activities and outputs asterisked above as being key to RARC capacity building under the first matching grant (see Annex A's evaluation scope of work). However, the evaluation also endeavors to be responsive to the emphases of the follow-on grant as well. This approach is appropriate because of the somewhat unique timing of the present evaluation. Although administratively and technically this assessment stands as a final evaluation of the first matching grant, in practical terms the exercise functioned more in the way of a midterm evaluation<sup>5</sup> — coming, as it did, 5 months before the conclusion of the first grant but with the follow-on already defined and approved, and with authorization of funds pending USAID approval of a detailed implementation plan (DIP) to be submitted in July 1995. Thus, with an eye to generating useful inputs for the DIP, a prospective as well as a retrospective approach to the evaluation was adopted.

The evaluation team consisted of two senior-level PhD professionals — one agroecologist and one anthropologist/cultural ecologist — with a total of 42 years of international development experience between them in FSR&E, regenerative agriculture, environment-and-development, and NRM issues, gender analysis, and still other issues pertinent to the RARC model.<sup>6</sup>

In brief, the team's itinerary was as follows. For two days (15-16 May 1995) the team met jointly with RI headquarters staff and RARC M&E consultants, accompanied by the USAID BHR/PVC Project Officer (Chapter 2). Prior to this, the team had done extensive document reading and consulted repeatedly with one another by phone. Thereafter, the agroecologist traveled to Senegal and the anthropologist to Guatemala to conduct the evaluation of each site. An ocean apart, the team were nevertheless in communication by electronic mail (hereafter, simply "e-mail") as they implemented a pre-agreed workplan and evaluation methodology. The team were reunited in Washington DC for 3 days (27 to 29 May) of coordination and synthesis meetings plus debriefings with the Director of RI's

International Division *cum* RARC Coordinator (Table 1.1) and the USAID Project Officer. Coordination and report writing continued by phone, fax, and Fedex until submission of the draft final report for USAID inspection in mid-June 1995.

In total, 40 persondays (20 days each) of team time were formally devoted to the evaluation.<sup>7</sup> Evaluation methods embraced the following.

- Open-ended but structured interviews (see Annex B) by evaluators, using a variety of individual, focus-group, and random-walk methods with:
  - RI and RARC staff of all functions and levels — technical, administrative, financial; home office and field; permanent hire and consultants and associates.
  - Representatives of various NGO and GO institutions collaborating with the RARCs (especially in M&E) or working in the same region and knowledgeable about RARC activities.
  - Relevant USAID personnel in Washington and in the two country Missions.
  - Peace Corps trainers in Senegal.
  - Of course, men and women farmers selected with attention to variation in ethnicity, socioeconomic status, length of participation in RARC activities, and other relevant variables.
  
- Extensive document review — RI and RARC technical, financial, administrative, field, and trip reports, whether monthly, quarterly, annually, aperiodically; scientific publications about RARC technologies by RI staff or collaborating institutions; theses and practica by RARC-associated students; RI and RARC communications fora, outreach publications, newsletters, brochures, etc.; RARC extension bulletins and related; staffing rosters; and more. In all some 150 documents were consulted (Annex C).
  
- Attendance at RARC team meetings and/or at program presentations by RARC staff to visitors from other institutions.
  
- Visits to RARC and/or collaborating Ministry of Agriculture or Livestock field stations, and to on-farm experimental and demonstration plots.
  
- Evaluator field observation of M&E and other RARC personnel working with real farmers while modeling RARC methods for arriving at participatory M&E indicators, plus techniques used by male RARC staff to interview rural women and men.
  
- In Senegal, organization and compilation of raw data on S-RARC outputs, for various analyses. (This was not attempted in Guatemala due to G-RARC inability to locate data or to the scattered, incomplete, and anecdotal nature of those data that could be found during the period of the evaluator's visit.)

- In Guatemala, listening to a random sample plus a "paragon example" of the archived tapes of the RARC's regenerative agriculture radio show, plus a comparative sample of CARE/Peten radio show tapes.
- Firsthand inspection of RI and RARC offices and facilities, filing and disc-archiving systems, equipment, and administrative records and files (staffing, financial, reporting, inventory, etc.).

### NOTES TO CHAPTER 1

1. The formal title of the International Division has since been changed to International Programs. But for ease of writing, throughout the present report the earlier title is used along with the acronym "DID" for Director of the International Division.
2. Since its inception, the G-RARC has been working to change its status to one of an officially recognized NGO. The process has been a difficult and conflicted one, however. RI's Second Annual Report (1994) notes that in April 1994 an NGO Foundation was legally established to collaborate with the Centro Maya Project. But by all reports, this Foundation is non-functional.
3. The G-RARC no longer works in the San Jose area, the site of Centro Maya's original restoration of examples of ancient Mayan agricultural technology both for study and as a source of revenue from "science tourism" in tandem with ecotourism. This thrust comprised the founding vision of Centro Maya. For reasons that are unclear to the evaluators, however, this component is currently unfunded.
4. For examples of the sources the G-RARC draws on for its FSR&E principles and methodologies, consult Annex C.
5. Appropriately, USAID decided to conduct no formal midterm evaluation. Given a 3-year-long granting period plus in Guatemala a slow start-up on staffing, such an evaluation would have been an unwise use of scarce resources that could be better spent directly on RARC capacity building.
6. Functionally, their skills spanned research, research administration, training, agricultural communications, project/program directorship, and of course evaluation. The agroecologist's background was mainly in Africa. With extensive professional experience in Latin America (50 months) and Africa (40 months) dating from 1972, with experience in a more than a dozen previous evaluations (most for USAID), and with both Spanish and French language skills, the anthropologist served as team leader.
7. In fact, however, quite a few more persondays were devoted *gratis* both before and after the official period of the evaluation, due to its short timeline.

## 2. STAFFING, REPORTING, ADMINISTRATION, AND RELATED

### 2.1. STAFFING AND ADMINISTRATION

#### 2.1.1. RI Headquarters

Primary RARC-related staff at RI Headquarters theoretically consist of the Director of the International Division (DID), a RARC Coordinator, one part-time consultant each for the S-RARC and G-RARC on M&E and other matters, plus a variety of RI support personnel who interact directly or indirectly with the RARC program. The latter include: the Communication Manager for the International Division, RI's Chief Financial Officer and his support staff, the Executive Director of *INFORUM* (Chapter 3), and members of the Development Office, who fund-raise and produce the *Partner Report* (Chapter 3).

The word "theoretically" in the preceding paragraph refers to the distressing fact that, as of June 1995, for the past 19 months the position of RARC Coordinator has been vacant (recall Table 1.1). In the meanwhile, the DID has labored to bridge this gap while also fulfilling his other myriad duties, both to the RARCs and to Rodale as a whole. During the evaluators' visit to RI headquarters, the immense overload this situation places on a single individual was manifest, particularly given major new thrusts arising during this period, including: the addition of the new R-RARC under his oversight; his on-going negotiations with several potential host countries for establishment of yet a fourth RARC; and his greatly intensified proposal-writing, networking, and fund-raising endeavors aimed at setting the first two RARCs on a sustainable financial footing within the next decade (Chapter 6).

A further consideration in RI staffing is that some of the principal players in the BHR/PVC grant have not been in place since the inception of the RARC concept (see again Table 1.1). The present DID assumed his position in January 1994. Before that, beginning in 1992 he instead served as the RARC Coordinator but was *de facto* responsible mainly only for the S-RARC. Thus, upon assuming the directorship of the International Division, his familiarity with the G-RARC was limited. About midway through the grant period, there was also a changeover in the Division's Communication Manager.

More recently, the original USAID BHR/PVC Project Officer retired; the present incumbent took charge only in January 1995, when he moved to the position from a different office within USAID/Washington. However, there *has* been good continuity in staffing in other RARC spheres, including the RI financial and other support services and the RARCs themselves.

In sum, the doubling-up and/or turnover in key RI staff and USAID oversight cannot help but be reflected in the quality of at least some aspects of RARC program design, implementation, and follow-through. The evaluators also noted that RI has no technical expertise on-staff in socioeconomics or in tropical agroecosystems. Furthermore, it has experienced high staff turnover in statistical expertise, and currently has no one to provide it. RI is also short on MIS capabilities for other than financial matters. In the sometimes less-than-positive evaluation observations that may follow in subsequent chapters, readers should bear these facts in mind.

### **2.1.2. Senegal**

The S-RARC program is divided into three interactive subprograms: agriculture, women in development (WID), and communications (Figure 2.1). Seven people staff the S-RARC: a team leader and his assistant, plus one specialist each in agroforestry, gardening, agricultural development, WID, and communications. Two of the team are seconded from the government to the S-RARC: the WID specialist, from the Ministry of Women, Children, and the Family; and the gardening specialist, from the Agriculture Development Society (SODEVA) of the Ministry of Agriculture. The S-RARC also hosts students doing field practica and thesis research.

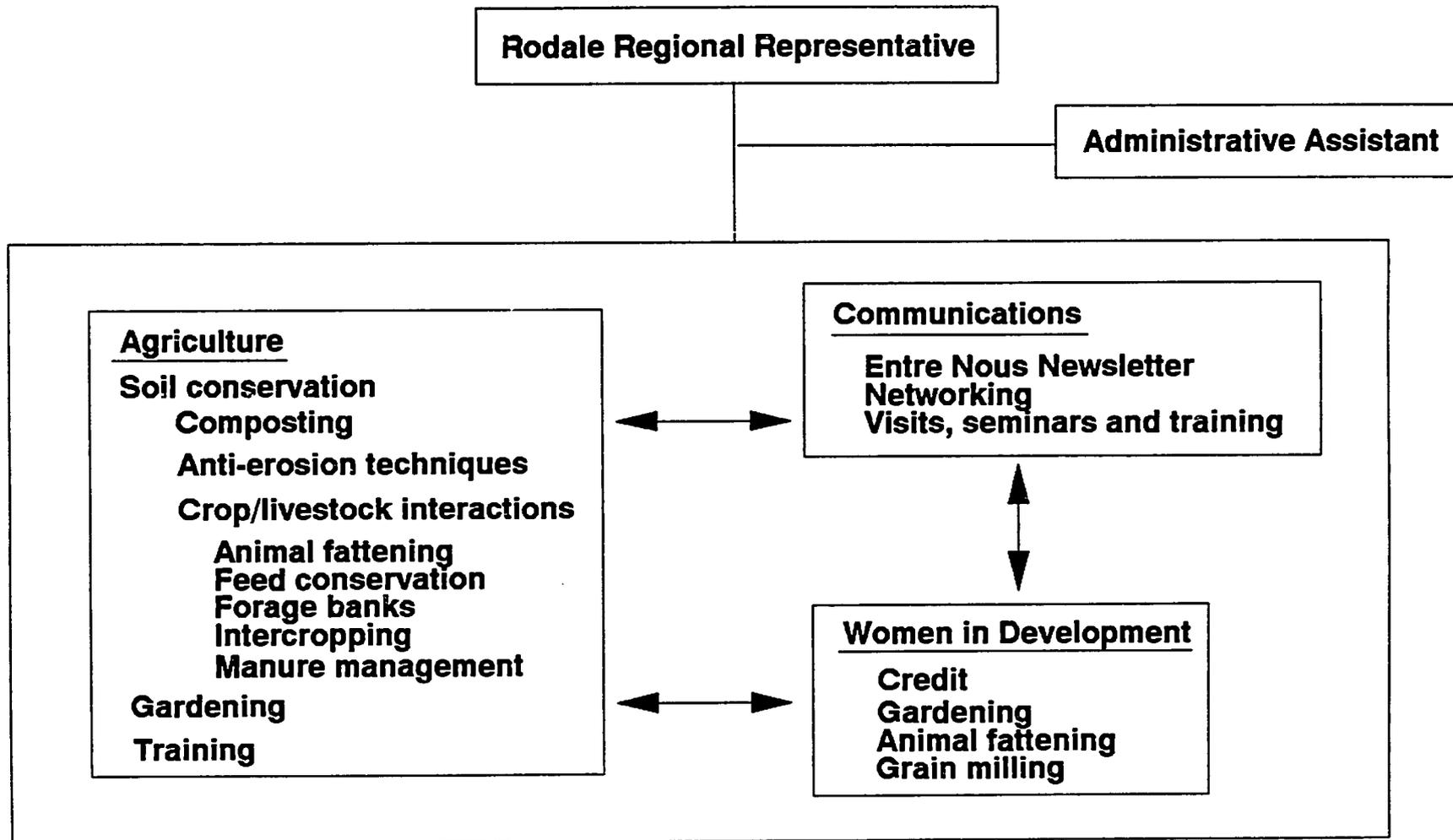
The team are currently defining scopes of work (SOWs) for each member. Individual discussions with the evaluator plus review of available SOWs confirm that tasks still need to be better defined and partitioned among team members. But the participatory approach the team has taken to this task, the S-RARC's highly interactive weekly planning meetings, and other evidence of high team integration are most commendable.

Most of the team have been working in the S-RARC since 1990. They comprise a highly competent, energetic group dedicated to their mission of promoting regenerative agriculture. The week of discussions and field visits that the evaluator spent with them clearly showed that these are very committed people, with a vision, who believe in what they do. Their enthusiasm, the interdisciplinary nature of the program, and its effective collaboration with research institutes, other NGOs, and producers makes this a unique program.

### **2.1.3. Guatemala**

The same can be said of the G-RARC team. The evaluator was greatly impressed by its members' devotion to and, in most cases, discipline in their work. Team professionals work on an intensive 11-days-on 4-days-off schedule in which they spend 3 of every 4 weeks together as a multidisciplinary "task force" in the field, with one week devoted by turn to each of the 3 Pilot Areas in which the Center now works (Chapter 1).<sup>1</sup> The fourth week is given over to networking, writing, monthly reporting, and other office work at G-RARC headquarters plus a once-monthly, highly participatory meeting on the first Tuesday of each month, attended by all senior staff, various administrative personnel, and the Coordinators and Supervisors of the Pilot Areas.

**Figure 2.1. Organigram of the Senegal-RARC**



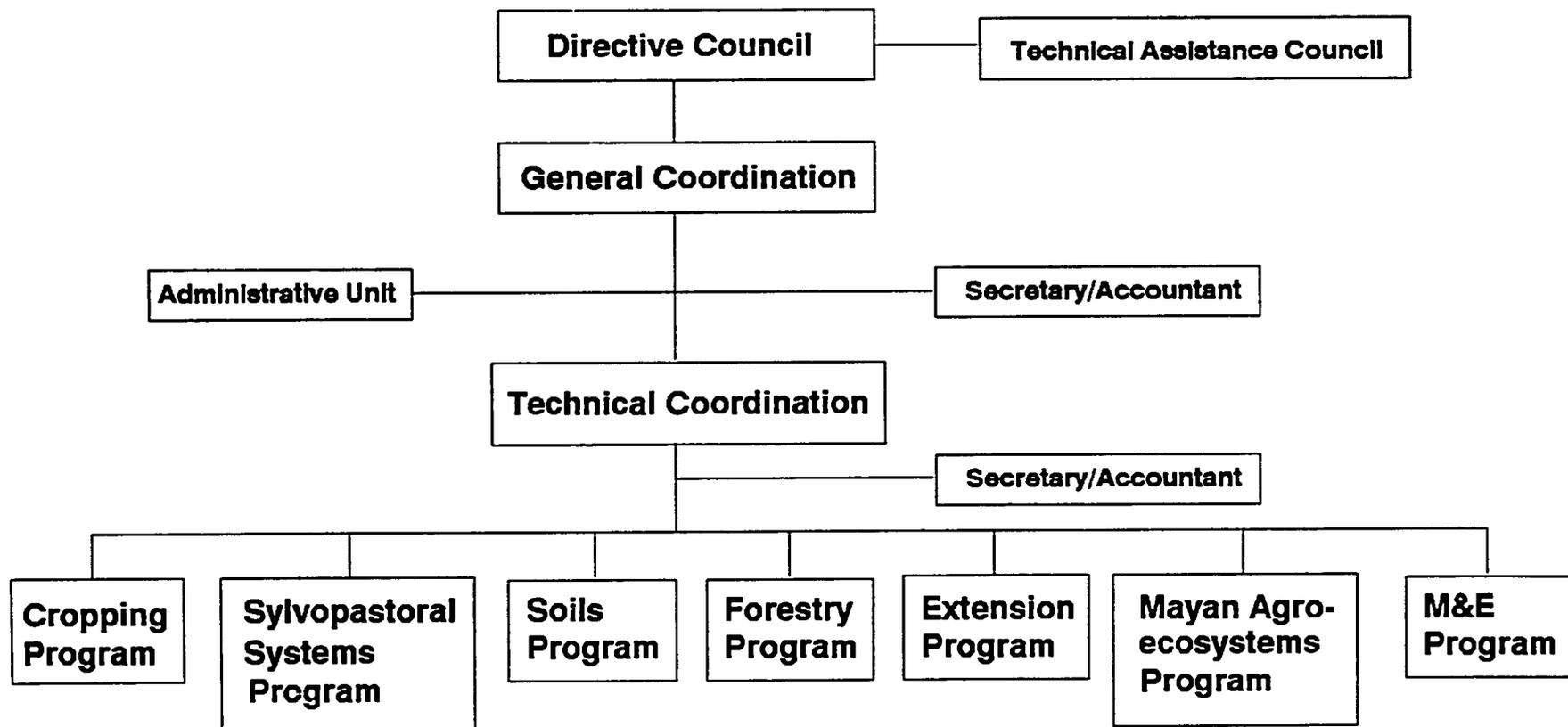
With approximately 50 core, associate, support, and collaborating MAGA extension staff, the institutional structure (Figure 2.2) and the personnel picture of the G-RARC is a complex one. As the new Pilot Area of Bethel gears up, this figure may rise even higher. Currently, a General and a Technical Coordinator have administrative and scientific oversight, respectively, of RARC activities. There is also one Coordinator for each of the G-RARC's 5 program areas that are currently functioning: Soils, Sustainable Crop Production, Sustainable Animal Production/Sylvopastoral Systems, Forestry/Forest Management, and Extension and Rural Socioeconomy, and of course M&E. A sixth program — Rescue and Reconstruction of Mayan Agroecosystems — is currently inoperative (see Chapter 1 again).

Each Program Coordinator oversees a varying number of associate professionals — most seconded from the Ministry of Agriculture's (MAGA) research unit (ICTA) — as well as technicians, field assistants, and university students doing practica and theses. The Extension and Rural Socioeconomy Program in addition includes 2 home economists (both female) plus a secretary for the El Chal Pilot Area. Each Pilot Area ideally also houses one Multidisciplinary Team Supervisor plus a Pilot Area Coordinator. Together, they oversee a mix of DIGEBOS, DIGESA, DIGESEPE, FORPETEN, and PROFRUTA extensionists (see list of acronyms) residing and working in the Pilot Areas in coordination with the G-RARC.

The Technical and M&E Coordinators are both supported 100% under the BHR/PVC grant. The two RI hirees are supported by one secretary-accountant, also RI-funded. The Center as a whole enjoys the services of an additional nine support staff consisting of a secretary/accountant, a chief and an assistant accountant, a warehouseman, three guards, one mechanic, and a procurement officer.

Besides the foregoing personnel, the G-RARC recently also helped host a Peace Corps Volunteer (PCV) who worked on issues of improved cookstoves and women's kitchen gardens. Throughout the 1980s and on into the early 1990s, Peace Corps did not operate in the Peten due to acute civil strife there. G-RARC leadership reports that it would like to host more PCVs now that they are being allowed (cautiously) back into the Peten. To this end, the leadership has met several times with Peace Corps representatives (in particular the Guatemala Associate Director for Agriculture) and has forwarded a formal request to PC/Guatemala for 3 more volunteers: one female PCV to work on women's development issues, one PVC (ideally also female) to work in environmental education, and one PCV with forestry expertise. The G-RARC has been told that perhaps by as soon as August 1995 some PCVs may be available. The Technical Coordinator somewhat ruefully noted that, in one sense, the Center has been fortunate in not yet having obtained official status as a Guatemalan NGO since, he says, PCVs in Guatemala are legally allowed to link only with GOG agencies.

**Figure 2.2. Organigram of the Guatemala-RARC**



In addition to PCVs, the G-RARC has also requested 3 volunteers — one each in WID, cooperative administration, wood processing — from CECI, the Canadian Center for International Studies and Cooperation.

During the course of the evaluation, the institutional resumés of all core G-RARC staff were perused, along with examples of written work by a number of the Coordinators (see Annex C). Oral histories on selected individual and overall team performance were also gathered. And many of the monthly reports (Section 2.3.3) and program workplans submitted during the BHR/PVC granting period were examined. These efforts gave rise to a number of evaluation observations about staffing and staff capabilities relating to the aims of both the present and the follow-on BHR/PVC grants. Some of these are offered below; others are mentioned in subsequent chapters to which they pertain.

For one thing, it should be noted that the Extension and Rural Socioeconomy Program currently includes no one trained in any of the relevant social or economic sciences. Along with some concerns about the background and capabilities in current G-RARC M&E personnel (Chapter 5) plus the lack of socioeconomic expertise at RI itself, this corresponding lack of skills at the G-RARC likely has contributed to its poor performance on people-level (including gender) impact indicators in M&E.

For another, no one in the G-RARC appears to have either formal or non-formal training in gender analysis in the context of agriculture and NRM (Ag&NRM). Moreover, currently there are only two even semi-professional females on staff. Both are home economists, hired at a salary level of Quetzales 600 per month. For comparison, only field extensionists earn less (Q500) while a guard's salary averages Q1000, a field assistant's Q1,500, an associate professional's Q6,000, and a program coordinator's typically Q9,000.<sup>2</sup> This is not to say that these home economists are necessarily paid an inappropriate salary (although this might bear investigation). It *is* to say, however, that this situation certainly signals a dearth of real expertise in gender-related Ag&NRM issues in the G-RARC. This lack both reflects and fosters a strong male bias in G-RARC choices of technologies and recommendation domains<sup>3</sup> — a situation that the follow-on grant seeks to correct.

Correction will be possible, however, only with the hiring of a full-time senior-level professional with demonstrated expertise in gender and Ag&NRM. It is also important that this individual be a female, so as to send an indisputable meta-message to donors that the G-RARC is firmly committed to gender equity and a development agenda that includes more than just 49% of the members (the males) of Petenero farm families. Arguments that appropriate female candidates are difficult to attract to the Peten do not "hold water." For example, as CARE/Peten leadership explained to the evaluator, they have had no difficulty attracting such women professionals. The secret is simple, they say: offer them positions with real responsibility that challenge their intellectual and professional interests and growth.

To the G-RARC's credit, it has taken an interim step to strengthen its capacity in gender issues by formally requesting the Volunteers in Overseas Cooperative Assistance Program (VOCA) to supply the Center with 8 personweeks of expertise to: analyze women's roles in the Pilot Areas; "educate" all RARC staff on gender issues and analysis; train the RARC home economists in methods for increasing women's participation in Ag&NRM development activities; and help write a RARC-wide plan of work for women in Ag&NRM (VOCA 1995).<sup>4</sup>

## **2.2. FINANCIAL REPORTING**

Financial reporting appears to be streamlined and timely, and it functions well for USAID, RI, and the RARCs. The USAID Project Officer indicated that BHR/PVC Office has always received the contractually stipulated quarterly financial reports in a timely fashion. Funds flow without major problems from USAID to RI and from RI to the RARCs. USAID's "letter of credit" allows RI to receive funds within a few days of requests. Under this system, RI can request funds when the project balance is less than or equal to 30 days' operating funds. The RI finance department expressed complete satisfaction with the timeliness of USAID disbursements, as did USAID Project management with RI's quarterly financial reporting.

At the project level, the S-RARC Team Leader and G-RARC Technical Coordinator are responsible for budgeting and reporting all financial activities. Budgets, disbursements, and expenditures are fully computerized, using Quicken software for banking and Excel spreadsheets for accounting. Handwritten ledgers of all petty cash transactions are kept at both field sites and RI headquarters. For BHR/PVC funds, the RARCs are reimbursed monthly. Other funds are provided on a monthly or quarterly basis, depending on the donor.

Each RARC maintains a local bank account. Monthly advances are sent to the field after the RI has received RARC monthly financial reports. In addition, the RARCs send annual financial reports to the RI. Interviews with RARC leadership and the RI Financial Officer, and inspection of these monthly and annual financial reports indicate that the present systems are streamlined and function very well. As of the monthly financial report for March 1995, the evaluators can confirm that — as per a specific RI and USAID/Guatemala query — monthly reports are now being submitted by the G-RARC in the new format requested, which gives complete by-source line-item detail of expenditures.

In sum, no funds appear to have gone astray anywhere along the line in the BHR/PVC matching grant. Only one incident having to do with Guatemalan banking systems was reported as still requiring some attention. The national bank does not always notify clients of transfers of monies. And if the accountant does not know that funds have been transferred, she can do nothing to track them down. In one such case, some \$7000 disappeared for several months within the Guatemalan banking system. Ultimately, the discrepancy was discovered by RI accounting and then recovered by the Guatemala City accountant. However, systems need to be set in place so this cannot happen again.

The evaluators found that RARC staff have been adequately trained in the performance of all basic financial reporting procedures. Training is given when the RI Financial Officer visits the field site, and when RARC leadership visit RI. The Financial Officer has made 2 trips to Senegal and 1 to Guatemala during the grant period; before grant start-up he made an additional trip to Guatemala to put systems in place. The training provided during these visits involved demonstrations of how to enter data into pre-formatted database files in a simple, clear, efficient, and cumulative way such that output fulfills RARC management and administrative needs as well as the reporting requirements of both RI and USAID.

Both the RI Financial Officer and RARC leadership signaled that the RARCs could benefit greatly from a broader approach to training in financial and general data management and reporting. Also, more comprehensive training in multiple uses of spreadsheets could make RARC accounting support staff more polyvalent and thus expand program capabilities, e.g. in M&E. It should also be noted that RI's Guatemala-City accountant/procurement officer has lacked a computer for the past 2 years and must borrow one from CATIE in order to do her work. This situation makes for less efficient and flexible use of her worktime. If rectified, it could free her to do a greater variety of tasks.

Also in Guatemala, a salary issue arose with regard to the Guatemala-City and at least one of the two G-RARC secretary/accountants. Like the G-RARC Technical and M&E Coordinators, these individuals are paid solely through Rodale, which provides them a larger-than-average lump-sum salary rather than a package of salary and benefits (life and health insurance, year-end bonuses, etc.). It would be prudent to review and confirm that accounting staff's current salary is commensurate with that of equivalent professionals in Guatemala.

## **2.3. TECHNICAL REPORTING**

### **2.3.1. RI Headquarters**

The RI DID *cum* RARC Coordinator uses the information sent to him in various RARC reports (next two sections) as the basis for preparing monthly and quarterly reports to the RI President. Three times per year he also submits a divisional report to the RI Board of Directors. RI's non-financial reporting requirements to the USAID BHR/PVC office consist only of one overall annual report.

In preparing his reports, the DID/RARC Coordinator has to contend with a wide variety of reporting formats, not to mention the absence of technical or annual reporting from the RARCs themselves on occasion (next two sections). In effect, this headquarters individual often ends up writing RARC annual technical reports himself. This is an unfair burden on RI management and one that, if remedial steps are not taken, can only become more onerous with the addition of new RARCs in Russia and elsewhere.

Moreover, this arrangement makes for poor-quality annual reports from RI to USAID (RI Sep 1993 and RI Sep 1994). In their substantive sections, these consist largely of a laundry list of qualitative paragraph after paragraph after paragraph of impressive-sounding but mainly anecdotal accounts of RARC achievements. There is no tabular, or cumulative presentation of quantitative data; only occasional large "estimates" of numbers of farmers contacted directly or indirectly, numbers of trainees, etc. are offered. Neither is it entirely clear how these estimates are arrived at — particularly in light of the present evaluation's findings on the status of reporting systems (Section 2.3) and M&E (Chapter 5) at both the S-RARC and the G-RARC. Furthermore, while these annual reports are written in a very polished and persuasive style, both evaluators discovered discrepancies between information there as versus in the field.

Greater harmonization of reporting formats and procedures across RARCs could contribute much to better and more timely technical reporting on the part of both the RARCs and RI. Currently, RARC quarterly and biannual or annual technical reports — if they appear at all — do not provide information in a way that is comparable or that can be easily packaged or re-packaged at headquarters (or for that matter, in the RARCs) into reports for multiple audiences: RI, USAID, researchers, other NGOs/PVOs, and perhaps farmers. Institution of a standardized and cumulative reporting format plus an integrated RI/RARC-wide management information system (MIS) (see Chapters 4, 5, and 6) would go far toward easing this perennial and potentially growing problem of attempting to produce multiple RARC technical reports at RI with a dearth of credible quantitative data.

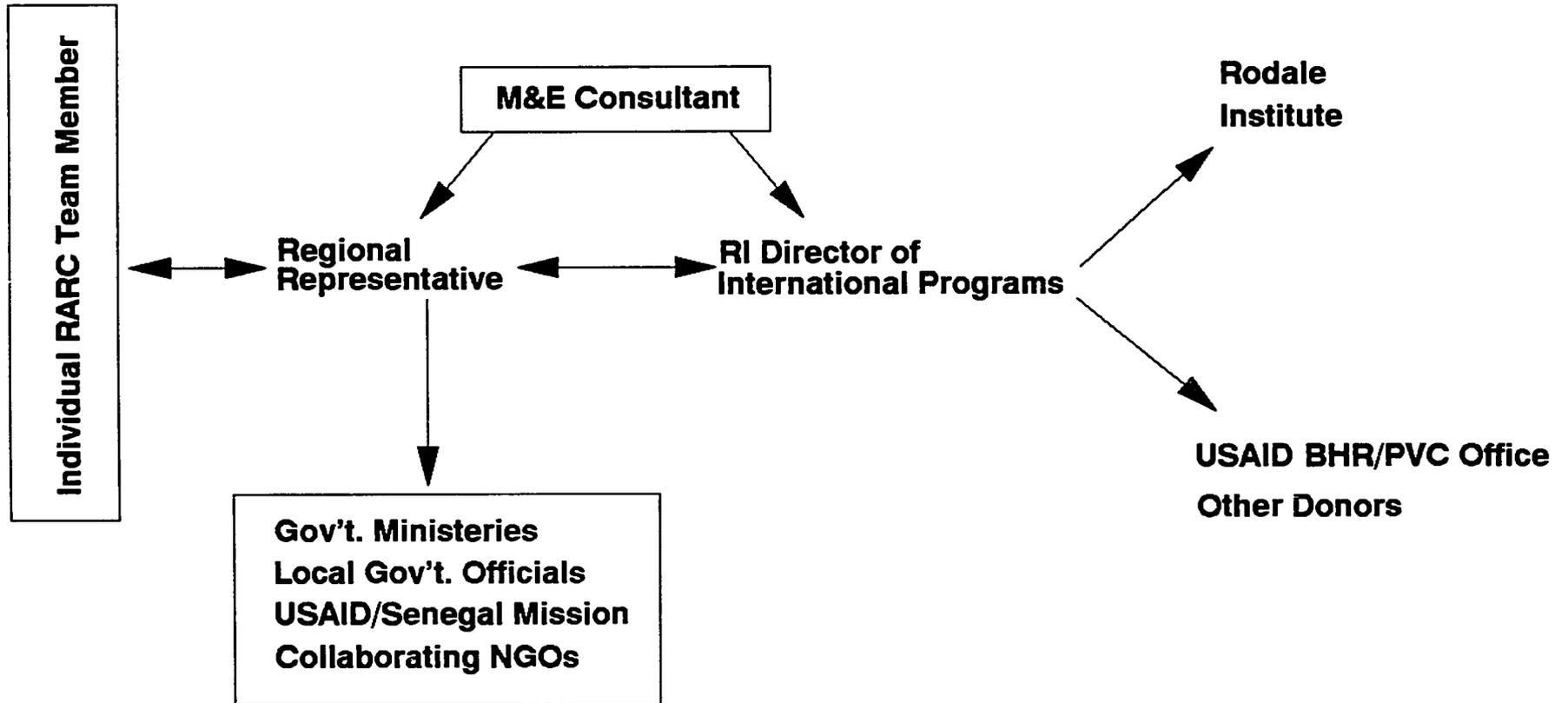
An integrated MIS would also be invaluable in tracking data on staffing, administrative matters (e.g., submission or non-submission of monthly reports, staff travel and other absences), and general activity types (see e.g. Annex D's chronogram of M&E activities) that are required for day-to-day operations as well as many kinds of RARC and RI reporting.

### **2.3.2. Senegal**

The flow of technical reporting for the S-RARC is illustrated in Figure 2.3. Each staff member submits a monthly technical report to the S-RARC Team Leader who compiles the information into a program monthly report. This is then returned to team members for their review and, after modifications, is forwarded to the RI DID, the DESFIL Coordinator, and the S-RARC M&E Consultant. The RARC Team Leader also sends quarterly and semiannual reports, albeit not on a regular basis, to government ministries and local officials, USAID/Senegal, and collaborating NGOs.

The technical reporting systems in place at the S-RARC are overly cumbersome, both for the field staff and the RI DID. A review of monthly reports and discussions with the S-RARC team revealed that staff often report on shared field activities, e.g. when multiple members have participated in certain activities. The Team Leader has to sift through this duplication and the very different reporting styles to compile his monthly report.

**Figure 2.3. Paths of Technical Reporting by the Senegal RARC**



One of the (many) successes of the S-RARC is that it has been able to effectively interact with researchers, other NGOs/PVOs, and producers. However, collaborating with such a diverse set of stakeholders presents particular problems for reporting on program activities and technical results. The S-RARC needs to tailor its reports to the information needs of its diverse audiences while also maintaining credibility among its various collaborators.

Technical reports need to be more descriptive and provide more quantitative information. For example, one monthly technical report informs that "average daily weight gains (of cattle) were 935 grams, which were outstanding." Yet more of the available data should have been provided so as to make for a richer description of results that would be more informative and credible for all audiences. For instance, the report could have included what type of animal was fed (male or female), the feed used (millet grain, leaves, etc.), the length of the study, and how this weight gain compared to animals not given the feed supplement. If the fattened animals are destined for sale, the report could also add something like "Producers following such feeding strategies for a month could sell animals at a profit of X amount."

The S-RARC has not published an annual technical report since 1990. A technical report covering 1991-92 appeared in 1994; the 1993-1994 biennial report is still in progress. According to the S-RARC Team Leader, the main reasons for this tardiness are insufficient technical information on an annual basis from long-term trials and the long delay in receiving information from ISRA on collaborative trials. For example, ISRA has not given the RARC any analytical results of samples (e.g., soil, plant, compost) for mineral analyses since 1992.

It is imperative that the S-RARC produce annual technical reports. Not only do all stakeholders require information in a more timely manner, but also the exercise of annual reflection and reporting provides an important tool for critical evaluation of activities, which can then be used to plan appropriate future endeavors. The current reliance on one person (the Team Leader) to perform the necessary qualitative and quantitative analysis and synthesis of all program activities and to write the annual report is not functioning well because of this individual's many other administrative responsibilities.

The Team Leader also signaled that the program's computers lack the required math coprocessors to run the statistical software (SUPERNOVA) necessary to good technical reporting. In addition, assistance from RI in data management and statistical analysis has been poor recently. As noted in Section 2.1.1, RI has experienced high staff turnover in statistics expertise and currently has no one to lend such assistance to the RARCs. ISRA provides some backstopping in data analysis, but this is infrequent and often takes a long time.

Illustrative and/or verbal messages would be more appropriate for farmers. Such results could be transmitted via posters and during village and farmer-to-farmer meetings (Chapters 3 and 4).

Overall, the program's message could benefit greatly by better targeting its reporting to its various stakeholders.

### **2.3.3. Guatemala**

The current structure of all non-financial reporting within the G-RARC is displayed in Figure 2.4. Reporting can be categorized into three types: RI-specific, RARC-internal, and M&E. While the latter two theoretically interlock in ways that are explained in Chapter 5, as should be evident from Figure 2.4, RARC-to-RI reporting forms an isolated category that is not linked to any other of the normal reporting processes within the RARC.

RARC-to-RI reporting itself consists primarily of three types, not counting extraordinary reports that are sometimes needed for submission to potential donors or for other special purposes.

First are monthly reports in English from the BHR/PVC-funded Technical Coordinator to the DID/RARC Coordinator concerning the former's activities across the month. The evaluator verified that these have been delivered "faithfully" and usually in a timely fashion since the beginning of the BHR/PVC grant. Moreover, when the current DID took over from his predecessor, he instituted a standardized format for these reports; before, they consisted of a single, amorphous body of text undifferentiated by topic or type of information. Originally, too, they were written only quarterly rather than monthly, but this proved inadequate for regular information flow from the G-RARC to RI headquarters. Thus, there has been considerable improvement in this line of reporting.

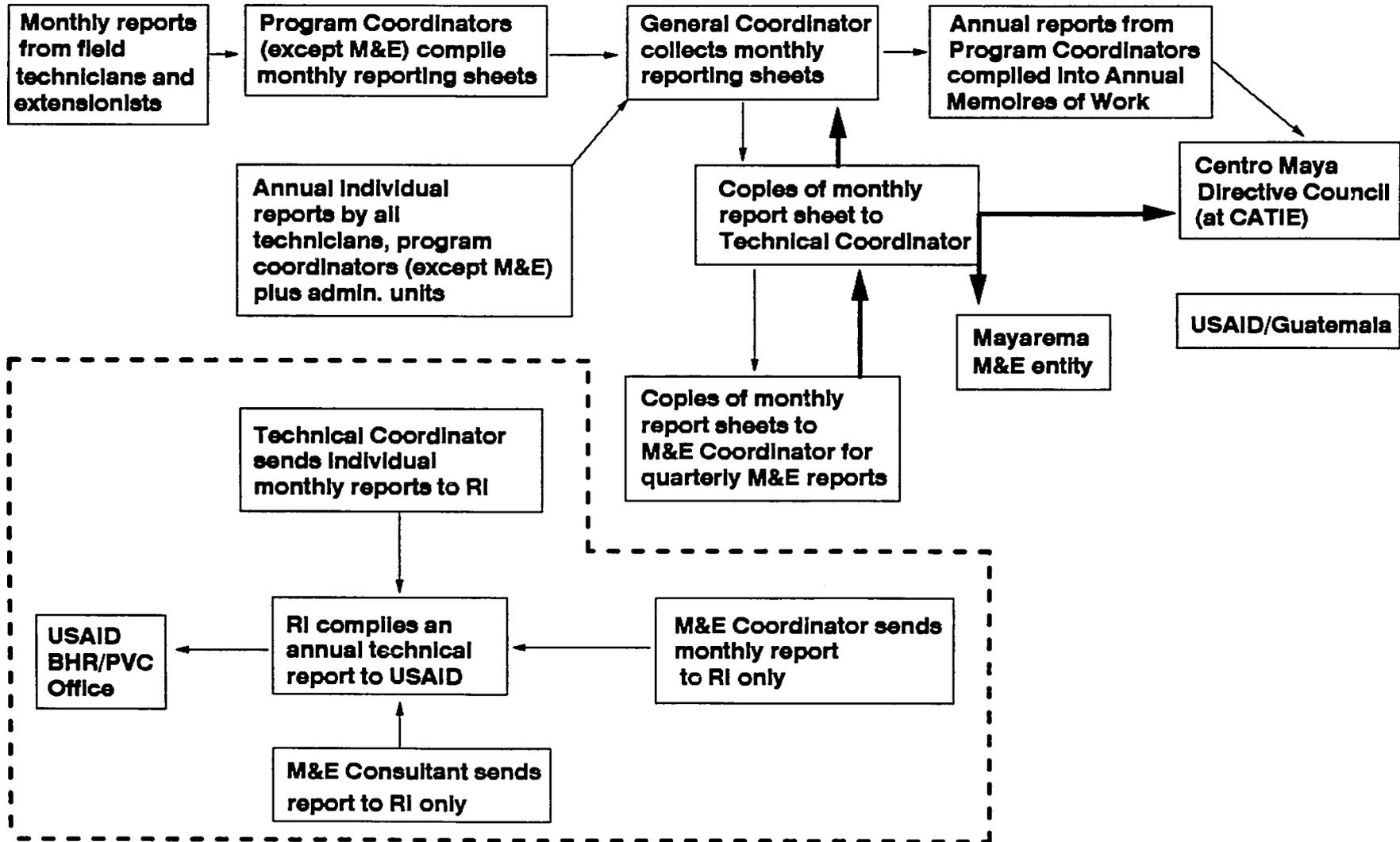
Since January 1995, the DID/RARC Coordinator has also required a second, equivalent report from the BHR/PVC-funded M&E Coordinator. This probably was a wise move in that output from this component has been disappointing (Chapter 5). Thus it would be useful for RI management to learn how this individual has been expending his time. To date, however, the M&E Coordinator has combined this new requirement with the trip reports of the G-RARC M&E Consultant, who spent the months of January through April working with him in the Peten.

Third are these consultant and other trip reports. All RI headquarters staff or consultants are required to submit reports of their trips to RI upon return. Again, they have done so without fail (but see Chapter 5).

The important points to note about this system of RARC-to-RI reporting are three. First, as it all occurs in English, it stands entirely apart from the rest of G-RARC reporting. Second and relatedly, neither the Technical nor the M&E Coordinator participate fully in the larger G-RARC reporting system. Unlike all other Coordinators, they submit no monthly reports to the General Coordinator (Figure 2.4). The evaluator was frankly astonished to learn this; but it was explained that these individuals are not subject to contractual commitments to do so, as are the rest of the professional staff. This represents a serious internal institutional disjuncture. It presents potential for challenge to the authority of the

# Figure 2.4. Paths of Technical Reporting by the Guatemala-RARC

(Heavier-lined arrows indicate flow of M&E reporting)



General Coordinator and to the very effective and impressive reporting, worktime, team-organizational, and other systems he has put in place. But when some staff operate under special and different rules from their peers, this can pose a serious threat to morale, as well as to team integration and communication. While this seems not to have been a problem in the case of the Technical Coordinator because of his warm personal relations with the General Coordinator and his position as the G-RARC's "founding father," according to some accounts the M&E Coordinator has abused his status as a contractually distinct personage.

This duplicate and disjunctive system of reporting must be corrected. At the same time, lines of authority and responsibility between any RI-salaried staff and the rest of the Center must be straightened out. It is puzzling how this situation has escaped the notice of RI management. Most likely it is in part due to the turnover in RI leadership discussed in Section 2.1.

Third, the evaluator was also surprised to learn that copies of consultant trip reports are not formally shared with G-RARC management — neither with the General nor the Technical Coordinator, even though the latter is also an RI hiree. This oversight could easily make for a completely unnecessary lack of transparency that fosters suspicions and jealousies over competing agendas, access to resources and to the ear of higher-ups, and what-have-you.

Finally, a particular bone of contention in RI reporting has been the lack of quarterly and annual technical reports from the G-RARC Technical Coordinator to the RI DID *cum* RARC Coordinator. The former claims he did not know this was expected of him. And indeed, in a perusal of various job announcements for his position, this task was not stipulated. (Despite the evaluator's request, no current SOW of this position was forthcoming from either the RARC or RI.) On the other hand, when the evaluator inquired whether the Technical Coordinator thought it was reasonable to expect the DID/RARC Coordinator to write such reports for up to 4 RARCs worldwide, he allowed as how this was not "logical." The Technical Coordinator's impression seemed to be that it was the M&E Coordinator's job to do the technical reports for the G-RARC.

At one point, in exasperation RI gave notice that it would refuse to pay salaries if technical reports were not forthcoming from the G-RARC. To the best of the evaluator's ability to untangle this situation, in fact the following G-RARC technical reports have appeared: for 1992, a 4-page document written by the M&E Coordinator in Spanish; for January 1993 through June 1994, a 15-page document written by the DID *cum* RARC Coordinator in English, with the Technical Coordinator listed as a second author; and for September to December 1994, a 4-page "trimester" technical report presumably authored by the DID.

Turning now to RARC-internal reporting flows, these are orderly and are fairly well-monitored and -archived by the General Coordinator. Although the system of monthly reports from Program Coordinators — to be handed in on the first Tuesday of each month at the monthly whole-team meeting — sometimes falls behind and breaks down (see Chapter 5), staff are scrupulous about submission of their year-end individual reports. From these plus monthly reports, the G-RARC has produced comprehensive and extremely well-organized year-end reports for both 1993 and 1994, using a format standardized across programs and years. Building on the system of logframe-driven workplanning (Chapter 5), these reports systematically outline, program by program, all types and numbers of activities planned vis-à-vis those actually implemented, along with commentary on their research or extension results — albeit without the systematization and accuracy that an MIS/M&E system would provide. Nevertheless, the G-RARC deserves kudos both for these year-end reports, as well as for its well-formulated and interdisciplinarily coordinated (but probably overly ambitious) annual workplans.

## **RECOMMENDATIONS**

### **RI Headquarters**

- Promptly fill the RARC Coordinator position. Plugging this longstanding gap in headquarters personpower is imperative in order for RI to be able to cope with the on-going expansion of its international activities to at least two more RARCs while also working to help place the first two RARCs on a sustainable financial footing (Chapter 6).
- Because of the foregoing needs plus a number of visible lacks at RI headquarters and/or the RARCs in expertise in socioeconomics, gender analysis, M&E, and impact assessment, the new RARC Coordinator should be a mid-to-high-level social scientist (socioeconomist, anthropologist, or rural sociologist) with demonstrated experience in all these areas (see also Chapters 5 and 6).
- As RARCs and their activities expand and intensify, and especially — as seems likely — yet a fourth, tropical-zone RARC is added, consider acquiring some modicum of technical expertise (e.g., an MS with a number of years of overseas experience in the tropics) in tropical agroecosystems (which RI currently lacks).<sup>5</sup>
- Improve technical backstopping from RI to RARCs with particular reference to data management and analysis (statistical analyses, presentation of numerical data, MISs) and the writing of technical reports.
- Set clear standards for the quality and paths of trip and technical reporting on the part of M&E or any other consultants contracted by RI (see also Chapter 5).
- Also, formally share all regular consultant reports (even though they are in English) with RARC management and other interested G-RARC staff (e.g., M&E Coordinators) in accord with the spirit of transparency for which NGOs are renowned, and which in any case should characterize any well-functioning organization.

## **Senegal**

- Computerize petty cash transactions so they can be easily incorporated into financial reports.
- Finish the 1993-94 technical report and institute regular annual technical reports.
- To the extent possible, standardize the formats of monthly, quarterly, semi-annual, and annual technical reports (see program-wide recommendations below). The format of the 1991-92 technical report appears appropriate.
- Formalize relationships or otherwise contract with ISRA to supply technical information to the S-RARC in a more timely fashion.

## **Guatemala**

- Hire a senior-level (PhD recommended, minimum MA) female professional with demonstrated experience in socioeconomics and in gender-and-Ag&NRM. For cost savings, seriously consider adding M&E to this list of expertise and folding together this position with that of M&E Coordinator. Until a permanent national-level professional can be hired, supply some interim expertise to work through gender (and ideally also MIS/M&E) issues with G-RARC staff. This might consist of seconding the new RARC Coordinator hiree to the G-RARC for some months or (admittedly in a break with RI/RARC policy) temporarily contracting a recent PhD expatriate with demonstrated overseas development experience. Without such steps, it is doubtful that the G-RARC will be able to embark effectively on the follow-on grant's tasks.
- Equip RI's accountant/procurement officer in Guatemala City with a computer. Also, always notify this individual whenever funds are in the process of being transferred, and provide her with copies of all RI deposit and transfer documentation.
- Review, and if necessary augment, the lump-sum salaries of RI-employed secretary/accountants to bring them in line with national norms for total pay packages of such levels and types of employees.
- Forward additional requests to Peace Corps for more "generalist" PCVs who can assist the G-RARC in a number of much-needed tasks at its headquarters, such as many of those listed below in the program-wide recommendations (establishment of an MIS and other information, library, etc. organizational strategies; helping to get a standardized reporting system up and running) and elsewhere throughout this evaluation report. Generalists are much easier to come by than technically more specialized PCVs. While waiting for the latter, the G-RARC could make good use of the former.

- At all costs, in preparation for the BHR/PVC follow-on grant, proceed with plans to acquire expert training for all G-RARC professional and extension staff in gender issues (and for professionals, analysis) in Ag&NRM. If for any reason VOCA plans fall through, promptly make other arrangements.
- Correct the disjunctures in G-RARC reporting flows (and lines of authority) by requiring RI hirees to participate in the reporting process in the same fashion as the rest of the staff. Permit RI hirees to submit the same monthly reports to RI in Spanish, if at all possible.
- Sort out who, exactly, is responsible for producing G-RARC technical reports to RI, when, and in what language, format, and approximate length with what kind of content. Once clear agreement on these points is reached, write them up; and include this task in updated job descriptions for the responsible individual and in his/her contract. Consider hiring an inexpensive national-level translator or editor on a flat-task basis to assist in this job if frequent reports are required in English.

### **Program-wide**

- Update (or where they do not already exist, create) clear and well-defined SOWs/job descriptions for all RI and RARC personnel.
- Make sure that both RI and RARC staff job descriptions include each individual's required reporting responsibilities; and make payment of salaries or disbursement of funds contingent upon the timely completion and submission of reports. Review the need for applying others of the procedures and sanctions elaborated in the final recommendation above for the G-RARC in other RARCs.
- Train appropriate RARC personnel in the use and application of spreadsheet software for an array of pertinent program activities: accounting, organization and management of technical and other information databases, M&E, modeling, etc.
- Train or hire someone solely responsible for information management at each RARC. Where cost is an issue, investigate the possibility of contracting this task out on a part-time basis.
- Standardize technical reporting formats across RI headquarters and all present and future RARCs so that information and reporting itself will be cumulative across the year and be available in readily "repackage-able" units that can be tailored to meet the needs of multiple RI and RARC audiences.

- To facilitate the foregoing, institute an integrated RI/RARC-wide MIS (see also Chapters 4, 5, and 6). This system should also serve to track management and administrative matters at all sites. If necessary, hire a highly experienced consultant with a demonstrated track record in MIS and associated reporting formats to set up such a system.
- Enrich the technical-scientific data presented in both RI and RARC annual reports so that these will be more comprehensible and credible to the scientific and donor communities.

## **NOTES TO CHAPTER 2**

1. Unfortunately, the timing of the evaluator's visit coincided with the team's fieldweek in the most distant of the Pilot Areas, which would have consumed 2 persondays of the evaluator's time to visit. Consequently, it was not possible for the evaluator to meet personally with many of the core team.
2. At the time of the evaluation, US \$1.00 = 5.5 quetzales.
3. The evaluator also noted a strong bias toward farmers with more-or-less secure land tenure in the technologies being extended — more reason for a careful socioeconomic look at recommendation domains.
4. Serendipitously, VOCA contacted the G-RARC evaluator immediately upon her return from Guatemala to see if she would be available for this assignment. Already committed to other activities, the evaluator recommended a number of qualified and experienced candidates.
5. This could be done through any number of mechanisms. One might be a continuing consultancy, as has been established with the RARC M&E Consultants. Another might be a part-time hire off-site. If a full-time hire on-site is an option, however, then make this position a polyvalent one that also supplies administrative and other backstopping support to the DID and the RARC Coordinator.

### **3. COMMUNICATION AND INFORMATION DISSEMINATION**

As noted in Chapter 1, a major RI thrust and a key feature of the RARC model is the communication and dissemination of information about regenerative agriculture to a wide variety of audiences through a variety of means. This is also one of the major program outputs stipulated under the BHR/PVC matching grant.

#### **3.1. RI HEADQUARTERS**

##### **3.1.1. *INFORUM***

This evaluation sought to determine whether the RARCs have expanded their use of computer conferencing and what further improvements might be made. To accomplish this task, discussions were held with *INFORUM*'s Executive Director, located at RI headquarters, and with RARC staff. *INFORUM* is the conduit for RARC computer linkages with the outside world. But *INFORUM*'s main purpose is to facilitate the forging of regional and global partnerships among institutions working on sustainable land use systems. *INFORUM* currently conducts its activities in three program areas.

- Broker new regional or global partnerships by assisting organizations with similar or complementary objectives to identify each other.
- Support existing partnerships through assistance in information exchange and the creation of cooperative research initiatives.
- Disseminate information by helping existing partnerships to share their expertise with organizations everywhere.

The RARCs have been "on-line" with *INFORUM* since 1991 (Senegal) and 1992 (Guatemala). However, they use it almost exclusively as an e-mail service, to communicate between themselves (rarely) and with RI (frequently). Both RARCs use *INFORUM* to access SARD-FORUM, a global forum of approximately 200 participants who exchange information on sustainable agriculture and rural development.

The challenge for any institution participating in such fora is locating material relevant to their local situations. Most subscribers are research and development organizations located in temperate climates. Institutions with information and experience relevant to S- and G-RARC activities are limited. Also, news, reports, etc. offered by such fora are mostly in English. These considerations have so far limited the RARCs' use of *INFORUM* for purposes other than e-mail. However, communications from the SARD-FORUM will soon be offered in Spanish.

### **3.1.2. *International Ag-Sieve***

Begun in 1988, RI's *International Ag-Sieve* is a bimonthly 8-page newsletter of current information about regenerative agriculture in the tropics. Written for people working in the field, *Ag-Sieve* gathers, synthesizes, and disseminates practical technical information from the scientific community in a format that field workers can easily digest and use. The newsletter thus serves to interlink the work of scientists and major agricultural research centers, farmer know-how, and the practical field insights of individuals and multidisciplinary teams in a way that highlights breakthroughs in regenerative agriculture.

Each issue is thematic. Themes have spanned, e.g.: ancient and traditional farming systems, women in agriculture, home gardens, soil management, seed selection, biodiversity, integrated pest management, agroforestry, animal husbandry, and agricultural extension.

*Ag-Sieve* is available in hard copy and also on an interactive on-line service via Internet, by which readers can both receive the newsletter and contribute information to it. Reportedly, more than 3750 people in 70+ countries read *Ag-Sieve* on a regular basis. All back issues are or will be available in the Plants and Sustainable Agriculture subject area of the Sustainable Earth Electronic Library (SEEL) through World Wide Web via EnviroLink.

*Ag-Sieve* has been widely advertised in other development magazines and newsletters. It also enjoys an exchange relationship with some 23 such publications that, taken together, span the entire developing and developed worlds. Exchange partners are free to reproduce or abstract information from the newsletter for re-publication. Although systematic tracking of such re-publication has not been done, RI's International Division can point to at least 8 other publications that have reproduced information from *Ag-Sieve* about the RARCs; and three of these included references to RARC activities more than once.

In a 1991 readership survey, respondents indicated that they read *Ag-Sieve* mainly for development as versus research or extension purposes (62% of respondents) both for keeping abreast of new findings and techniques (90%) and for resource and reference purposes. Readers also indicated they particularly appreciate stories about successful applications of regenerative agriculture techniques (24%). Furthermore, anecdotal evidence indicates that *Ag-Sieve* has served to put the RARCs in contact with other groups who are interested in RARC findings and experience, and vice-versa. The Communication Manager for International Programs also recounted several instances in which the RARCs were important in putting *Ag-Sieve* itself in touch with groups working on the theme of an upcoming newsletter.

In light of all the foregoing data and anecdota, the newsletter unquestionably could have been an effective outlet for RARC findings and experiences; and indeed it reportedly *was* a useful mechanism for putting the RARCs in touch with other like-minded groups and with useful information sources. However, only one out of some 60 substantive articles published in *Ag-Sieve* during the period of the BHR/PVC grant related directly to RARC activities.

This was a 1992 (5:8) article by the G-RARC Technical Coordinator entitled "Mayan Secrets for Modern Farmers." In addition, a 1-page insert describing the new R-RARC was enclosed in one 1995 newsletter.

Greater use of *Ag-Sieve* to disseminate RARC findings was limited by several factors. One was the thematic nature of the newsletter, such that some themes did not correspond to on-going RARC activities. Another factor, at least in the case of the G-RARC, was its slow start-up and staffing, such that it had little in the way of concrete research findings or extension outcomes to report during much of the grant period. Nevertheless, more might have been expected to have appeared from the S-RARC, given its greater maturity.

In any case, RI has found *Ag-Sieve* too expensive to sustain. Hence, RI now plans to move to a new 2- to 4-page "fact sheet" format in which a cumulative index of available sheets will be listed with SEEL and also mailed out to subscribers. People can then request the specific sheets that interest them, at cost, or access them electronically. *Ag-Sieve* exchange relationships will continue under the fact-sheet format.

Each fact sheet will deal with a single subject. This will allow for slightly longer and more informative articles and lists of pertinent contacts than was possible in *Ag-Sieve*. Also, this format will permit more flexibility than *Ag-Sieve*'s thematic approach, because a given fact sheet can be designed to focus on timely activities in which RARCs (as well as other entities) are engaged. Moreover, the plan is, with time and additional funding, to produce the sheets in French and Spanish as well as English. Thus sheets that include information about RARC efforts can do triple-duty. Not only will they broadly disseminate information about the general topic, but also they will be able to serve RARCs as training handouts and promotional materials.

In order to help generate news items about the RARCs, the Communication Manager for International Programs visited each RARC so as to fully familiarize herself (Senegal) and later — after an employee turnover — himself (Guatemala) with RARC activities and achievements.

### 3.1.3. Other

RI has placed project profiles of each of the RARCs (including Russia's) with SEEL. In addition, as an information and fund-raising newsletter for donors, RI publishes a *Partner Report*. Across the grant period, the RARCs have all been featured in this outlet, with 10 articles on the S-RARC, 9 on the G-RARC, and 1 on the R-RARC. From the limited sample reviewed by the evaluators, these brief "punchy" articles appear to be catchy and well-written.

A notable shortcoming in communication and information dissemination between RI headquarters and the RARCs remarked by both evaluators has been the limited efforts on the part of RI staff and consultants to assist RARCs in locating and obtaining key texts and other documents, video- or slide-tapes, etc. on issues relevant to the BHR/PVC grant. For example, one cannot help but wonder whether initiatives like the G-RARC radio program (Section 3.2.2.) might not have profited from RI backstopping in relevant ag-comm materials.<sup>1</sup> Provision of such materials for gender analysis and organic gardening will be especially wanted under the follow-on grant.

## **3.2. THE RARCS**

### **3.2.1. Senegal**

**Electronic Communications.** The S-RARC uses its e-mail to participate in conferences, for correspondence with RI and others, and to solicit articles for its newsletter *Entre Nous*. The e-mail connection for the S-RARC is as follows: a line is established to Dakar, then via SENPAC to Europe, where the line connects with *INFORUM*. Access is thus obtained to the INTERNET and to the networks SANET (the global Sustainable Agriculture Network), VITA (Volunteers in Technical Assistance), AGSIEVE, and SOILS. Monthly e-mail costs for the S-RARC currently vary from \$70 to \$120 with higher rates associated with use by visitors to the program. The team send their communications in batches to minimize costs. Costs can be further minimized by hooking up with ORSTOM's electronic linkages, and the team is investigating this possibility.

Only the Team Leader has participated in electronic conferences, and this has been limited to three over the past few years. The major reason why computer conferencing is not used more widely is a paucity of conferencing in French. The team mentioned that donor support is being solicited to moderate a West Africa conference in French on regenerative agriculture. Such assistance and conferencing in French will be necessary if the S-RARC is to become more involved in computer conferencing.

***Entre Nous* Newsletter.** Current subscriptions to *Entre Nous* have equilibrated at approximately 250-300 (Table 3.1). The number of non-renewers is offset by new subscriptions. According to the S-RARC team, there has never been a policy to increase the newsletter's circulation. In addition to subscriptions, an extra 200 copies are printed for handing out to visitors to the program and for distributing at outside seminars and conferences and workshops. Some new subscriptions are gained through these mechanisms.

**Table 3.1. Status of *Entre Nous*, 1988 to 1994**

<i>Year</i>	<i>Issues Published</i>	<i>Average Subscriptions</i>
1988	5	40
1989	4	146
1990	6	156
1991	5	160
1992	7	205
1993	6	226
1994	6	263

*Source:* Information provided by Pape Kane Diallo.

The annual subscription cost for the 6 issues of *Entre Nous* is \$4, which covers postage. Some organizations maintain multiple subscriptions; and donations over subscription costs are common. The current geographic distribution of *Entre Nous* subscribers is 50% Sahel, 15% rest of Africa, 15% USA, 10% Europe, and 10% other.

A questionnaire in the last issue of each year solicits reader views on the appropriateness of the information contained in *Entre Nous*. Responses are discussed at S-RARC team meetings, and modifications are made by consensus. The team have not systematically classified and filed these questionnaires, so they were unavailable for the evaluator's inspection.

The production of *Entre Nous* appears to be a constant challenge for the S-RARC Communication Specialist. Finding adequate material of good quality is often problematic; and his publishing equipment is of poor quality (especially the printer). The S-RARC does not even have a photocopier; it relies instead on a private establishment for this service. All publishing equipment must be upgraded if the S-RARC is to continue to produce the newsletter.

**In-country Media.** The S-RARC has had many opportunities to communicate its message and activities. It receives numerous formal and informal requests for information along with collaboration and training (see Table 3.2 and Chapter 4). Media interviews given by team members have been broadcast on national and international radio stations: 12 transmissions on Senegalese stations since 1990 and approximately 10 transmissions on the Voice of America since 1992. Also, a good-quality videotape of S-RARC activities was recently made by a student from the University of Dakar. The team plan to use this video to introduce visitors to program activities, in training, and for television transmission. Publication in local newspapers has been sought on numerous occasions, but money is required for travel, per diem, and incidentals in order to entice reporters to come from Dakar to the RARC.

**Table 3.2. Requests to the S-RARC for Information, Collaboration, and Training**

Year	Training		Information <sup>a</sup>		Collaboration <sup>b</sup>	
	Institutions	Individuals	Institutions	Individuals	Institutions	Individuals
1993	8	18	8	21	38	8
1994	23	22	19	4	29	1
1995 <sup>c</sup>	5	8	-	2	11	5

Source: Information provided by Amadou M. Diop.

<sup>a</sup> Demands for *Entre Nous*, articles, brochures, etc.

<sup>b</sup> Technical assistance, development of collaborative programs, financial assistance.

<sup>c</sup> From 1 January to 15 May 1995.

**Publications.** The S-RARC team have published numerous articles in conference proceedings and in other newsletters. During the evaluator's visit, S-RARC staff developed a list of 10 items written by staff or published about the S-RARC in a variety of outlets (see Annex C). This list was based on recall by staff, who indicated they thought it was fairly complete. However, the evaluator independently discovered a number of other S-RARC publications that went unremembered and unlisted.

### 3.2.2. Guatemala

**Electronic Communications.** In 1992, the G-RARC was connected to the Internet via *INFORUM*, the computer conferencing facility housed at RI (see Section 3.2). Before that time, the G-RARC was linked only to a Central American network named *Huracan*, which served solely for e-mail.

Via *INFORUM* and the Internet, the G-RARC began to participate regularly in SANET as well as in the various subsystems of *INFORUM* — e.g., making contacts and exchanging information through "Welcome" with other *INFORUM* members. In late 1994, the G-RARC participated in *Inforum's* electronic conference on "Indicators of Sustainability." With its new electronic communication capacity, the Center now also receives many more information requests (no tally available, however) and invitations to electronic or conventional conferences than before.

G-RARC users of this technology are enthusiastic about it. They say they connect with Internet almost daily. Presently, though, only the two professional staff funded by the BHR/PVC grant have access to these upgraded communication resources. Time did not permit investigation of how many other G-RARC professionals would or could access such technology were it available to them. However, it can be assumed they many would be eager to do so. Some concern was expressed about inequitable access within the G-RARC to this advantageous technology, and about the long-term sustainability of funding for the phone charges associated with it.

***Platicando con el Agricultor* Radio Program.** Beginning in late 1993, the G-RARC instituted its Spanish-language radio program "Chatting with the Farmer." It is a once-weekly 45-minute<sup>2</sup> show that, interspersed with popular Latin American songs, features, e.g.: interviews with farmers attending RARC demonstrations and field days; announcements of additional such events upcoming, and of plans for researcher and extensionist visits to specific communities; "dramatizations" of exchanges on regenerative agriculture subjects; letters from farmers to the program; lectures by RARC or other technical personnel on agricultural and environmental subjects; greetings and thanks to particular participating farmers; and perhaps above all, repeated and almost egregiously positive reference to the RARC itself.

A total of 55 programs had been aired as of the final evaluation. Broadcast was suspended for a time (late 1994 to approximately March 1995) for want of funding, until RI agreed to provide renewed support. The BHR/PVC grant has also helped support the radio show but RI was unable to specify the amount of such funding dedicated to it.

A point study of the G-RARC radio show done by a Licenciatura student of the USAC School of Communication Sciences (Gudiel Jovel 1995) found that the program was generally well-received by listeners. Random spot checks with farmers along the road by the evaluator suggested that it has an appreciable-sized audience. The evaluator also listened to a random sampling of three programs (one each from an early, middle, and recent period in the program's history) plus a fourth program selected by the G-RARC Extension Coordinator, whom the evaluator asked to pick what he considered "the very best one."

For a comparison, the evaluator also reviewed a selection of the hour-long radio shows produced and aired locally by CARE/Peten (which is also fully staffed by Guatemalan nationals). CARE is extending much the same technologies and types of information as the G-RARC.<sup>3</sup> And the CARE radio program format is virtually the same, structurally, as the G-RARC's.

This spot comparison of the two proved most instructive. Illustrative findings is summarized in Table 3.3. They are not positive ones. Admittedly, the samples of G-RARC and CARE programming reviewed by the evaluator were limited — although they represented some 6 hours' worth. Certainly, some CARE programming was not problem-free either; and presumably some G-RARC programs may be better than the "very best" selected for the evaluator's perusal. But the main point of Table 3.2 should be clear: there is a lot of room for improvement in *Platicando con el Agricultor*, even solely by comparison with other equivalent NGO efforts (as versus unrealistic "high-tech" First World standards).

**Table 3.3. Comparison of G-RARC and CARE Radio Shows**

<i>Issue</i>	<i>G-RARC</i>	<i>CARE</i>
Audio Quality	Worse	Better
Farmer Participation	Less -- Farmers were permitted to respond only with very general opinions. Interviewers often talked more than interviewees.	More -- Farmers gave firsthand details of their own experiences.
Specific impacts	Less -- Farmers were permitted to respond only with very general opinions. Interviewers often talked more than interviewees.	More concrete cases of specific impacts (e.g. one farmer reported that as a result of adopting a CARE-promoted woodlot, he was reaping enough timber to construct three houses)
Q-and-A with technical and GOG personnel	None.	Yes.
How-to technical information	Little.	More.
Real vs. dramatization	Unclear which.	More interviews with actual farmers.
Women in broadcast	Only one program has women's voices. Announcers were all male. Little information targeted to women.	Somewhat more information for women.
Program Music	Poor from environmental, gender, and religious viewpoints.	Screened for relevance to program goals. Songs commissioned by CARE on the technologies being extended.
Maya Language Programming	None.	None.
Acknowledgment of sources of support	Only Centro Maya, not USAID & RI.	USAID and CARE acknowledged in every show.

Source: Random selection of taped shows (see text).

Also, an unavoidable question presents itself: Is there really a need for two such radio programs, dealing with nearly the same technical subjects, in the Peten? Particularly if the G-RARC has found it difficult to sustain funding for this mode of communication and information dissemination? When the evaluator asked both G-RARC and CARE leadership if they would be interested to produce joint programming to save on costs, both responded in the affirmative; and G-RARC respondents indicated that they had broached this subject at one point with CARE.

**In-Country Media.** The major in-country media outlet for dissemination of G-RARC information to farmers has already been discussed above in the form of its radio show. Less has been done directly by the RARC with other broadcast or print media, though the Centro Maya is sometimes mentioned in media reports on the larger MBR Project of which it is part. However, the M&E Consultant has been active in giving interviews to representatives of international media in-country, including e.g. the Associated Press, NBC, and the *New York Times*.

**Publications.** Aside from regular reports (Chapter 2) and the preparation and organization of some original or borrowed training outreach materials (Chapter 4), G-RARC personnel appear to have done little in the way of formal or semi-formal publishing since the Center was established. In fairness, however, it must be noted that to this point, little time for such endeavors has been available due to the many other demands of institutional start-up and to the G-RARC's initial over-extension of operations geographically.<sup>4</sup>

While formal or semi-formal publishing is not an explicit mandate under the BHR/PVC matching grant, for an institution that pursues, among other things, applied and adaptive research and that prides itself on its FSR&E professionalism, the publication or electronic release of findings would be most advantageous. A corpus of published work would lend greater profile, weight, and credibility to the institution, thereby attracting continued donor contributions and other-agency partnerships that would contribute to the RARC's longterm sustainability. With Ag-Sieve's shift to fact sheets (Section 3.2.2) and with access to Internet and computer conferencing, such outputs would now find more ready intermediate outlets. More formal-style publications could be generated in collaboration with researchers of appropriate partner institutions (i.e., CATIE, ICTA, RI, USAC, other MRB institutions).

## **RECOMMENDATIONS**

### **RI Headquarters**

- Conduct an *INFORUM* computer conference on a topic of common interest to all RARCs.
- Continue with present plans for replacing *Ag-Sieve* with fact sheets.
- To increase promptly and efficiently the possibilities for in-country media to publicize the RARCs, with assistance from RI headquarters "re-cycle" and where necessary re-focus already-written articles from *Ag-Sieve* and RI's *Partner Report* into French and Spanish. RARCs can then tender these items (along with photos) to national media as press releases and short feature or human-interest stories.

- Using RI headquarters' powerful international communications technology, information exchange relationships, computer-conferencing and database capabilities, do more to search out and supply RARCs with a strategic library of publications in both English and national languages on key areas of endeavor funded under the BHR/PVC grant. With such backstopping from headquarters, RARCs need not fritter away their scarce resources on "re-inventing the wheel" in already well-known or elaborated techniques and materials for communication, extension, training, gender analysis, or implementation of other RARC technical and outreach mandates.

## Senegal

- Phase out the publication of *Entre Nous* in tandem with *International Ag-Sieve's* shift to "fact sheets" in French as well as English.
- Pay the necessary fees for the local newspaper *Le Soleil* to come and report on S-RARC activities. Fee payment appears to be standard protocol, and for a relatively inexpensive amount the S-RARC would gain wide publicity.
- Investigate the possibility of linking-up to ORSTOM's telecommunication lines to save on-line costs.
- Upgrade basic publishing and reproduction equipment.

## Guatemala

- Assuming the follow-on BHR/PVC grant continues to fund the G-RARC radio show, budget a highly qualified, native-Spanish-speaking or fully bilingual consultant who is well-acquainted with Latin American cultures and subcultures to work shortterm (e.g., 2 weeks) with the G-RARC to instruct it on how to improve the quality, the truly participatory nature, the environmental etc. sensitivities, and the gender orientation of programming content and presentation — all at no additional production cost.
- Write a set of guidelines enunciating the programming policies that result from the foregoing consultancy.
- The consultant should periodically (e.g., monthly) monitor all broadcasts for some stipulated time (e.g., a year) for their compliance with programming policy, and return constructive written assessments to the G-RARC so it can continue to improve on any problems identified. This can be done long-distance at minimal consultant cost.

- To increase the likelihood of longterm financial sustainability for such key RARC communication and information strategies on regenerative agriculture as the radio show and in order to improve the show's overall technical quality at little or no additional cost, explore with CARE/Peten the possibilities for efficient collaboration in shared funding and production of radio shows or program segments, production facilities and equipment, air time, and so forth. The shortterm consultant should assist in this dialogue and in the preparation of a formal accord on any agreements reached between the G-RARC and CARE/Peten.

## **RARC-Wide**

- Expand and/or facilitate the use of electronic communication, information exchange, conferencing, and etc. With *INFORUM* assistance, hold a workshop at each RARC on the use of computers for these purposes.
- In addition, have RARC staff who are presently adept in electronic communications give additional on-the-job training in their use to selected other RARC personnel (e.g., senior support staff, information officers, program coordinators).
- Provide each RARC with appropriate software for translating computer information from English to Spanish and French.
- To defray the costs of wider use of electronic communication technology and to make it financially sustainable for functions that are key to the RARC model's mandates of networking, communication, education, and training and to RARCs' everyday needs for interacting with donor or partner institutions, build funds to support this technology into the budgets of every grant, contract, etc. that a RARC holds or seeks.
- At the same time, be sure to institute systems to prevent cost overruns or abuses in the use of electronic communication.
- Also take the same overhead-budgeting approach described above for electronic communication to sustaining funding for other communication and information outreach activities (radio shows, newsletters, inserts in newsletters) since any RARC donor will be — and will expect to be — served by such media efforts.
- Get even triple-duty out of these same (and future such) items by re-packaging them in various forms as handouts or promotional materials for RARCs, as exhibits or annexes to RARC institutional capability statements, as short contributions to other development-oriented outlets, and so forth.
- To encourage formal or semi-formal publications by staff, RARC management should consider instituting a system of "protected writing time" plus modest annual bonuses or prizes for professional publications that reach print or electronic dissemination.

- Look to appropriate partner institutions for co-authors to help write and publish credible documents that will build a demonstrable track record of RARC achievements.
- Establish a system to ensure that the resulting research, development, and extension information from the foregoing collaborations are fed back into other information dissemination mechanisms, as appropriate, at both RARC and RI levels (such as the fact sheets, press releases, *Partner Report*-style items, training materials, etc.).
- Set up both hard-copy and disc archives at both RARCs so that publications already produced can be readily retrieved. Also get a listing of all such publications into an MIS. Further, it would be prudent for RI to maintain duplicate such archives at headquarters.
- Review computer needs and their management for each RARC with a view to increasing access to information exchange, computer conferencing, etc.

### NOTES TO CHAPTER 3

1. To take just one example, what about the excellent corpus of materials generated in both English and Spanish by USAID's Science & Technology (now Global) Bureau as part of its extension media projects, Communications for Technology Transfer in Agriculture? Nor is this to mention any number of other or earlier bilateral, multilateral, and NGO efforts in ag-comm worldwide -- including a famous pioneering USAID project in Guatemala (Ray 1978).
2. In fact, the show often runs longer. The RARC prepares an hour of material and the radio station sometimes extends the presentation time unilaterally.
3. Indeed, the two entities have agreed upon a geographical division of their efforts within the Peten.
4. In the evaluator's opinion, the G-RARC is still greatly over-extended in the range of technologies and crops it envisions working with. As outlined its 5-year plan (Centro Maya 1995), these are almost innumerable.

## **4. TRAINING**

Training of two sorts forms a central focus of the BHR/PVC grant to increase the capacity of the RARCs. One is training *of* RARC personnel in a variety of arenas (accounting, report preparation, MIS and M&E). The other is training offered *by* RARC personnel either to producers themselves or to other NGOs, GOs, and entities like the Peace Corps. This last type serves as an important conduit for dissemination of information about concepts and techniques in applied research and extension in regenerative agriculture or about development-management tools such as the USAID logframe or RARC MIS/M&E systems.

### **4.1. TRAINING OF RARC STAFF**

#### **4.1.1. Senegal**

**Training.** Members of the S-RARC were asked to list the type, number, and length of training (excluding seminars) each had received during the BHR/PVC grant period. The intent of this exercise was to make some assessment of the possible training needs, as well as the appropriateness of the training so far received.

Except for the Administrative Assistant, all S-RARC staff have participated in some type of training over the past 3 to 4 years (Table 4.1). However, along with the Team Leader, the Administrative Assistant did benefit from training in financial operations by the RI Financial Officer (Chapter 2). Except for the input of the RI M&E Consultant (Chapter 5) and the visits of the Financial Officer, RI has not provided training to the S-RARC. Except for the 2-year training program recently completed by the Development Specialist in Switzerland, all instruction has involved short courses of 1 to 3 weeks, mostly given in Senegal. Staff attend about one training per year.

Most training themes appear appropriate to S-RARC needs. All staff have been trained in rapid rural appraisal techniques some 2 or 3 times, which is likely excessive. Of potential importance to the S-RARC is the lack of training opportunities made available to the Agriculture and Communication Specialists. Both these pivotal staff have not received any training related to their disciplinary expertise for the past several years. Although both are very competent and currently contribute immensely to the S-RARC's achievements, one must wonder if even greater contributions might have been/could be realized through training for them. The S-RARC's emphasis on agriculture and information exchange necessitates up-to-date expertise in these areas.

**Table 4.1. Training of S-RARC staff**

<i>Name</i>	<i>Position</i>	<i>Course Name</i>	<i>Date (year, length)</i>
Amadou M. Diop	Team Leader	Personnel Management	1992, 4 days
Amadou M. Diop	Team Leader	Project Development	1994, 5 days
Ansoumana Sane	Development Specialist	Development Studies	1992-94, 2 yrs
Ansoumana Sane	Development Specialist	Agroforestry/NRM	1990, 18 days
Ansoumana Sane	Development Specialist	Rapid Rural Appraisal	1991, 18 days
Ansoumana Sane	Development Specialist	Rapid Rural Appraisal	1991, 17 days
Ansoumana Sane	Development Specialist	Rapid Rural Appraisal	1992, 18 days
Diange Sarr	WID Specialist	Savings and Credit	1992, 4 days
Diange Sarr	WID Specialist	Rapid Rural Appraisal	1994, 8 days
Diange Sarr	WID Specialist	Financial Analysis	1995, 21 days
Diange Sarr	WID Specialist	Savings and Credit	1994, 5 days
Diange Sarr	WID Specialist	Soil and Water Conservation	1995, 5 days
Mbagnick Diour	Horticulture Specialist	Environmental Protection	1990, 7 days
Mbagnick Diour	Horticulture Specialist	Environmental Protection	1991, 14 days
Mbagnick Diour	Horticulture Specialist	Integrated Pest Management	1992, 7 days
Mbagnick Diour	Horticulture Specialist	Pathogen Biological Control	1993, 12 days
Mbagnick Diour	Horticulture Specialist	Rapid Rural Appraisal	1993, 10 days
Mbagnick Diour	Horticulture Specialist	Rapid Rural Appraisal	1994, 7 days
Mamadou Guissé	Agriculture Specialist	Rapid Rural Appraisal	1992, 18 days
Mamadou Guissé	Agriculture Specialist	Training Trainers	1994, 6 days
Mamadou Guissé	Agriculture Specialist	Participatory Diagnostics	1994, 21 days
Momar Diouf	Administrative Assistant	None	-
Pape Kane Diallo	Communication Specialist	Rapid Rural Appraisal	1991, 17 days

Source: Compiled by the Senegal-RARC staff.

#### 4.1.2. Guatemala

**Training.** As noted in Chapter 2, G-RARC accounting personnel have received very effective on-the-job training in basic financial operations and reporting pertinent to the management of Rodale-related monies. This training has been extended in two ways: through personal visits by the RI Chief Financial Officer, and through constant and continuing contact by fax, phone, and e-mail among G-RARC and RI headquarters and the Guatemala City accountant. However, no higher-order training in, e.g., principles of accounting or generalized use of spreadsheets and other financial tools has been given the G-RARC (see again Chapter 2).

The evaluator did not learn of any formal training for G-RARC staff in technical report preparation *per se*. Training in M&E (mainly logframing and workplanning) *has* been extended to G-RARC personnel both individually and as a group via, e.g.: USAID/Guatemala workshops linked to the M&E needs of the MBR Project; visits by RI's M&E Consultant to the G-RARC; and workshops run by the consultant and/or the G-RARC's M&E Program Coordinator. The M&E Coordinator has also given one training session to G-RARC personnel in the administration of surveys for collection of adoption and other beneficiary-related data (see Annex D's chronogram).

Records from the G-RARC Extension Program for 1993 through mid-1994 note four other training events attended locally by G-RARC personnel. Briefly, these included one workshop each on: participatory methods of agricultural research and extension, crop and livestock extension techniques, FSR&E, and use of legumes for soil improvement and forage. Doubtless still other training events were attended by G-RARC staff between mid-1994 and the present; but no systematic record of such was available to the evaluator.

In the absence of an MIS, any further such information would have to be sifted out from any of a number of documents scattered and stacked about the Center. Alternatively, it would have to be gathered through oral history methods. The same is true, by the way, for professional development of RARC-related staff at RI headquarters.

**Training Materials and Curriculum Design.** For internal training on logframes and their use in workplanning, the G-RARC M&E Coordinator has generated or borrowed and adapted a number of useful handouts, worksheets, model forms, and examples (see Annex C).

## 4.2. TRAINING BY RARC STAFF

### 4.2.1. Senegal

**Training.** For the past 7 years, the S-RARC has been conducting on-farm training programs consisting of demonstrations with both men and women producers (Table 4.2). Men have received training in intercropping, composting, gardening, animal fattening, and erosion control; women have so far been trained almost exclusively in gardening. The S-RARC also has a technology diffusion program whereby producers are provided with materials such as seeds, feed, and tools with which to implement technologies on their own.

**Table 4.2. S-RARC Field Trials<sup>a</sup> with Producers**

Year	Theme	Demonstrations		Diffusion		Total
		Male	Female	Male	Female	
1988	Intercropping	9	-	14	-	23
1989	Intercropping	18	-	-	-	18
1990	Intercropping	11	-	46	-	57
1990	Composting	-	-	2	-	2
1990	Gardening	7	41	-	103	151
1990	Animal fattening	8	-	5	-	13
1990	Soil Erosion control	-	-	18	-	18
1990	Organic matter	7	-	-	-	7
1991	Intercropping	2	-	2	-	2
1991	Composting	2	-	-	-	2
1991	Animal fattening	4	-	-	-	4
1991	Organic matter	8	-	19	-	27
1991	Crop variety tests	7	-	-	-	7
1992	None					
1993	None					
1994	Intercropping	7	-	-	-	7
1994	Composting	-	-	125	-	125
1994	Animal fattening	6	-	7	-	13

Source: Information provided by Amadou M. Diop

<sup>a</sup> Demonstrations consist of joint RARC producer trials. "Diffusion" refers to producer trials whereby RARC supplied the inputs (seeds, feeds, tools, etc.).

As discussed in Chapter 5, the S-RARC team has not been systematically monitoring technology adoption/non-adoption nor evaluating impacts. Although they have collected gender-disaggregated data on training (Tables 4.2, 4.3, and 4.4), these data were tabulated only during the week of evaluation fieldwork, at the suggestion of the evaluator. The S-RARC plans to use this information to illustrate its involvement with both male and female producers and to delineate more clearly the training needs of each group.

In addition to on-farm demonstrations and technology diffusion, the S-RARC has collaborated with researchers and other NGOs to conduct many group training programs (Table 4.3). Such events are gaining in importance in terms of the number of requests for these services as well as the number of participants. The most popular themes are composting, gardening, and animal fattening. All these events are attended by both men and women producers and by government and NGO technicians. In 1994 the S-RARC led a group of collaborators in training over 600 producers on composting methods.

**Table 4.3. S-RARC Training of Producers**

Year	Training Theme	Villages	Trainees			Collaborators
			Male	Female	Total	
1989	Composting	3	10	0	51 <sup>a</sup>	-
1989	Gardening	1	-	23	23	-
1989	Soil erosion	1	NR	NR	48	-
1989	Hay making	2	16	-	16	-
1990	Composting	2	14	16	58 <sup>a</sup>	-
1990	Gardening	3	7	63	70	-
1990	Seed treatment	1	11	14	25	-
1990	Soil erosion	1	NR <sup>b</sup>	NR	18	-
1990	Agroforestry	1	NR	NR	17	-
1990	Crop protect.	1	NR	NR	17	-
1991	Composting	18 <sup>c</sup>	93	50	271 <sup>a</sup>	4
1991	Gardening	12 <sup>c</sup>	43	62	105	-
1991	Seed treatment	4	15	NR	58	-
1991	Soil erosion	2	NR	NR	14	2
1991	Animal fatten.	1	NR	NR	13	-
1991	Agroforestry	5 <sup>c</sup>	NR	NR	22	1
1992	Composting	4 <sup>c</sup>	6	27	41 <sup>a</sup>	-
1992	Agroforestry	1	NR	NR	12	-
1993	Composting	4	86	47	133	-
1993	Soil erosion	1	NR	NR	22	-
1993	Hay making	2	NR	NR	NR	-
1994	Composting	4	251	336	633 <sup>a</sup>	3
1994	Gardening	5	11	69	80	-
1994	Hay making	1	17	-	17	-
1/95-5/95	Composting	12 <sup>c</sup>	64	26	90	1
1/95-5/95	Gardening	1	0	17	17	-
1/95-5/95	Animal fatten.	3	58	19	77	2

Source: Information provided by Mamadou Guissé

<sup>a</sup> The difference between (male + female) and the total is the number of trainees whose sex was not recorded.

<sup>b</sup> NR = not recorded.

<sup>c</sup> In these events, several villages came together for a single training.

The S-RARC also uses farmer-to-farmer linkages as part of its training and technology diffusion approach (Table 4.4). These linkages are accomplished in two ways: via farmers' training other farmers, and via exchange visits whereby farmers from one village visit farmers in other villages who are practicing RARC-promoted regenerative agricultural techniques. Four such exchange visits were organized by the S-RARCs and their collaborators in 1994. Both men and women producers participate in these activities.

**Table 4.4. Farmer-to-Farmer Linkages Mediated by the S-RARC**

Year	Theme	Number	Participants			Collaborating organizations
			Male	Female	Total	
						-
<b>Seminars offered by producers:</b>						
1991	Natural resource management	1	NR <sup>a</sup>	NR	20	-
1992	Soil conservation	1	38 <sup>b</sup>	12	50	-
1993	Crop/livestock integration	1	38 <sup>b</sup>	12	50	-
1994	Animal and vegetation biodiversity	1	38 <sup>b</sup>	12	50	-
<b>Inter-village visits:</b>						
1989	Soil erosion control	1	NR	NR	NR	-
1990	Soil erosion control	1	NR	NR	NR	3
1993	Soil erosion control, animal fattening, hay making, composting	4	25	8	33 <sup>c</sup>	2
1994	Soil erosion control	1	8	2	10	1

Source: Information provided by Mamadou Guisse.

<sup>a</sup> NR = not recorded.

<sup>b</sup> A second verification of this data showed that indeed these participant numbers were correct for each of the 3 years. This should be verified again.

<sup>c</sup> Total number of producers who were taken to visit others. Total for only 3 of the 4 visits.

On other training-related issues, the present evaluation also set out to determine whether PCVs in Senegal had been integrated into RARC activities, and if so, what impact this has had on RARC programs, and whether this integration should continue. The evaluator's meeting with Peace Corps staff at the regional PCV training site in Thies revealed their great enthusiasm for S-RARC activities and for the RARC's continued participation in training new volunteers. The S-RARC has participated in 3 Peace Corps training programs over the past 4 years (1 each in 1991, 1993, and 1994). In addition, volunteers frequently come to the RARC for information and assistance.

S-RARC impacts on Peace Corps placement and follow-up activities fall far short of the targets set in the BHR/PVC logframe of four to five PCVs working in sustainable agriculture in the Thies region. No such PVCs are currently assigned to the Thies region, nor are there plans for any to be assigned there in future because the S-RARC has never formally applied to the Peace Corp for volunteers. PCVs *will* participate in S-RARC village training programs ongoing in other regions, however.

The possibility for future Peace Corps/S-RARC collaboration is high. Peace Corps interviewees not only felt that RARC activities are very appropriate for the region; they were also keen to link up PCVs with organizations like the S-RARC, who work with producers. Peace Corps is in the process of establishing formal arrangements with Winrock International and ISRA to assign all current trainees in agriculture to these organizations' on-farm activities. The Peace Corps trainers interviewed by the evaluator suggested that the S-RARC seek similar formal agreements with the Associate Peace Corps Director for Agriculture at the Corps' Dakar office.

**Training Materials and Curriculum Design.** The S-RARC has developed few training materials and curricula on regenerative agriculture. This is somewhat surprising given the high number of and demand for its instructional services. Instruction consists mainly of on-farm demonstrations and classroom lectures. The latter employ hand-written flip charts, slidetapes in French and Wolof, overheads, and videos. The team have drafted "technical sheets" to use in training on composting, animal fattening, gardening, and nursery management. But these drafts still require considerable further work.

Only a single brochure in French and a manual plus accompanying poster in Wolof have been so far been developed; both are for composting. But these materials have been very popular; they are in high demand by producers, NGOs, and researchers. Some NGOs have paid for copies of these materials (approximately \$3 per manual/poster) — a further sign of their usefulness and marketable value.

Of the 3,000 brochures and 1,000 manuals/posters on composting that were printed, only a few copies remain. There is no budget to reprint them. The S-RARC has solicited donor funds to have the compost manual reproduced in the local language of the Casamance region, where it trained over 600 producers in composting last year (Table 4.3). Coupled with the evaluator's review of the draft technical sheets and visual materials, the team's increasing involvement in information dissemination (Table 3.2) and training (Table 4.3) clearly warrant an expansion in the development and production of more training materials.

RI backstopping in this regard appears to have been minimal during the BHR/PVC grant period. The S-RARC has none of the necessary equipment (a scanner, high-quality printer, photocopier, etc.) to produce training materials. It perhaps also lacks sufficient expertise for developing training materials with clear messages. It is unclear why — given RI emphasis on education and communication — it has not lent more assistance to the RARCs in their efforts to develop and produce high-quality training and other outreach materials on regenerative agriculture (see also Chapter 3).

As the foregoing Tables attest, the S-RARC has conducted a great deal of training. But it has not instituted any systematic way of obtaining feedback from participants on the quality, usefulness, clarity, etc. of its training. Producer feedback was reportedly obtained and incorporated into the production of the compost manual. One questionnaire was administered after one training event, but a copy of this instrument could not be found; and no one could recall its results.

#### **4.2.2. Guatemala**

**Training.** As with training *of* staff, training *by* G-RARC staff of other organizations' personnel is sometimes only imperfectly documented — and almost always textually as versus numerically. This is particularly true at the RI headquarters level. RI's First Annual Report to USAID faithfully records 3 training outreach events involving the G-RARC: a workshop on mucuna presented "in collaboration with CARE, attended by 40 people"; another on mucuna and participatory methods "attended by various representatives from NGOs and government institutions"; and one on regenerative agriculture in which the G-RARC Technical Coordinator apparently participated as a trainer, but with no mention of types or numbers of trainees (RI Sep 1993:14). The Second Annual Report, however, merely shrugs "Many workshops conducted" (RI Sep 1994:7). It offers no organized listing of these events nor of the types, numbers, institutional affiliations, gender, etc. of attendees.

As nearly as can be judged, G-RARC training of other NGOs appears to have been modest. This is probably so for several reasons. With regard to logframing, MIS, or M&E training, the G-RARC is still something of a novice. However, one GOG unit (USPADA/Peten) has recently expressed interest in learning about its experiences with logframing and workplanning. But for all collaborating MBR institutions, a two-person Management Systems International (MSI) team is stationed in the Peten to work with on these subjects.

Moreover, in view of the current plethora of environment and development entities operating in the Peten, it is not clear whether the G-RARC would have much comparative training advantage (and thus clientele) in subjects other than FSR and related technical matters at this time. Neither has the G-RARC offered to, or explored opportunities for, training the Peace Corps. But recall from Chapter 2 that, until only a few years ago, the Corps was inactive in the Peten due to acute security problems there.

Where G-RARC training seems to have had the most dramatic impact is on employees of various GOG cropping, livestock, forestry, extension and research agencies. Training with these groups consists not only of workshops but also of role-modeling and on-the-job training in FSR&E and somewhat more participatory approaches to environment and development work than conventional MAGA procedures. As noted in earlier chapters, the G-RARC has effectively been given responsibility for organizing much of MAGA fieldwork in the Peten.

It does this by forming multidisciplinary inter-institutional teams coordinated by the G-RARC in its Pilot Areas. The same on-the-job training and role-modeling can be presumed to apply to the (unknown number of) USAC/CUDEP students whose field practica and thesis work are overseen by senior G-RARC personnel.

An Extension and Rural Socioeconomy Program table of training for 1993 to mid-1994 made available to the evaluator lists 4 training events offered to an unidentified "public," attended by a total of 61 men and 2 women. These events spanned current regenerative technologies available, FSR&E, and peasant organization and technology transfer. Attendees included personnel of DIGESA, USPADA, and other unnamed institutions. At the evaluator's request, the Extension Coordinator attempted to write up a corresponding roster of such training for late-1994 through 1995. He came up with several events but was uncertain as to when some had taken place; and in few cases were the number and gender of attendees indicated. Hopefully, he and his colleagues will manage to organize this information in time for the G-RARC's 1995 year-end report.

These year-end reports appear to be fairly comprehensive when it comes to tracking numbers of training-related extension activities with producers. The 1994 report, for example, notes: the establishment of 480 technology transfer plots for mucuna, with the same number of participating farmers, in cooperation with DIGESA, PROFRUTA, and CUDEP; 3 such plots for maize varieties; 30 other technology transfer events; 49 radio shows produced; 25 talks to farmer groups; 10 community consultations in collaboration with the M&E Program; 30 farm records activities initiated; 44 local extension committees established; and numerous other trial and demonstration plots established in conjunction with various G-RARC Programs and other entities. Again, however, numbers and types, gender, etc. of participating producers are not systematically recorded.

It is important to note that G-RARC research and extension employs a trial, demonstration, and training methodology in which farmers form into groups of 10 to 20, each with the responsibility to pass on what they learn to another 5 farmers. Considering that the Center has worked, in one fashion or another, in over 50 communities of the Peten, it seems certain that its RARC-to-farmer and farmer-to-farmer training outreach has been considerable. This impression is bolstered by even a cursory review of G-RARC monthly and year-end reports. Neither must one forget the widespread coverage of the G-RARC radio show and the potentials for training/information dissemination it embodies.

Taken together, all the training efforts discussed above on the part of the G-RARC staff make for a very impressive list. In light of the institutional and security landscape in the Peten, a respectable amount of training of other institutions by the G-RARC also appears to have taken place. And certainly it seems clear that G-RARC training/extension for (male) farmers has been immense.

Quite possibly, these efforts have far outstripped all outputs stipulated in the Project Paper (PP) for the Cooperative Agreement (Chapter 6). However, there is no easy way to ascertain this vis-à-vis quantitative indicators set in the PP (Chapter 6).<sup>1</sup> This is not only because of the lack of baseline data (Chapter 5) but also because the extent of training has not always been systematically or reliably enumerated. Nowhere are cumulative achievements summed up across the G-RARC as a whole in a readily accessible, useful, and relatively up-to-date form. And trainee data are only haphazardly disaggregated by key variables such as trainee profession (e.g., producers, extensionists, researchers, policy makers, etc.), institutional affiliation, gender, total persondays or personhours of training, etc. Capturing all such M&E information will require establishment of a functioning MIS (Chapter 5).

**Training Materials and Curriculum Design.** Aside from a promotional brochure on the overall organization and objectives of Centro Maya, the G-RARC has generated one brochure each on two of the three technologies it has been extending massively: mucuna, and selection of maize seed based on plant characteristics. (The third technology consists of improved maize varieties.) All three brochures are handsomely formatted, easy to read, clearly written, and provide sufficient technical information for practical producer use.

The Extension and Rural Socioeconomy Program has both borrowed and itself elaborated a number of handouts and short reference documents for use in interinstitutional training on extension and technology transfer methodologies. Likewise for the M&E Program elaboration of materials on the conduct of participatory "community consultations" (but see Chapter 5). The evaluator also reviewed several documents produced by the G-RARC Animal Production Program for use in awareness-raising and training on establishment of sylvopastoral systems and forage banks, and for instruction in animal health. A "basic course" curriculum on forestry topics (e.g., collection of forest seeds, nursery and woodlot establishment and management) prepared by the Forestry Program was also examined. Finally, the G-RARC or/and the Technical Coordinator keep a collection of textbooks and other materials on FSR&E principles and methodologies; they draw on these for reference and training materials as-needed. (For examples of all the foregoing, consult Annex C.)

The evaluator had the clear impression that still more such materials pertaining directly or indirectly to G-RARC training efforts existed. But due to their regular schedule of fieldwork and travel (Chapter 2), most of the Program Coordinators were unavailable for personal meetings at the time of the evaluation. And no central library or filing system for training and reference materials appeared to exist that the evaluator could simply peruse. The six Coordinators share a single 4-drawer file cabinet in the one-room office they also all share.

In any case, with regard to materials and curriculum design for training outreach, it is evident that the G-RARC has far surpassed any outputs set for it in the PP. At the same time, however, it must be noted that no formal systems appear to be in place for participants to regularly or periodically evaluate the quality, usefulness, appeal, and ultimately the tangible impacts on producer behavior of G-RARC training events or materials.<sup>2</sup> Such critical, firsthand assessment by trainees is vital for two purposes: feedback into training so as to improve it; and demonstration to potential future donors of the quality and (with an M&E system in place) efficacy of training and thus of the virtue of supporting further such efforts by RARCs.

## **RECOMMENDATIONS**

### **Senegal**

- Provide the Agriculture and Communication Specialists with short-term training opportunities related to their discipline and to S-RARC needs.
- Train all disciplinary specialists in useful field and classroom pedagogical (not more rapid rural appraisal) techniques. Contract for this service with a specialist(s) in the training of trainers.
- Formalize S-RARC/Peace Corps collaborations for both PVC training and for PVC assignment to RARC-supported villages or regions.
- Complete the "fact sheets" for all technologies and employ them in training curricula and manuals. Make these materials available in both French and local language(s), in a professionally produced format suitable also for sale.
- To accomplish the foregoing recommendation, thoroughly upgrade current S-RARC human resources and equipment relating to publishing.

### **Guatemala**

- See below.

### **RARC-Wide**

- Promptly institute MIS mechanisms for the systematic and reliable monitoring both of RARC (and also RARC-related RI) professional development and of RARC training outreach, with trainee data consistently disaggregated by all relevant parameters (see also Chapters 5 and 6).
- Devise and institute formal but parsimonious methods for consistently soliciting, documenting, and using trainee feedback (whether from producers, NGOs, GOs, or other groups of trainees) on the appropriateness and quality of both on-farm and in-class training and training materials (see also Chapter 5).
- Organize office management, library, and filing systems, and improve simple infrastructure such as file cabinets and bookshelves so that training, reference, curricular, etc. materials already gathered or generated are readily retrievable. This will avoid time, energy, and money lost in locating, re-purchasing, or re-doing such fundamental resources.

## **NOTES TO CHAPTER 4**

- 1. This also begs the question of the effectiveness and impact of these massive training efforts (see Chapter 5).**
- 2. Partial exceptions to this statement are the point study and the listener survey on the G-RARC radio show described in Chapters 3 and 5, respectively.**

## **5. DATA COLLECTION, MANAGEMENT, MONITORING AND EVALUATION (M&E)**

A centerpiece of the BHR/PVC grant was to be the development and institution of effective systems of data collection and MIS/M&E at the RARCs. M&E systems were envisioned to be integral parts of each RARC's operation. Good MIS and M&E should serve multiple purposes, including:

- serving as a management tool to monitor administrative, personpower, staff development, equipment, and other inputs and outputs;
- making course corrections in projects/programs when M&E signals that the desired progress is not being achieved or that unanticipated consequences have resulted;
- furnishing, in an organized way, the data for credible reporting on progress toward project/program goals;
- likewise providing data on the overall impact of interventions on people's lives;
- conversely, capturing changing social, economic, and environmental conditions that impact on program/project activities;
- evaluating the cost-effectiveness of activities; and
- demonstrating institutional capabilities and successes to potential donors or clients who must in turn demonstrate to their own donors or citizenry that funds have been well-spent.

The latter consideration is particularly important for nascent NGOs who, like the RARCs, must eventually find self-sufficiency. However, it is equally important for the accountability, credibility, and sustainability of established NGOs like RI.

A key question that arises in designing any M&E system is: who needs what information for what purposes? Multiple stakeholders must be considered in this regard: the institution and its staff and management, its major partners in research and/or extension, donors, and of course the target beneficiaries. At the same time the system must be simple, user-friendly, parsimonious in its data needs, and cost-effective.

Another and pioneering feature sought in RARC M&E design was the creation of participatory indicators. I.e., along with other stakeholders producers themselves would play a role in setting M&E indicators, with the aim of providing information that producers can use to perceive and monitor benefits and disbenefits from RARC interventions. Such indicators might be biophysical (e.g., producer observation of plant succession as a sign of soil condition), technical (e.g., producer calculation of yields), economic (e.g., increased income), or quality-of-life (e.g., producer reports of enhanced diet as a result of yields or — as a result of increased income — any number of other benefits such as homes built or improved, new farm equipment or animals purchased, children educated, or what-have-you).

Finally, besides the construction of up-and-running, participatory M&E systems at the RARCs, yet another goal of this part of the BHR/PVC grant is to produce an M&E manual suitable for use by other local/national NGOs that work at the community level, for setting up systems of their own. This manual is to be written jointly by the two expatriate M&E Consultants and published in English by RI. Annex D displays a draft outline of the proposed manual, created at the evaluators' request. The manual's completion date is the EOP, but evaluators were given no time frame for interim steps toward its completion nor any other draft materials to examine.

Experiences with the design and implementation of data collection, MIS, and M&E systems<sup>1</sup> at the two RARCs have differed. So have the precise constellation of purposes and functions of M&E at each RARC, as these still-nascent NGOs define and re define their identity, primary activity foci, research or extension partners, and so forth. Nevertheless, some common outcomes and lessons learned are also evident. After a review of each RARC's experiences, some of these overarching findings are outlined in Section 5.3.

### **5.1. SENEGAL**

S-RARC field data are collected using the following forms (displayed in Annex D).

- Diagnostic forms — filled out when work is initiated in a village.
- A logical framework — after the diagnostic, this is formulated (with producers) to define goals, purposes, outcomes, and both process and impact indicators.
- Contact sheets — used to monitor RARC/producer collaboration; in April 1995 the team started to synthesize the information contained on these forms every 2 months.
- Follow-up sheets — used periodically in a village to track adoption and diffusion of various RARC-promoted technologies.
- Harvest recording forms — for measuring yield differences due to program interventions.
- Evaluation forms — to solicit producer views on the usefulness of a technology. (These have so far been elaborated only for composting.) A recent evaluation involving 165 compost users was completed by DESFIL. Data are with DESFIL in Washington for analysis.

With technical assistance (TA) from its M&E Consultant and others, the S-RARC has been using USAID's logical framework to clarify program goals, activities, and anticipated results, and to define the measures and indicators needed for M&E. Logframes are employed to solicit the participation of all key stakeholders. For example, the S-RARC has gone through various iterations of a logical framework for Center-wide activities (Annex D); pertinent team members and ISRA staff recently devised a logframe for their collaborative activities (Annex D); and logframes have been completed with producers from various villages that solicited S-RARC assistance in gardening and animal fattening (Annex D displays one example from Gade Khaye). The S-RARC has mastered the use of logframes for program planning to such an extent that their expertise in this area is sought by other NGOs, ISRA, and USAID's Natural Resource Based Agricultural Research Project (NRBAR).

Other aspects of S-RARC M&E are still in evolution, however. Most recording forms have not been finalized, and their data are not integrated into any MIS. In general, information is not being systematically classified and filed, either in filing systems or in computerized databases. Indeed, most staff do not even *have* filing cabinets. Disc archiving systems are also not in place. These data management problems became especially obvious during the evaluator's visit when, for the first time, gender-disaggregated data were compiled by the team from an array of forms and notes in scattered places. Given the S-RARC's 8 years of existence, it should now be mature enough to institute better data management systems.

However, merely organizing and managing data is not enough to ensure a useful, functioning M&E system; the data must be pertinent ones. In this regard, it is not clear how the data collected on the S-RARC's diagnostic, contact, and follow-up sheets fit into an M&E system. The RARC needs to rationalize data collection in terms of its usefulness for detecting impacts and for satisfying the needs of various stakeholders. Clear examples of how the data being collected can be used in program review and planning are also needed.

Relatedly, the current data-collection forms emphasize diagnostics, producer collaboration, and technology adoption. Few technical or economic data are being collected to assess the merit of S-RARC interventions vis-à-vis producers' agroecological and economic realities. The S-RARC could certainly benefit from better technical backstopping, especially in collecting, analyzing, and using technical data. Like many NGOs, the S-RARC has relied mostly on qualitative or proxy indicators to measure program impacts. Rather than making recommendations on certain practices, such as the amount of compost to apply to particular crops, the strategy is to teach the technique(s) and allow farmers to apply them as they see fit. In this way, producers experiment with and adapt techniques to fit their own needs. But the complexities of designing, analyzing, and drawing conclusions from the results of time-series, multilocational field trials will only become greater, especially if the team pursue a more quantitative approach to description and evaluation of their field activities. It was not clear whether ISRA is prepared to provide this expertise.

The S-RARC also needs to build more biophysical information into its M&E, especially in view of their desire to collaborate with researchers in other locations. The S-RARC relies on ISRA to collect, analyze, interpret, and provide results on biophysical phenomena (e.g., soil, plant, and forage analysis). But as discussed in Chapter 2, the high cost of this information and ISRA's preoccupation with many other activities keeps this information from being collected. If the RARC feels that gathering such data lies beyond their mandate and capabilities, then the necessary collaborations with other research and development agencies must be made.

Examples of easily obtainable information that could greatly enhance the technical and economic merit of some S-RARC technologies are the following.

- **Composting** — Information on dimensions of pits and compost nitrogen and phosphorus contents could be used to calculate the amount of plant nutrients available from each pit and the land areas of compost application to achieve a desired yield increase. Along with description of how farmers adopt/adapt composting to local situations, this information could generate more in-depth and fruitful analysis of the impact and sustainability of this RARC-extended technology.
- **Animal fattening** — Species, age, and sex of animal being fed; standardized weight measurements of supplemented and non-supplemented animals; type and amounts of feed presented, consumed, and refused; amounts of manure produced; animal purchase and sale prices — information on all such parameters would make possible simple economic analysis of fattening, better understanding of on-farm nutrient cycling, and increased attention to how a producer may wish to divide his/her efforts between harvesting vegetation for use as feed as versus for composting, manuring fields, or other uses.

The present evaluation recognizes that the one staff member hired to oversee S-RARC M&E left the program about a year ago and that this position has not been re-filled. But perhaps worse, informal discussions between the evaluator and the remaining team members suggest that the team as a whole is not highly committed to M&E. Rather, they appear to view it as an exercise to be attended to only when the M&E Consultant visits; and they feel it merely represents more (unnecessary) work added to an already overburdened schedule. In sum, a sense of ownership and a recognition of the usefulness of M&E are lacking. As long as this situation continues, the S-RARC will not implement M&E and it will become increasingly difficult for them to evaluate their impact and to convey to donors or others that they are doing credible work that is worth funding.

It should be noted that USAID is currently funding three NRM M&E initiatives in Senegal: a USAID-wide system, the NRBAR's, and the S-RARC's.<sup>2</sup> The present evaluation was too brief to gather in-depth information on the first two, and so cannot discern how these systems may complement, conflict or overlap with the S-RARC's. Of course, M&E systems will differ according to the varying reporting and accountability needs of different organizational types (NGO, GO, research, extension). But the S-RARC M&E Consultant, a USAID direct-hire in Washington, and the DESFIL Coordinator are all involved in developing all three systems. This overlap in personnel should provide ample opportunity for "cross-fertilization" so that these systems can be made compatible and not duplicative.

Unfortunately, the M&E Consultant's trip reports shed little light on most of the problems and issues outlined above. These reports consist mainly of chronologies of daily activities. They do not clearly describe nor give explicit examples of sequential achievements, problems encountered, possible solutions, etc. during the consultant's 5 trips to Senegal to put in place an M&E unit. Only the last report provides useful information on progress toward this end.

Setting up an effective M&E unit in a nascent NGO requires expert TA. But a review of the *curriculum vita* of the M&E Consultant suggests that this individual had little prior experience in MIS/M&E as it is understood within the development community. Although this evaluation fully appreciates that developing an M&E system is by nature an iterative process and therefore cannot be achieved overnight, perhaps greater progress could have been made by engaging more experienced TA. However, it should be reiterated that, under the M&E Consultant's guidance, the S-RARC has become very experienced in the use of logframes for program planning. Moreover, other NGOs and GOs are seeking S-RARC advice in applying logframes to their own situations. This is commendable.

## 5.2. GUATEMALA

Annex D presents a chronogram of the many G-RARC-related activities pertaining to the collection and management of M&E data as well as other kinds of information, along with brief indications of their outcomes and current status. Readers are asked to refer to this chronogram throughout the complex discussion that follows.

As noted in Chapter 1, the G-RARC cleaves to an FSR&E paradigm. According to the Technical Coordinator, it is modeled after the paradigm pioneered some two decades ago at CIMMYT, the International Agricultural Research Center for maize and wheat, located in Mexico. According to the Technical and M&E Coordinators and to the healthy number of methodology handbooks and internal guidelines they displayed to the evaluator as their sources, the steps currently followed by the G-RARC in its — as well as most conventional, applied — FSR&E are roughly the following.

- Characterization of the target area in general social, agroecological, economic, etc. terms using secondary data plus the rapid rural reconnaissance technique of the *sondeo* (lit. 'sounding').
- Diagnosis of the area's principal Ag&NRM problems, again using *sondeos* and involving producers in discussion about their problems.
- Identification of possible solutions by the G-RARC professional and technical staff, based on their knowledge of existing scientific information and "shelf" technologies.
- Prioritization of solutions and then their translation into activities (also done by the staff).
- Elaboration of tentative RARC action plans for the activities prioritized.
- Community selection of which of the prioritized problem-solving activities it would like to participate in.
- Finalization of the action/work plans by the staff, but now using logframe techniques and setting indicators of forward movement on the workplan (i.e., process indicators).
- Implementation of activities on-farm, e.g.: multilocational or adaptive trials and collection and analysis of data on them, including on-going informal farmer feedback and assessment as to the value and feasibility of adopting the technologies being tested. (This is a standard FSR monitoring activity.)

- Then, for fully validated technologies or practices, broad extension — theoretically by targeted recommendation domains — in the form of, e.g., plot demonstrations, field days, exchange visits, radio programs, flyers, etc. plus technology transfer to other entities capable of further extending the validated technologies or practices.

The foregoing FSR&E paradigm has been outlined here primarily so as to highlight one key point: none of these steps involve what is generally meant when donors speak of setting baselines and then monitoring and evaluating impacts, both positive and negative, anticipated and unanticipated. Baselines are *not* the same thing as *sondeos*. The latter serve a diagnostic function, whereas the former are designed as statistical samplings of the current state of affairs with regard to specific behaviors, biophysical phenomena, crop and livestock yields, etc. against which one intends to measure change as a result of project/program interventions.

Neither are process indicators the same thing as impact indicators. The former are measures of activities conducted (e.g., X number of men and women farmers, extensionists, RARC staff, etc. trained; numbers of field days held; numbers of radio shows broadcast and numbers of listeners) whereas the latter are marks of the changes that such activities, taken singly or in the aggregate, can be reasonably demonstrated to have provoked. It is hoped that such changes will be positive, anticipated ones; but sometimes they may be negative and/or unanticipated. Unanticipated positive changes can also occur. For M&E to be effective, all such changes need to be monitored.

This is not the place to write a text on M&E. However, it is important to underline the foregoing points because in both G-RARC parlance and in RI reports, *sondeos* have been repeatedly confounded with and reported as "baseline surveys completed" (see Annex D's chronogram); and process indicators have sometimes been confounded with impact indicators. Such confusion signals considerable misunderstanding in some quarters as to the fundamental nature of M&E for the ultimate purpose of revealing project/program impact, in addition to its other, more immediate purposes.

Again, it is not the task of the present evaluation to provide a tutorial on M&E. But in the above FSR&E paradigm, subsequent M&E steps would typically involve the following.

- Definition of impact indicators to be measured so as to detect the type and extent of changes as a result of training, extension, and diffusion.
- Construction of a baseline for these indicators *before* wide scale extension begins.
- On-going and systematic monitoring of these indicators through both quantitative and qualitative means.
- Periodic summative and cumulative tabulation and reporting of indicators vis-à-vis baselines, as well as analysis of unanticipated or negative impacts and of the reasons behind all impacts detected.

Moreover, indicators and impacts can be set and assessed in short, medium, and long terms and at people as well as non-people levels. Unfortunately, there also appears to have been some confusion on these distinctions at the G-RARC. For example, in some instances, long-term indicators have been considered that go far beyond any realistic LOP. Relatedly, people-level indicators have been proposed that are very difficult to link causally with project interventions in Ag&NRM. While the repeated visits of the M&E Consultant to the G-RARC (see Annex D) appear to have clarified some of these confusions with some staff, others are still "in the dark."

A further reflection of some of this confusion is found on the monthly reporting forms (displayed in Annex D) currently in use for Program and Pilot Area Coordinators and Supervisors to report their putative M&E data. These forms have no slots for the organized listing even of process indicators in appropriate units of measure. To borrow some examples from CARE/Peten's excellent MIS and data collection forms, slots should include items like: hectares of fertilizer bean, forage banks, orchards or gardens planted by producers; hectares of specific kinds of demonstration plots installed; kilometers of live fences planted; numbers of what types of plants raised in nurseries; hectares of forest or fallow land burned (or not burned); and so forth. Neither do the G-RARC's monthly reporting forms have any place to enumerate the number or gender of people involved in a given activity — items like CARE/Peten's numbers and types of extension and training events held, numbers and sex of participants attending all such events, personhours of training by sex, and so forth.

In sum, it is very difficult to see how G-RARC monthly reporting sheets can provide the necessary grist for an M&E system. Yet the M&E Coordinator informs that these sheets are supposed to serve as the source of data for his assigned tasks — when and if he receives them.

Recalling Chapter 2 and its Figure 2.4, theoretically copies of these sheets currently flow to the M&E Coordinator via the Technical Coordinator, who receives them from the General Coordinator, who has collected them in the whole-team meeting on the first Tuesday of every month. This rather hierarchical distribution pathway reportedly arose at the M&E Coordinator's request. When Program Coordinators failed to complete and hand in their sheets to him — or did so only 3 or 4 months after they were due — he asked the General and Technical Coordinators to bring their authority to bear in seeing that the sheets were completed on time. This strategy does not appear to have been effective, however. When the evaluator tallied up the monthly reports on file with the General Coordinator, it was discovered that all but two programs (Animal Production, Extension and Rural Socioeconomy) had fallen significantly (3 to 4 months) behind in their reporting as of mid-May 1995.<sup>3</sup>

Assuming that the M&E Coordinator receives the monthly reports in a timely fashion, his job is then to elaborate a quarterly M&E report which goes forward via the Technical Coordinator to: the General Coordinator for his files; the G-RARC Directive Council; and perhaps most importantly the MSI team in the Peten, who have been contracted to integrate all M&E data from all institutions participating in the MBR Project. (See again Figure 2.4). According to the on-site MSI expert, however, the G-RARC has so far managed to submit only one such quarterly report. An important datum to note here is that MSI is contractually required to assist MBR institutions in various aspects of M&E upon request. Curiously, though, the G-RARC does not seem to have taken much advantage of this resource on-tap just a few kilometers from its offices. Neither was it clear whether the M&E Coordinator or Consultant had examined CARE's MIS/M&E system as a possible starting point for one of its own, rather than re-inventing the wheel.

In fairness, it must be said that both these individuals are acutely aware of many of the foregoing issues. Nevertheless, these problems have not been operationally resolved despite considerable investments and even budget overruns in M&E TA (see Annex D's chronogram) plus one full-time employee (FTE) on-site across the past 2.25 years.

Various reasons could be and have been adduced by various sources for the fact that, quite simply, there is as yet no up-and-running M&E system at the G-RARC — despite RI annual reports that seem to insinuate otherwise (see chronogram in Annex D). One is that the M&E Coordinator was often diverted from his duties by other demands placed on him by G-RARC leadership. Certainly, a close reading of Annex D's chronogram suggests that — except just before or during the visits of the expatriate M&E Consultant — there was little forward movement on M&E at the G-RARC. Also, various interviews and reports suggest that the M&E Coordinator has not always been diligent in his duties (M&E or otherwise). Some attribute this to his recent poor health. In contrast, the M&E Consultant appears to have been quite diligent (see chronogram again). But review of this individual's *curriculum vita* reveals no prior experience with M&E or, equally important, the MISs necessary to support it.<sup>4</sup>

Be all that as it may, in a laudable effort to correct for at least some of the shortcomings and confusions outlined above, in late 1994 several useful activities were initiated (see Annex D's exhibits).

One is an efficiently designed survey to collect adoption data (but not people-level impacts) on three technologies now-long-extended by the G-RARC in 12 Central Area communities (N=120): mucuna, new maize varieties, and in-field techniques of maize-seed selection. Another is an equally efficient survey in 46 communities (N=240) of the audience for the G-RARC radio show. This instrument surveys listeners' radio-use habits, their preferences in program and content, their frequency of tuning in the G-RARC show, and what topics they recall hearing about on the show. However, it does not collect any type of impact data, i.e. how (and how many) listeners may have modified their Ag&NRM practices as a result of the messages emitted and, further, how they may have thereby bettered their agricultural production, land use practices, or quality of life.

To provide some sort of baseline for future adoption and impact studies, a third survey was simultaneously administered to the same 240 respondents as for the radio show. Also displayed in Annex D, this instrument catalogs basic plot and land-tenure characteristics of respondents' current farming system and family structure. However, it was not entirely clear to the evaluator how the data collected through this survey could adequately baseline the many different kinds of Ag&NRM interventions the G-RARC is now promoting, plus more to come in future LUMP activities.

Unfortunately, as of June 1995 some 10% or so of all survey forms were still outstanding, and data from those that were returned had not been computerized. Indeed, according to the M&E Consultant, no computerized database formats have even yet been constructed to receive and process such data. The same is true for a recently initiated effort at keeping "farm records" for a (presumably representative) sample of some 30 farms. However, another laudable effort proposed in early 1995 is the not-yet-implemented plan to fortify M&E with periodic qualitative data gathered from G-RARC Program Coordinators and farmers themselves.

As to the pioneering participatory nature of M&E indicators mentioned in the introduction to the present chapter, this proved to be a chimera at the G-RARC. The M&E Coordinator explained that the participatory procedure has been to hold "consultations" with individuals or groups of farmers on the general topic of what development outcomes they would expect to see across time as a result of G-RARC presence (see Annex D's chronogram). In a field trip to the Las Cruces Pilot Area, the evaluator asked the M&E Coordinator to model this technique with real farmers for the evaluator's observation. The precise question frame he used on this occasion was: "What would you like to see your life be in 5 or 10 years here in Las Cruces that Centro Maya could help you with?" The result was a desultory conversation that veered off into issues like sewers and rural electrification, with only happenstance reference to Ag&NRM development and even less to specific project interventions. Moreover, the M&E Coordinator explained to the evaluator how, after such consultations, he sits down alone to "deduce" the relevant "participatory" indicators [direct quotes].

This explanation directly contradicts statements by the G-RARC M&E Consultant during interviews at RI headquarters. There, the consultant gave the impression that concrete and meaningful indicators were being sought that relate directly to project impacts and draw upon phenomena emically significant to and observable by producers — perhaps even including sensitive indigenous knowledge of agroecology, cropping, stockraising, and forest biomes. An exhaustive set of trip and other reports recounts how question frames underwent change as a result of preliminary consultations to arrive at such indicators through community-wide meetings in 17 communities. But certainly there is a very long way yet to go in reaching this participatory M&E ideal within the G-RARC, especially given that the M&E Coordinator's understanding of the workings and aim of such efforts still appears muddled.

As to the evaluation SOW query "Is [sic] appropriate gender-disaggregated data being collected," the answer for the G-RARC is simply "No." As noted above, the monthly M&E reporting sheets do not even call for systematic data collection on numbers of participants in trials, field days, radio programs, etc., much less on their gender or any other socioeconomic characteristics. The three surveys conducted in December 1994 are also innocent of any gendered parameters. (However, women *were* systematically included in the community consultations mentioned above.) RI annual reports (1992-93 and 1993-94) to the BHR/PVC Office have correctly and consistently remarked RARC inattention to gender, and have offered repeated recommendations in this regard. Those of relevance to the G-RARC include the following (RI 1993:32).

- Develop a specific mechanism to include gender analysis in...annual RARC project workplans.
- Disaggrage [sic] the baseline surveys and project impact assessment by gender.

At the G-RARC, these recommendations appear to have gone so far unaddressed. Throughout most of the LOP, the G-RARC has had no technologies or practices on offer for women and thus no impacts to assess in this regard, other than indirect or possibly even negative ones resulting from men's adoption of G-RARC offerings. As discussed in every preceding chapter, its agenda has been heavily male-biased. If the VOCA (or other equivalent) assistance in gender analysis is forthcoming and if the recommendations discussed below and in Chapter 2 are attended to, these shortcomings can be overcome, however.

Yet a further shortcoming that needs to be addressed promptly is the G-RARC's failure to include management information on institutional achievements in its (as-yet non-existent) MIS/M&E system. As noted in preceding chapters, these embrace, e.g.: staff professional development; RARC-generated publications, training materials, radio shows, etc.; and the numerous other outreach activities that staff engage in off-farm (e.g., talks to other NGOs and institutions, media interviews). Although these variables are included in a late-1992/early-1993 document (Centro Maya M&E Program n.d.) laying out possible M&E indicators, they seem to have been since forgotten (again see Annex D's chronogram).

Even something as seemingly straightforward as the G-RARC radio show could benefit from tracking within an MIS/M&E system — e.g., to track numbers of segments aired on different subjects disaggregated by gendered appeal, numbers of male and female producers who have participated in the show in various capacities (as interviewees, Q-and-A panel members, letter writers to the show), numbers and sex of individuals from different collaborating NGOs, GOs, or other institutions who have participated in shows, etc.

On a brighter note, the G-RARC staff and especially the M&E Consultant and Coordinator deserve kudos for their institutionalization of the use of the USAID logframe approach to aid in workplanning. This tool appears to have been a great success. It is adhered to by all G-RARC professionals, whom it has helped to prioritize and justify their

research and extension endeavors; and it accounts in part for the orderliness and clarity of G-RARC year-end reports (Chapter 2). Also, as noted in Annex D's chronogram, some GOs are beginning to take note of the Center's success with this tool and to ask for information about it. Further, in discussions with the evaluator, USAID/Guatemala interviewees expressed their appreciation of the fact that, even though G-RARC M&E advances have so far been limited, thanks to RI initiative the G-RARC *has* committed one FTE to M&E, unlike most other NGOs in the MBR Project.

### **5.3. LESSONS LEARNED**

Taken together, Sections 5.1 and 5.2. point to some overarching findings and lessons for NGO M&E efforts. One is the need for a better understanding of the distinctions among different kinds of data collection for different purposes (e.g., diagnostic versus activity monitoring, or program planning versus impact assessment). Specifically for impact assessment, another is the imperative to continuously evaluate whether the necessary information is being collected, analyzed, and reported in such a way that impacts (i.e., positive/negative, anticipated/unanticipated effects on e.g. crop and livestock yields, biophysical phenomena, quality of life, etc.) can be reasonably linked directly or indirectly to RARC interventions.

Overall, this evaluation found that although much effort has been expended in the formulation of logical frameworks and data collection forms and/or in community consultations, in fact very little information is available and being used from M&E at either RARC. Beside the shortcomings noted in the preceding paragraph, a serious contributory problem is the absence of any MIS to support M&E. Put another way, "Where's the beef?"

Other overarching findings echo those of a 1995 USAID/Guatemala assessment of the status of M&E in MBR NGOs as a whole. This document's observations on the many difficulties that such M&E efforts have encountered independently confirm many similar findings from the present evaluation — not only for RARCs but also for RI. Some of the pertinent findings from this 1995 assessment include the following.

- Commitment to M&E by NGO leadership and staff has been half-hearted.
- Relatedly, NGO staff as a whole lack a sense of ownership in the M&E enterprise or in some of the indicators selected.
- M&E activities are not specifically budgeted for.
- NGO workplans do not take into account the time required for performing M&E functions.
- Some of the selected indicators may be too costly or difficult to measure and/or too difficult reasonably to link with project/program interventions.
- In consequence of all the foregoing considerations, reporting and recording of data are irregular.
- Baseline data are not complete and consistent, and they are often too general to be useful for subsequent measurement of indicators.
- Targets are not always set against which to gauge indicators.

The present evaluation also noted the visible lack at RI headquarters of MIS/M&E systems for non-financial matters relating to the RARCs — with the consequences for RI reporting already noted in Chapter 2 and illustrated in Annex D's chronogram. Yet "What is good for the goose is also good for the gander." Like the RARCs, RI is likely soon to suffer from its lack of any way to systematically capture and efficiently and dramatically present in compelling quantitative (as well as textual, qualitative) forms what, most probably, are some outstanding results and impacts of its RARC program worldwide.

Charged with evaluating only two RARCs, the present reviewers found extremely frustrating the inavailability at headquarters of any such organized quantitative data within or across sites. One can only imagine what management, oversight, and reporting strains will face RI headquarters as the R-RARC swings into action and still more RARCs come on-line — all without a centralized MIS or M&E system.

Bluntly put, such systems will be critical for ensuring the accountability, credibility, and sustainability of RI's International Division — and thus, too, of the RARCs (Chapter 6). Frequent periodic updates and organization of field data at RI would not only provide data security for RARCs (perhaps an especial consideration in the Peten). It would also facilitate the technical and managerial backstopping of field operations. Also, such a comparative cross-site database would significantly improve overall RARC and Divisional review and strategic planning. Finally, having to periodically submit MIS/M&E data to headquarters — as does CARE/Peten, for example — might underscore to RARCs the importance of this component.

## **RECOMMENDATIONS**

### **Senegal**

- Fill the M&E staff position vacated in 1994. Assuming *Entre Nous* is discontinued, after appropriate MIS/M&E training the S-RARC Communication Specialist (who is already computer literate) could take on this job.
- Expand S-RARC indicators to include the minimum quantitative data required to meet the information needs of key stakeholders. The relative importance of donor, producer, and collaborator needs will vary by technology and activity.
- Determine the (in)congruence among the three USAID-funded M&E systems being developed for NRM in Senegal; identify what parts of each system can be merged; and divide M&E responsibilities (e.g., for policy analysis, institutional development and planning, technology design and transfer) in such a way as to avoid duplication of efforts.

## **Guatemala**

- Freely access the professional M&E expertise of the MSI team in the Peten, available by contractual requirement to collaborating institutions in the MBR Project, to assist with problems and questions arising in the establishment of an appropriate G-RARC M&E.
- Relatedly, study the excellent up-and-running MIS system operated by CARE/Peten as a possible model for a G-RARC MIS and the foundation of a computerized G-RARC M&E system. If it proves appropriate, adopt it outright or with modifications as needed.
- Once an MIS is established, experiment with providing each Pilot Area with an inexpensive computer for direct data entry at the field level on a periodic (e.g., weekly) basis. Plan to hold backup computers in reserve for temporary breakdowns.

## **Program-Wide**

- Clearly distinguish between the kinds of M&E data necessary for constructing baselines and assessing impact from those collected at FSR&E operational level, along with the relationships between these two kinds of data.
- Instill a sense of team ownership in M&E and get all staff and RARC leadership "on board" as to its importance. Ideally, this should be done consensually.<sup>6</sup>
- Give all RARC and RI staff a shortcourse in MIS and other tools that can assist them in filing and retrieving data.
- Integrate the establishment of RARC (including R-RARC) MIS and M&E systems with the simultaneous establishment of compatible systems at RI headquarters so that data can be monitored and regularly exchanged electronically between RI and the RARCs and manipulated in a number of ways useful to both. In this process, also consult with M&E personnel at the relevant USAID Missions or Offices in order to ensure that proposed systems will deliver the kinds of information that the RARCs' major donor requires.
- Include in all these systems not only on- but also off-farm activities like requests for information, visitors to the program, inter-institutional outreach (e.g., talks and conference presentations) plus staff development, administrative information, and other variables that need monitoring.
- Develop a specific mechanism to include gender analysis in all RARC (and RI) workplans/logframes, and gender-disaggregate all pertinent MIS/M&E data.

- For most of the foregoing and other future M&E needs under the follow-on grant, engage a single, expert M&E Consultant with a longstanding and demonstrable track record of successful achievement in MIS/M&E to assist both RI and all RARCs.
- Have this expert review for feasibility of collection and cost-effectiveness all present or proposed M&E process and impact indicators (participatory/non-participatory, biophysical/agronomic/economic, etc.), all current or planned baseline efforts, and the targets set. (If no targets have been set, do so.) Also spell out how feedback will be obtained from adopters, non- and dis-adopters of RARC technologies and practices who do/don't receive RARC training or extension services.
- At the same time, re-examine the usefulness of all current recording forms, make the necessary modifications, finalize them, and get on with integrating them into an MIS.
- In light of all the foregoing, check to see if indicators or outputs in the follow-on BHR/PVC grant need to be revised.
- Re-vamp and standardize the format of all consultant reports to make them more substantive.<sup>5</sup> Include this format in consultant SOWs; and of course, always elaborate concise but precise SOWs for each mission.
- Assign a budget to MIS/M&E tasks at both RARCs and RI; and build time to carry out these tasks into all workplans.

## NOTES TO CHAPTER 5

1. Hereafter, for parsimony these are often referred to in the aggregate as "M&E," albeit not entirely accurately (see Section 5.2).
2. Likely other NGOs in the region are also developing or implementing still other systems of their own.
3. The evaluator cannot help but note that she, too, would probably have resisted filling out these forms since they seemed to hold so little meaning.
4. However, this individual serves as a sort of factotum consultant to the G-RARC and has many other duties besides M&E. Reportedly, he has performed very effectively in a number of other vital project arenas such as: interfacing and negotiating with USAID/Guatemala; building good relations with other institutions operating in the area; finding additional financial and human (e.g., VOCA) resources for the G-RARC; mediating between RI and the G-RARC; meeting with the media; and opening G-RARC staff (who have very conventional FSR&E backgrounds) to a more truly participatory FSR&E paradigm.
5. E.g., omit description of personal activities; clearly enumerate trip achievements and task progress vis-a-vis previous visits; add a contacts list, complete with contact information; attach examples of forms and surveys designed, data sheets processed, and any other outputs resulting from the trip; in a separate section, flag problems and possible solution and next-trip plans; and so forth. The G-RARC M&E Consultant's trip reports can serve as a starting point for designing a reporting format.
6. But if all else fails, in order to protect its own credibility with donors, RI may need to exercise salary- or fund-withholding sanctions.

## **6. SUMMARY AND CONCLUSIONS**

### **6.1. SUMMARY OF BHR/PVC-STIPULATED RARC OUTPUTS**

As the foregoing chapters have detailed, RI and the Senegal and Guatemala RARCs have partly, fully, or even more than achieved a number of the outputs set for them in the 1992 BHR/PVC Cooperative Agreement (Chapter 1). They have also made some impressive advances along many other fronts that were not specifically detailed for one or the other RARC (or both) in this agreement (see especially Chapters 3 and 4). As this evaluation also noted, however, for a variety of reasons — not all of them within the manageable interest of RI or the RARCs — other outputs have not been fully realized. Table 6.1 summarizes evaluation findings on all stipulated outputs in an abbreviated form, for readers convenience.

Aside from the outputs listed in Table 6.1, this evaluation was unable to assess to what extent RARC activities have met the BHR/PVC Project's overarching goal and primary purpose, as evidenced in an increase in the number of producers using regenerative agriculture techniques. A major focus in the evaluation SOW was to determine whether the BHR/PVC grant has enhanced the capacity of the RARCs to collect, analyze and interpret various kinds of data, to monitor and evaluate impacts, and systematically to report on all the foregoing. These capacities can indeed be said to have been enhanced. But the RARCs have yet to make a concerted effort to monitor and assess the adoption, (non/dis) adoption, and diffusion/spread of the technologies they are extending. While it is indisputable that the RARCs have carried out massive training, outreach, and extension efforts (in the process involving many other NGOs and GOs as well as producers), in the absence of functioning MIS/M&E systems (Chapter 5), the breadth and impact of these efforts cannot be confidently ascertained.

A wide range of complex indicators for the larger project purposes was outlined in the original Matching Grant Application of 29 August 1991 from RI to USAID. These are not discussed here for the reason that many were stated in overly ambitious or confusing terms.<sup>1</sup> Moreover, in the absence of baselines, MISs, and effective M&E, their achievement cannot be assessed in any meaningful way.

The indicators set in the FY 1995 Matching Grant Application to the BHR/PVC for a follow-on to the 1992 grant represent a great improvement over those of the first application. But in light of the findings of the present evaluation on progress to date, it would be prudent to review some of the purposes, outputs, and their indicators during the DIP exercise for their clarity, feasibility, and even desirability.<sup>2</sup> Their associated means of verification also require re-examination. Some of the indicators set may be unverifiable solely by the means currently stated.

**Table 6.1. Summary of Outputs Achieved**

<i>Output</i>	<i>S-RARC</i>	<i>G-RARC</i>	<i>Indicators of Non-output</i>
<b>RARC staff trained in:</b>			
Accounting	yes	yes	
Report preparation	no	no	No training documented.
Information delivery	no	no	Assuming this means MIS, no training or software provided.
M&E	yes	yes	But apparently to little institutional avail.
<b>Streamlined reporting:</b>			
Financial	yes	yes	
Technical	no	no	Lack of reports. Incongruent and/or duplicative and disjunctive reporting. Lack of systematic quantitative data.
<b>Both RARCs accomplish:</b>			
Better communications	yes	yes	
Effective M&E system	no	no	Data not collected and/or analyzed. Few data files. No MIS, even by hand. No feedback, regular reports.
Plans for sustainability	partly	partly	Financial plans done but weak on plans for institutional soundness.
<b>S-RARC accomplishes:</b>			
3 annual trainings for PCVs/NGOs	partly	-	No PCV training.
4-5 trained PCVs in Thies	no	-	No volunteers in Thies.
Development of training materials	partly	-	Only a brochure and manual on compost.
<i>Entre Nous</i> /press releases	no	-	Low subscription rate; lack of press coverage.
<b>Other:</b>			
EOP evaluation	yes	yes	
Plans for new RARCs	yes	yes	

Source: As enunciated in Attachment 2 to the 29 September 1992 Cooperative Agreement (see chapter 1).

Specifically, as emphasized throughout this evaluation, monthly or annual reports that are not backed by clear evidence of systematic monitoring of real data cannot serve as a credible means of verification. For example, some of the data gathered at the field level during this evaluation were inconsistent with information contained in RI and RARC reports (e.g., numbers of PCVs trained, training materials developed, number of *Entre Nous* subscribers, advances in M&E). Among other things (see Chapter 5 again), these discrepancies are likely due to tabulations made from different information sources by different people. An effective MIS/M&E system would avoid such inconsistencies, greatly improve the quality and reliability of reporting, and hence increase credibility in RARC achievements.

It should also be noted that few of the indicators set for the new grant signal impact of, as versus process/progress on activities planned and executed. For example, the conduct and monitoring of extensive training sessions, field days, workshops, and networking are envisioned; but little is said of how their effectiveness and impact will be determined (recall Chapter 4).

Both RI and USAID have been quite astute in recognizing the importance of well-functioning MIS/M&E systems in their initial request for and grant of funds, respectively, for strengthening S- and G-RARC capacities and for constructing the larger RARC model. Much remains to be done, however. Thus it is appropriate that the follow-on grant continue to emphasize this component of the model, building on the recommendations offered in Chapter 5.

Finally, at least one output *not* noted in Table 6.1 merits special mention. To wit, both RARCs deserve congratulations for their formation of many effective formal and informal partnerships with numerous other research, extension, and environment-and-development entities, both governmental and non-governmental. For example, the S-RARC Team Leader is a member of ISRA's Board of Directors and of the Executive Committee of CRCAD (Regional Committee for Agricultural Development), a joint NGO/GO body that oversees agricultural development matters in the Thies region. His participation in these committees activity planning and review work provides an important link between the RARC and regional and national research and government communities. As noted in earlier chapters, the G-RARC has taken the lead in effectively coordinating much of all MAGA activities in the Peten, interlinking diverse MAGA services in an integrated interdisciplinary effort

Such linkages can only augment and extend RARC influence and impacts. Under the follow-on grant, they should be strengthened, formalized where relevant, and increased (e.g., by including Peace Corps). Of course, they also need to be subject to monitoring and evaluation so as to demonstrate their important spread effects.

Still other kinds of linkages in which the RARCs could or do obtain useful and cost-effective assistance from other local/regional institutions (e.g., CARE/Peten) and international voluntary organizations (e.g., CECI, the International Executive Services Corps, VITA, VOCA) have been explored. These, too, should be further encouraged under the follow-on. As noted in Chapter 2, they could be extremely useful in accomplishing a variety of discrete tasks and point studies that would help set RARCs on the road to sustainability.

## **6.2. SUSTAINABILITY, REPLICABILITY, AND OTHER ISSUES**

The long-term sustainability and the replicability of the RARC model depend mainly on such NGOs' ability to secure funding from a variety of sources. As discussed at length in Chapter 5 and reiterated above, the RARC model being developed quite properly emphasizes the importance of MIS/M&E for attracting and retaining a sound mix of donors. Reliance on a single donor agency is risky.

In this regard, RI's Strategic Development Plan for the Sustainability of Centro Maya (Landeck 1994) is instructive. It lays out two vehicles for reaching G-RARC sustainability at a level of approximately \$600,000 per year: creation of a Guatemalan institution to build an endowment fund for the Center; and RI fund-raising to support G-RARC field activities. To date, nearly all financial support for the G-RARC has come from U.S. government sources, either directly or (through PL416) indirectly. It is hoped that major non-government funding sources will be found, including private individuals and foundations in the U.S. As of 1995, signs of such support have already emerged in the form of a contribution from the Moriah Foundation. For both vehicles, RI has already taken or planned aggressive action in terms of public information activities and outreach to a broad range of donors.<sup>3</sup> U.S. contributors who are not able to support the G-RARC directly will be able to channel funds through RI. The GOG has also promised to search for continued support.

Wisely for the G-RARC, the financial sustainability plan does not envision garnering significant funds from training personnel of other projects, NGOs, GOs, Peace Corps, and so forth. Given the relative youth of the G-RARC and its own nascent experience with subjects like logframes and M&E, this is appropriate. In any case, in view of the current plethora of environment and development entities operating in the Peten — including, e.g., CARE/Peten and the MSI team (Chapter 5) — it is doubtful whether the G-RARC would have much comparative training advantage (and thus clientele) in subjects other than FSR and related technical matters at this time.

Furthermore, charging for G-RARC training would be inappropriate vis-à-vis most other organizations in the Peten today, because the G-RARC is already linked in with them in a variety of cooperative partnerships, exchange relationships, and consortia. Thus, to generate fees, training clienteles would need to be sought farther afield in Guatemala or Central America as a whole. But given the presence of such institutions as CATIE, IICA, Honduras' famous Zamorano University, and others in the region, at this early point in the G-RARC's evolution, it is unclear what its comparative advantage might be.

Just the opposite appears to be true for the S-RARC. In addition to some of the strategies outlined above for the G-RARC, S-RARC financial sustainability strategies emphasize income-generation from S-RARC contracts with other NGOs for local training activities. The S-RARC has already begun to build a track record in this regard (recall Chapters 3 and 4). According to its Team Leader, for 1994-95 income from training amounted to an estimated \$16,000 — a not insignificant part of this much smaller RARC's overall operating funds.

The larger lesson to be learned here is that there must be room for difference and variation when it comes to replicating the RARC model — a lesson that RI appears thoroughly to appreciate. Although not discussed here, the establishment of the new Russian RARC underscores this point. There is a corollary lesson here, too. In its formative phase, a RARC may experiment with a number of programmatic thrusts; and over long periods of time, it may make significant strategic adjustments. But ultimately it must find its own "vision." Put another way, as is often pointed out, in order to endure every NGO must eventually find its own special niche within the larger ecology of development agencies.

This is a point of concern for the G-RARC, which seems yet to have fully defined a guiding mission vis-à-vis a comprehensive picture of its comparative advantages in the regional environment-and-development landscape, both geographically and functionally. As RI annual reports correctly point out, Centro Maya *is* one of the few entities in the Peten focusing on vital agroecological issues. And it is perhaps the only agency in the area with a critical mass of some scientific expertise in these issues. But the G-RARC perhaps needs to ask itself whether its primary purpose and main advantage lie in applied research and technology transfer and/or whether they are to be found in mass extension and education.

These kinds of questions are beyond the scope of the present evaluation. But for each new RARC that may be established, answers to them pertain directly to issues of sustainability and replicability. Without going into great detail here, it might be advisable to include in the DIP an exercise to review and, if indicated, revise RARC mission statements at the beginning of a second phase of BHR/PVC support. Specifically for the G-RARC, such a review should include both an intra- and an inter-institutional analysis of capabilities and comparative advantages. Intra-institutional analysis should also identify any structural weaknesses created by RI-RARC linkages and recommend ways to rectify them.

Whether under the BHR/PVC or (probably more properly) other auspices, there appears to be need for yet another kind of review of RARC activities: one that addresses the appropriateness and mix of technologies and practices being tested or offered for specific recommendation domains (e.g., farmers with insecure land tenure, women, producers with little water or manure with which to make compost, farmers with no viable access to markets for exotic crops, and more). Examination of the technical merit and differential socioeconomic fit of RARC interventions and messages did not form part of the SOW for the present evaluation. But based on their long years of experience in agricultural technology design, development, and extension, both evaluators independently discovered they had some reservations about RARC activities in this respect.

The evaluators appreciate that most RARC activities are demand-driven. I.e., partnerships are formed and training and other assistance are provided to those requesting it. Nevertheless, interventions and messages (how to compost, fatten animals, garden, etc.) must be technically correct and sensitive to specific and usually highly variable recommendation domains if they are to be adopted without inordinate risk to beneficiaries. Again, since

information on (non/dis)adoption of RARC-extended technologies has not been systematically collected, it is difficult to discern if messages are technically or broadly socioeconomically viable. The RARCs need to continuously evaluate the appropriateness of technologies for the audiences they service. They cannot simply assume that potential producer and other collaborators already have sufficient knowledge to be able to determine whether a given technology/practice or suite of interventions suit their situation.

In sum, a concerted technical review of RARC activities would seem indicated as part of the process of RARC maturation. As the USAID Project Officer put it, RARCs may be doing things right; but are they doing the right things? The lack of expertise at RI headquarters both in socioeconomics and in tropical agroecology may have led to inattention to the need to strengthening RARC capacities to look critically and iteratively at this question. Of course, this kind of critical "look-see" would be greatly facilitated by an up-and-running MIS/M&E system.

To return one last time to MIS/M&E, a further question pertaining to sustainability now faces RI and the S- and G-RARCs. That is, the value and cost-effectiveness at this late date of going back and doing what is known in MIS/M&E circles as "picking up data off the floor." This means trying to gather up and put into some credible, quantitative form all available information on the activities, achievements, and impacts of the two RARCs across the grant period to this point — as was essayed in Senegal during this evaluation. The goal of such an exercise would be to have such material in hand so that, as RI and the RARCs move forward with financial sustainability plans, they can deploy it in their proposals to various donor groups. In the opinion of the present evaluators, it would appear that such a reconstructive task *is* worth doing. Although scattered and incomplete, a fair amount of information does seem to be available in various forms at both RARCs.

Yet another concern in winning continued donor support (including support from heretofore untapped donors) is concerted attention to WID. Leaving aside compelling efficiency and equity arguments for the moment, in purely pragmatic terms today's environment-and-development climate demands this. Thus the decision to strongly focus the follow-on grant on WID issues is an extremely wise one; and it should be pursued with full force and vigor. This is especially true in the case of the G-RARC. As discussed in Chapter 2 and elsewhere and as recognized by the G-RARC itself, this Center will require "extra" inputs of TA and training up-front in order to be able to adequately address the goals of the follow-on grant.

The evaluation team has one further observation to offer. To wit, both RI and the RARCs did not appear to appreciate beforehand what-all is entailed in a formal external evaluation. Neither RI or the RARCs had prepared any materials or even semi-formal presentations specifically for this event. With the exception of the PP and RI's two annual reports, neither was existing documentation and data gathered up, organized, and duplicated ahead of time, ready for distribution to the evaluators either at headquarters or in the field.

On-site at the G-RARC, little thought had been given beforehand to possible useful field trips. In short, both RI and the RARCs were ill-prepared for both the rigor and the significance of a formal evaluation by a major donor — although RI leadership did express eagerness to garner all possible feedback, correctives, ideas, etc. that a good evaluation should supply. For future, RI and the RARCs should take note that forward-planning for such events is a pragmatic consideration in terms of continued donor support.

On a closing note, now, both RI and USAID should be roundly congratulated for their extremely astute identification and prioritization of the precise arenas in which the RARC model could most benefit from increased capacity-building. This is true both for the initial and follow-on BHR/PVC grants. The evaluation team is also gratified to see that USAID recognized and acted upon the need for follow-up. The team predict that the next external evaluation will find a useful and important yet highly flexible and dynamic model for the establishment of sustainable Regenerative Agricultural Resource Centers worldwide that has been well-tested and unequivocally demonstrated to be replicable.

### **RECOMMENDATIONS**

- Review indicators in the PP for the follow-on grant to make sure they are appropriate, clear, verifiable through credible means, reflect impacts of — as well as process/progress on — activities, and that in addition to all the foregoing features are feasible and cost-effective to collect.
- To assure greater RARC influence, effectiveness, and impact, continue to build mutually advantageous partnerships with other development assistance organizations.
- Move forward with present plans for financial sustainability, but where indicated, bolster these with an internal review of intra- and inter-institutional structures and capabilities. Then revise or refine RARC mission and institutional capability statements accordingly.
- Whether under BHR/PVC or other auspices, commission an external technical/socioeconomic review of RARC-promoted interventions.
- Include in the DIP a commitment at the beginning of (or even before) the follow-on grant that RI and RARCs synthesize existing process and (if any) impact data in tabular form so that this information will be available for use in: approaching future donors; responding to further external evaluations as regards activities and achievements during 1992-95; and RI/RARCs' reflecting internally on their programs and institutional vision.
- As planned under the follow-on grant, intensify RARC emphases on MIS/M&E and on women in agricultural development.

## NOTES TO CHAPTER 6

1. Some examples are such purpose indicators as: "20% more male/female farmers in Guatemala and Senegal use nutrient cycling techniques...in household food production"; "25% of NGOs, government extension workers involved in agricultural development disseminate information on regenerative agriculture in Senegal; 40% [of such] groups involved in natural resource management [do so] in Guatemala" (RI 1991, Attachment 2: Logical Framework). In some cases, the exact intent of the indicators set is not clear, e.g.: "35% HH [i.e., households] that NGOs work with, in Senegal farmers/farm organizations receive this information on regenerative agriculture technical development in at least 50% new HH in Guatemala" (*ibid.*).
2. For example, is "6 new sites added per year" a desirable goal for the G-RARC, which has a history of over-extending itself?
3. Examples include: the ACNUR/CECI, EEC, Interamerican Development Bank, USAID; FICAH, the Frank Weiden, General Services, MacArthur, Tinker, Pan American Development, and W. Alton Jones Foundations; and Guatemalan business sectors like the tourism industry.

**ANNEX A:  
SCOPE OF WORK FOR  
THE EVALUATION**

## **SCOPE OF WORK**

- I. **Purpose:** The purpose of this consultancy is to enable PVC to conduct a final evaluation of Rodale Institute's Matching Grant, "Increasing the Capacity of Regenerative Agriculture Resource Centers." The purpose of the evaluation is to assess the impact of the grant in each of the specific areas outlined in Section III, below.
- II. **Objective:** The objective of this assignment is to provide a final evaluation report which answers the questions listed below and provides a summary of lessons learned, as well as the evaluators' recommendations regarding any changes that need to be made before completion to achieve the grant's objectives.
- III. **Statement of Work:** The evaluation will be carried out at Rodale headquarters in Kutztown, Pennsylvania, and at Rodale's field site in Flores, Guatemala. The investigation shall focus on the following questions:

### **Data Collection:**

1. Is appropriate gender-disaggregated data being collected on: a) farming and resource utilization practices, and b) changes in the natural resource base. If so, how will this gender-disaggregated data be used?
2. Have the Matching Grant data collection (expected) targets been met? If not, Why?
3. What is the current capacity of Rodale headquarters and the RARCs to analyze and use the data being collected?
4. How is the analytical capacity of Rodale and the RARCs being used to improve program impact? How can that capacity be improved?

### **Reporting; Technical/Financial:**

1. Are streamlined accounting and reporting systems now in place at Rodale headquarters and the RARCs? How appropriate are these systems? How can they be improved?
2. Has Rodale headquarters adequately trained local RARC staff to use the new accounting and reporting systems? If not, what further actions need to be taken to increase these capabilities?
3. To what extent are Rodale headquarters and the RARCs using the new systems to:

- a) prepare timely reports for donors and host country collaborators that include qualitative/quantitative data on program activities, achievements and finances, and
  - b) identify and respond to appropriate requests for technical information in a timely and useful fashion?
4. What actions need to be taken to increase accounting and reporting capabilities at both Rodale headquarters and the RARCs?

**Communication/Information Dissemination:**

1. How have the RARCs expanded the use of computer conferencing? What further improvements might be made?
2. What steps have been taken to increase the amount of RARC-generated information in the International Ag-Sieve bulletin?
  - To what extent have these actions been successful?
  - How can the RARC-generated information in the Ag-Sieve bulletin be increased/improved?
3. What steps has the Senegal RARC taken to increase the circulation of the Entre Nous bulletin?
  - Does the RARC gather data on how the bulletin is used to ensure that the publication is relevant/useful to subscribers?
  - What other strategies could be employed to increase circulation?
4. Has there been an increase in the use of in-country media to publicize the RARCs?
  - How was this accomplished?
  - How can the use of local media be improved/expanded?

**Training:**

1. What type of training curricula and materials have been developed on regenerative agriculture?
2. How did the RARCs participate in developing the curricula/materials? Can this participation be improved? If so, how?

3. How has Rodale and the RARCs determined the demand for the training and materials? Is there sufficient local demand to warrant any anticipated expansion in this area?
4. How do the RARCs determine who receives the information material? Do the RARCs conduct any surveying/analysis to see how the material is used? How can this process be installed improved?
5. How have participations judged the quality of the RARC training?
6. How has Rodale headquarters assisted the RARCs in refining the training to make it more effective? How can the assistance from headquarters be improved?
7. Do the RARCs have the capacity to expand the curricula and materials development? If not, how can the capacity be improved?
8. To what extent have Rodale headquarters and the RARCs pursued cost-recovery approaches for its training and material development efforts? How successful have the strategies been? How can the prospects for cost-recovery be improved?

#### **Collaboration/Peace Corps:**

1. Have the Peace Corps volunteers been integrated into RARCs project activities? If so:
  - a) What impact has this had on RARC programs?
  - b) Should this integration continue? If so, should it be expanded? How?

#### **Replicability:**

1. What is Rodale Institute's capacity to develop and implement new RARCs in two different locations.

#### **General:**

1. As a result of this project has there been an increase in the number of farmers using regenerative food production techniques?
2. As a result of this project have NGO, government extension workers in agriculture development adopted regenerative agriculture practices or disseminated information about regenerative agriculture?
3. Is regenerative agriculture practices, project information, being effectively disseminated to local farmers, NGO's and farmer organizations in such a way that these groups will benefit from this information?

IV. **Level of Effort**: A maximum of 20 days is authorized for this consultancy. The consultant will be reimbursed for each day spent up to, and not to exceed, 20 days. A level of effort chart is attached.

V. **Period of Performance**: The dates of this consultancy are April 1, 1995 through May 31, 1995. The approximate schedule is attached.

VI. **Deliverables**: The evaluator will conduct a de-briefing meeting in Washington, D.C., upon her return from the field. The de-briefing is expected to occur on or about May 17, 1995. By the date of the de-briefing, the evaluator will submit a draft report of the evaluation findings, including information from the field investigation in Senegal, which answers to the questions listed in Section III, above. The final report including revisions as specified in the comments from the USAID Project Officer, the Rodale principals, and others involved in the evaluation will be submitted on diskette in WordPerfect 5.1 or higher ad camera-ready paper copy by May 22, 1995.

**ANNEX B:  
PERSONS CONTACTED**

## PERSONS CONTACTED

### RODALE INSTITUTE

Avila, Karin de	Rodale Accountant in Guatemala City
Bairstow, Roger	Communication Manager, International Division
Folk-Eckhart, Tammy	Senior Accountant
Hart, Bob	Executive Director of <i>INFORUM</i>
Herberan, John	President
Landeck, Jonathon	International Division Director; also Acting RARC Coordinator
Mahoney, Jim	Chief Financial Officer
Roberts, Bill	M&E Consultant for Senegal
Sabella, John A.	Program Associate/M&E Consultant for Guatemala

### SENEGAL

#### S-RARC

Diallo, Pape Kane	Communications Specialist
Diop, Amadou M.	Regional Representative
Diouf, Mbagnick	Gardening Specialist
Diouf, Momar	Administrative Assistant
Guissé, Mamadou	Agricultural Specialist
Sané, Ansoumana	Development Specialist
Sarr, Diagne	Women in Development Specialist

#### Peace Corps

Conner, David	Sustainable Agriculture Trainer
Eickerson, Sharon	Head of Training
Lambert, Don	Rice Trainer

#### USAID/Senegal

Massamba Dieng	NRBAR Project Grants Manager
Mawa Diop	NRBAR Project Facilitator
Thomas Cusack	NRBAR Project Chief of Party

#### Government of Senegal and Related

Diangar, Saliou	Agronomist, ISRA
Diémé, Seydou	SODEVA Forester
Dramé, Bafondé	SODEVA Thies Regional Delegate
M'Bengue, Yacinthe	Assistant Director, Bombay Research Station

### **Field Trips**

Approximately 40 male farmers in attendance at a meeting organized for an evaluation visit to the village of Ndiamsil, where compost pits and animal fattening locations were examined.

Approximately 20 women gardeners (of a cooperative of 161) in attendance at a meeting organized for an evaluation visit to the village of Ngad Khaye, where a RARC-assisted garden and compost pits were examined.

## **GUATEMALA**

### **CARE/Peten**

Milian, Bayron  
Montero, Pinicia

Director, EduCAREmos  
Coordinator for Agroforestry

### **G-RARC "Centro Maya"**

Barquin, Luis Francisco  
Guerra, Easau

General Coordinator  
Coordinator for Extension and Rural  
Socioeconomics

Herrera, Juan Manuel  
Pineda, Antonio

M&E Coordinator  
Coordinator of the Multidisciplinary Team of the  
Pilot Area of Las Cruces

Ruano, Sergio  
Esquivel, Gerildo

Technical Coordinator  
Fruit Technician of PROFRUTA attached to the  
Multidisciplinary Team of the Pilot Area of Las  
Cruces

Toraya, Maria Esperanza

Secretary/Accountant

### **MSI (Management Systems International)**

Alvarez, Nidia

M&E Officer for the Maya Biosphere Reserve  
Project

### **SEGEPLAN**

Cano, Jose Luis  
Lara, Mario  
Negreros, Mario  
Palacios, Marco Antonio

Consultant for Economics  
GIS Expert  
Agronomic Engineer  
Head of Peten Office and National Coordinator,  
Proyecto Peten

### **SINCE (Servicio Integral de Computacion SA)**

Chacon, Jose Luis

Computer Technician

**USAID/Guatemala**

De Leon, Eberto

Klein, Keith

Pastor, Claudia

M&E Coordinator for the MBR Project

MBR Project Officer and NRM Advisor

MBR Project Assistant

**Field Trips**

1 immigrant Ladino husband/wife couple and 1 female neighbor, ranchers/farmers of the Pilot Area of Las Cruces.

1 Ladino male farmer, passerby of the same area.

3 Itza Maya men (not farmers), participants in former Centro Maya activities (and organizers of the Maya language group) in the community of San Jose in the original Central Area of RARC operations.

1 Itza Maya man, formerly the leader of the G-RARC farmers group in San Jose.

1 Blanco hotelier in San Andres who is seeking to attract scientific- and eco-tourism to the Central Area.

**USAID/WASHINGTON**

Hewitt, Martin

BHR/PVC Project Officer

**ANNEX C:  
DOCUMENTS CONSULTED**

## DOCUMENTS CONSULTED

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<sup>c</sup> All documents listed above were published in Santa Elena, Peten by the Proyecto Centro Maya MAGA-USAC/CUDEP-CATIE-RODALE-AID unless otherwise indicated.

*RUSSIA*<sup>4</sup>

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<sup>4</sup> All documents listed above were published in Kutztown, PA by Rodale Institute unless otherwise indicated.

**ANNEX D:  
M&E SUPPORTING  
EXHIBITS**

# **Outline for M&E Manual**

## **Handbook Title**

### **Participatory Monitoring and Evaluation**

#### **Introduction**

This handbook has been developed as a practical guide for local/national NGOs that work with communities. The handbook offers tools for collecting relevant data that will serve the information needs of NGOs and the communities with which they work. An participatory monitoring and evaluation (M&E) system:

- \* Helps local NGOs collect and analyze data for reporting to donors.
- \* Helps the NGOs attract additional donor support
- \* Provides a system that responds to the NGOs' organizational needs.

(Here we will include a statement about the philosophy of Rodale Institute and the RARCs -- one-page case studies -- in their approaches to regenerative agriculture and human welfare, and how the approach suggested in this handbook is rooted in these values).

(Also, a short discussion of what should have occurred within the community, i.e., some type of needs assessment and prioritization of intervention options. The handbook will note that people in the community will have articulated their desired changes. The handbook will suggest how to track the change process, learn from what occurs in that process, and be able to identify and understand the expected and unexpected implications (impacts) of the changes.

Finally, a brief discussion about why it is important to understand each others agenda (i.e. community members need to understand the NGOs' agenda, and of course vice versa).

#### **Chapter 1 - Identification of Information Needs**

##### **A. What is M&E and why is it important?**

Today there is more work than ever to do with fewer resources. It is therefore crucial not only justify activities related to specific needs, but to demonstrate results and specify what the impacts of development are. Moreover, the ability of an organization to demonstrate what it has accomplished with resources already received will enhance its ability to attract additional resources.

All decision makers within the NGOs and their community partners need to make informed decisions during the life of a particular project. This requires appropriate, timely, and affordable collection and analysis of data to generate information related to goals and objectives.

Here are some examples of questions that staff members at the Senegal RARC ask themselves in order to assess the impacts of their activities:

How many people have received training at the RARC?

What is the topic of their training?

Is there an evaluation of the training?

How many farmers (men/women) have received training in given regenerative agriculture practice?

What were the dates of their training?

Where do these farmers live (village of residence)?

**How many of the farmers (men/women) who have received training now use these practices? What changes have resulted**

**How many of these farmers do not? Why not?**

**How many farmers use the practice but have not received training?**

**How many farmers neither received training nor use the practice?**

How many collaborative partners who utilize and disseminate information on regenerative agriculture?

#### B. Participatory Planning: Linking Goals and Action

(Introduction of the logical/analytical framework as a planning tool)

This tool serves several purposes. It provides a structure by which people can organize thoughts with respect to linking what they do (activities) to immediate, intermediate and long term results, and to the changes (impacts) that occur as a consequence. The framework is a **guide to conversation** between partners.

(We should insert a compare and contrast examples of these conversations in Guatemala and Senegal).

#### C. Selection of Appropriate Indicators and Targets

In this section we need to reinforce the importance of measurable indicators setting realistic goals or targets against which to gauge progress. We will provide examples of qualitative and quantitative indicators, as well as those that lend themselves to cost-effective measurement, and those that do not. We will also note the role of appropriate proxies when these are logical indications of change and easier to collect. We will stress the importance of minimizing the amount of time and resources committed to collecting data by targeting the most important and relevant data to be collected.

## **Chapter 2 - Monitoring Tools and Data Collection**

### **A. Establishing a Baseline for Data Collection and Future Analysis**

The importance of baselines for determining the rate and nature of change (impacts).

### **B. Development of Appropriate Monitoring Tools for Data Collection**

Monitoring tools should be designed to collect relevant data in a way that "fits" with the way people go about their work in villages.

### **C. The Four-Step Method for Developing Impact Indicators (see proposed RARC reporting system)**

### **D. Other Examples of Participatory Monitoring Tools and Indicators**

## **Chapter 3 - Data Management and Impact Analysis**

### **A. Information Organization**

This section will make the case for having filing procedures so that data can be easily retrieved for reporting purposes.

### **B. Understanding and Using the Analytical Framework**

### **C. Relevant Types of Analyses**

Explanations and uses of trend analysis, gender analysis, household and community profiles, economic and environmental.

## **Chapter 4 - Communicating Results**

### **A. Participatory Evaluations with Community Partners**

Discussion about how lessons learned from earlier activities can inform planning for future activities (Senegal/Guatemala examples).

### **B. Reports to Collaborators and Requests for Additional Resources**

### **C. Improving M&E Capacity and Capabilities Over Time**

## **Bibliography**

MARP and other Rapid Rural Appraisal tools

List of Participatory Handbooks already out there

List of more accessible articles on Monitoring and Evaluation

Jim Rugh. 1992 (reprint). *Self-Evaluation: Ideas for Participatory Evaluation of Rural Community Development Projects*. World Neighbors Publication.

Alexandra Stephens and Kees Putman. 1988. *Participatory Monitoring and Evaluation: Handbook for Training Field Workers*. FAO: Bangkok.

Jerry Aaker and Jennifer Shumaker. 1994. *Looking Back and Looking Forward: A Participatory Approach to Evaluation*. PACT.

Judi Aubel. 1993. *Participatory Program Evaluation*. Catholic Relief Services.

Others

# **S-RARC Form for Diagnostic Survey**

**FICHE DIAGNOSTIC**

Enqueteurs Alassane LY

Date Janvier 95

Région Thiès

Departement Thiès

C. rurale Lambaye

Arrond.

Village **Ndiamsyl**

Date Implantation

Population totale 364

Hommes

Femmes

moins de 16 ans

Plus de 60 ans

Estimat° Ethnique (%) wolof

Nombre de concess° 33

Avec 7 à 20 pers 40

Avec moins de 7 pers

INFRASTRUCTURES Avec plus de 20 pers 4

Equipements hydraul 2 puits manque d'eau

Marché ou Boutiques 2 boutiques

Magasins Intrants 1 magasin

Case de santé

Moulin à mil

**AUTRES INFARSTRUCT.**

**ACTIVITES DU VILLAGE** par ordre Importanc

cultures vivrières et de l'embouche

**CONTRAINTES** acts

Problème fondamental manque de ressources financières.

Problème pour accéder aux crédits, de la paille en saison sèche

Répartition cultures par importance

Cultures % des concessions % des superficies

mil 15 %

75 %

Fertilisation par

Eng chim non

Fumier oui

Compost oui

arachide

niébé

Calendrier annuel des activités

Autres :

Activités

impliquées  
H, F, ou E

J F M A M J J A S O N D

culture  
vivrière

x x x

embouche

x x x

Formations reçues Embouche, cultures associées, compostage, fenaison.



## SYSTEME SYLVICOLE

### Espèces végétales

Nom local	Nom scientifique	Principales utilisations Tend 20 last ans +, -, ou =
baobab	acacia Albida	fonctions agronomiques, alimentaires, médicales, artisanales
Kad	cajanus cajan	
neem	leuceana	
quinquélba	leucocephala	
ratt	ficus	
nguer	gnaphalocarpa celtis integrifolia bauhinia rufescens	

**Droit d'usage (commun ou individuel)** c'est comme sauf les arbres des familles

**Mode de possession des terres** il suffit de demander au chef de village pour avoir une terre

**Nombre de hameaux** 3

**Nombre de quartier et leurs noms** Ndiamsyl taï,  
séssène  
ndiougène

### GROUPEMENTS VILLAGEOIS

Date contact avec Rodale

TYPE Nombre Grpmts Activités Realisations

GPMT  
HOMME

GPMT  
FEMME

63 membres

petit commerce  
le comité de gestion se  
chargera de la gestion  
financière

GPMT  
JEUNE

### RESUMES des activités de développement des 15 dernières années

Année	Activité et acteurs	Résultats
1990	appui de Rodale sur les assais	fertilisation des terres hausse des rendements agricoles
1991	7 fosses de compost	Ils ont démarré avec 6 têtes. Actuellement, ils ont 13 têtes
1993	embouche	

**CONSTRAINTES DES HOMMES** manque d'activités agricoles

**CONSTRAINTES DES FEMMES** elle veulent faire du maraîchage, avoir un moulin à mil et de l'eau

**CONSTRAINTES DES JEUNES** maraîchage, renforcement de l'embouche

# S-RARC Logframe

OBJECTIFS	INDICATEURS	VERIFICATION	HYPOTHESES
<b>BUT:</b>	<b>BUT:</b>	<b>BUT:</b>	<b>BUT:</b>
Meilleure gestion des ressources naturelles	Productivité, rentabilité, durabilité	Evaluations Participatives	Les cultivateurs ont les potentialités de gérer les ressources locales disponibles
<b>JUSTIFICATIONS:</b>	<b>JUSTIFICATIONS:</b>	<b>JUSTIFICATIONS:</b>	<b>JUSTIFICATIONS:</b>
Dégradation de l'environnement, Baisse de la productivité-santé précaire,	Régénération des sols-Hausse productivité Diminution des maladies nutritionnelles	Superficies cultivées, rendements, enquêtes, entretiens	Complexité problèmes agricoles, prédisposition populations à réaliser leur potentiel humain
<b>RESULTATS:</b>	<b>RESULTATS:</b>	<b>RESULTATS:</b>	<b>RESULTATS:</b>
<b>Programme Agricole</b>	<b>Programme Agricole</b>	<b>Programme Agricole</b>	<b>Programme Agricole</b>
Régénération des sols	Productivité et accrois. des superficies et r	Entretiens, mesures, estimations, évaluation participative	Les populations connaissent leurs problèmes, les hiérarchisent et leurs trouvent des solutions-Des alternatives aux Intrants externes existent
Intégration élevage/agriculture	Taille du cheptel		
Valorisation des ressources naturelle	Quantité compost		
Accroissement des capacités des paysans-Intégration des femmes	Niveau d'utilisation des Intrants locaux- Niveau de participation des femmes-Diversi-		
Accroissement des revenus	fication des activités		
<b>Communications</b>	<b>Communications</b>	<b>Communications</b>	<b>Communications</b>
Collecte et diffusion d'informations sur l'agriculture régénératrice	Périodicité, thèmes diffusés, cibles et nombre d'abonnés	Bulletin de liaison "ENTRE-NOUS" Brochures-Livrets-Questionnaires	Diffusion du savoir scientifique et empirique
<b>Formation</b>	<b>Formation</b>	<b>Formation</b>	<b>Formation</b>
Acquisition des compétences en matière d'agriculture régénératrice par les producteurs	Nombre d'agents et de paysans formés et leurs capacités	Enquêtes, évaluations, entretiens, estimations	Existence de besoins en formation sur les techniques d'agriculture régénératrice
<b>Administration</b>	<b>Administration</b>	<b>Administration</b>	<b>Administration</b>
Collaboration plus large avec les institutions de développement et organisations de producteurs	Nombre de programmes, d'institutions collaborant avec Rodale, de conventions signées et reconduites	Courrier, conventions, évaluations, contacts	La collaboration et la complémentarité des différentes institutions sont nécessaires
<b>ACTIVITES:</b>			<b>MOYENS:</b>
<b>Programme Agricole:</b>			<b>Programme Agricole:</b>
Intégration agriculture/élevage			
Formation, Embouche, fenaison, Jardin fourrager, Compostage			Humains, physiques, financiers, matériels
<b>Communications</b>			
Bulletin de liaison, outils de communications			

# **Logframe for S-RARC/ISRA Collaboration**

## OBJECTIFS

### BUT

Rendre la collaboration entre ISRA et CRAR-S plus efficace pour une meilleure utilisation des résultats de la recherche

### RESULTATS

\*Elaboration d'une strategie d'intervention

\* Evaluation de la participation des partenaires

\* Developpement/Elaboration de projets

### Inputs/Moyens

\* 3 chercheurs ISRA  
\* 3 Staffs de CRAR-S

## INDICATEURS

Protocole/avenants  
Réunions/visites périodiques  
Nombre projets collaboratifs  
Nombre de technologies

Démultiplication des technologies  
Nombre de sites/bénéficiaires

Participation dans formation/suivi  
Communications/publications conjointes

Nombre de projets

NRBAR

## VERIFICATIONS

Protocole/Rapports

Réunions

Evaluations participatives

Focus groupes  
Interviews individuelles

Rapports

Rapports

## HYPOTHESES

Protocole d'accord

Bénéficiaires considerent les deux institutions au même niveau

Les deux insitutions comprennent le rôle de chacun

La complementarité de deux institutions mise en évidence pour rendre plus efficace le programme de chaque structure

Meilleur bien-être de bénéficiaires

**Logframe for Village of Ngad Khaye  
Formulated by S-RARC Staff**

HYPOTHESES /CONDITIONS CRITIQUES	OBJECTIFS	INDICATEURS	VERIFICATION
Collaboration et coordination effective entre le GP, les services étatiques, les ONG et les autres structures de dev.	FINALITE: développement du village, amélioration du niveau de vie des populations	Infrastructures (dispensaire, maternité rurale, électrification, etc...) augmentation du cheptel au niveau du village	Enquêtes et observations directes, statistiques au niveau du CERP
Disponibilité des matériaux à composter, amélioration du système d'exhaure de l'eau	But: production de légumes de qualité et en quantité pour approvisionner le marché extérieur	accroissement des superficies cultivées, quantité de production vendue hors du village	Fiches de récoltes, nombre de planches cultivées, interviews, enquêtes
	RESULTATS		
Disponibilité des terres et de l'eau, cohérence et coordination des activités au niveau de RI et ISRA, suivi régulier, disponibilité et quantité de la matière organique	Identification de nouvelles variétés et des techniques culturales adaptées à la zone autonomie du GP et autosuffisance en légumes pour le village, pérennité des relations entre l'encadrement et le groupement	Taux d'adoption des techniques culturales (superficies couvertes par variété et par technique, rendement par superficie cultivée) disponibilité des légumes en toute période dans le village, augmentation de plus de 20% de la production par an, 90% des femmes du village pratiquant la technologie	Evaluation en pourcentage des espèces retenues par superficie cultivée et traitée, pesée, interviews, exercices pratiques
Identification des problèmes à résoudre, élaboration d'un programme d'action et d'un calendrier d'exécution, volonté de collaboration entre RI, ISRA et le GP des femmes, existence petit matériel de maraîchage	ACTIVITES Formation en technique de compostage, de maraîchage et de protection naturelle des cultures Introduction de nouvelles variétés	Mouvement du budget et nombre d'espèces introduites, calendrier d'exécution, nombre de personnes (H/F) formées	Rapports, Fiches de contact évaluation participative

**Logframe for Village of Ngad Khaye  
Formulated by Producers**

HYPOTHESES /CONDITIONS CRITIQUES	OBJECTIFS	INDICATEURS	VERIFICATION
Collaboration et coordination effective entre le GP, les services etatiques, les ONG et les autres structures de dev.	FINALITE: amélioration du niveau de vie des populations, développement du village	Financement des activités Taille du groupement Niveau d'organisation	Enquêtes Interviews, investissements et opérations effectués
Disponibilité des matériaux à composter, amélioration du système d'exhaure de l'eau	But: production de légumes de qualité et en quantité pour approvisionner le marché extérieur	augmentation des rendements et des superficies, réduction de la fumure minérale	Quantification de la matière org. utilisée par surface et dans le temps
	RESULTATS		
Disponibilité des terres et de l'eau, cohérence et coordination des activités au niveau de RI et ISRA, suivi régulier, disponibilité et quantité de la matière organique	Identification des espèces et des techniques culturales adaptées à la zone autonomie et autosuffisance en légumes pour village, pérennité des relations entre l'encadrement et le groupement	Accroissement des revenus, augmentation de plus de 20% de la production 75% des femmes maîtrisent et pratiquent la technologie	Evaluation en pourcentage des espèces retenues, fiche de contact, rapport pesée, interviews, exercices pratiques RESULTATS:
	ACTIVITES		RAPPORTS
Identification des problèmes à résoudre, élaboration d'un programme d'action et d'un calendrier d'exécution, volonté de collaboration entre RI, ISRA et le GP des femmes, existence petit matériel de maraîchage	Formation en technique de compostage, de maraîchage et de protection naturelle des cultures	Utilisation du budget, Nombre d'espèces introduites, Superficie cultivée, Calendrier d'exécution, Superficies traitées	Evaluation participative

# **S-RARC Contact Sheet**

VILLAGE OU SITE Ngombel

DATE 19/01/95

HEURE ARRIVEE 10h 17mn

HEURE DEPART 12 h 15 mn

OBJECTIFS VISITE Réunion villageoise pour une meilleure organisation de la campagne maraîchère

DOMAINES ACT. Maraîchage

Méthodo. et CIBLES Discussions

		Nature du Contact Consultation	
PARTICIPANTS	VILLAGEOIS	STRUCTURES	
HOMMES	1	M. Guissé	TOTAL
FEMMES	16	D. Sarr A. Si.	
FACILITATEUR	Diagne Sarr	REDACTEUR	Diagne Sarr

OBSERVATIONS Revoir le CL pour le village avant de partir, remplir les indicateurs appropriés. Si le CL n'existe pas, utiliser le CL du CRAR

RESULTATS

INDICATEURS

BUT

INDICATEUR

RESUMES CONVERSAT\* (Résumer au moins 2 conversations individuelles avec les producteurs sur les facteurs liés à l'adoption/adaptation des technologies - rappeler quelle technologie)

HOMME

FEMME Nous déplorons l'étroitesse de la superficie exploitée en 1994, le test de compost était satisfaisant de même que la protection avec les graines de neem ; la culture de gombo (hivernage) n'a pas donné de bons résultats .  
Hypothèses : sol pauvre - spéculation non adaptée au type de sol.

DEROULEMENT ACTRE

Introduction par la MR pour inviter les femmes à une meilleure organisation de la campagne . Certaines mesures ont été prises et mises en exécution (amendes) évaluation participative de la campagne 1994. Dépaillage de la pépinière semée en ligne et repaillage de celle en mottes qui n'a pas encore germé déjà 7 jours .

CONCLUSIONS RECOMS

Labour de la partie à exploiter et préparation des planches. Transfert du fumier au niveau du site. Continuation de l'irrigation de

# **S-RARC Follow-up Sheet**

Village

Date

**Agric/Elevage**

Nom	Age	taille Menage	cheptel O/N	source des reven	format. reçue	format.pratiq	début operat.	appui techn.	accès crédit/	Nbre Cycles	résultats(>, =, <
		H / F / E	bovin		embouche	embouche			provenace		financ.
			ovin		fenaison	fenaison			main d'oeuvre		socio
			caprin		jardin fourr.	jardin fourr.					nutrit.
					compostage	compostage					environn.

**Compostage**

Nom	Age	taille Menage	cheptel O/N	dispo.de terres	format. reçue	début Oper.	appui techn.	Qté produite	cultures	equipements	résultats(>, =, <
			bovin	droit foncier				>, =, <	super.compost.		financ.
			ovin					%	superf.total.		socio
			caprin					an.passé	differ.rend.		nutrit.
											environn.

**Cultures associées**

Nom	Age	taille Menage	droit foncier	provenace	format. reçue	début Oper.	appui techn.	Superf.total	Superf.Cult.As	Utilils.produc.	résultats(>, =, <
				main d'oeuvre					>, =, <		financ.
									%		socio
									an.passé		nutrit.
											environn.

**Marachage**

Groupe	taille	taille Menage	droit foncier	provenace	format. reçue	début Oper.	appui techn.	Superf.total	Superf.Cult.As	Utilils.produc.	résultats(>, =, <
				main d'oeuvre					>, =, <		financ.
Nom	Age								%		socio
									an.passé		nutrit.
											environn.

**Conservation des sols**

type	groupe	Individus	format. reçue	début Oper.	appui techn.	type de terre	Util.terres proteg.	Assis.flanc.	proven.	résultats(>, =, <
	nombre	nom						si out. qui?	main d'oeuvre	financ.
	sexe					superf.				socio
										nutrit.
										environn.

NB. personnes cibles : 1. forme et qui pratique; 2. forme mais ne pratique plus; 3. pas forme

**Chronogram of Events Relating to G-RARC  
M&E**

## Chronogram of Events Related to G-RARC M&E Activities<sup>a</sup>

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Feb 1993	M&E Coordinator hired and paid 100% by the matching grant, with (among other things) the task of writing quarterly progress/impact reports to be submitted to USAID/Guatemala (later to MSI) as part of the MBR Project M&E.
Feb-Mar 1993	M&E expatriate consultant hired and makes first visit to G-RARC (approximately 6 weeks). "Brainstorming" of M&E indicators, discussions of participatory M&E, clarification of "products" versus impact indicators, completion of an impact indicators document by consultant, decision to form an MBR M&E Committee to meet monthly.
Feb 1993	USAID/Guatemala-convened meeting of all institutions participating in the MBR Project (CARE, Centro Maya, CI, CONAP, TNC) to arrive at consensus on each one's M&E reporting requirements -- both indicators and periodicity of reports.
Mar 1993	"Consensus document" released by USAID/Guatemala (K. Kline) summarizing in logframe form the results of agreements reached in the foregoing February meeting.
May or Jun 1993	Plans for G- and S-RARC M&E Consultants to meet on design of M&E manual.
Jul 1993	Diagnostic survey ( <i>sondeo</i> ) in 55 Central Area communities to identify agricultural problem areas for planning project activities.
Jul-Aug 1993	M&E Consultant makes second trip to G-RARC (approximately 3 weeks). Review of M&E materials, development of a plan of work for M&E, sharing of Spanish-language publications on M&E with M&E Coordinator, M&E and logframe workshop presentations to G-RARC staff, clarification of distinction between evaluation of specific technologies versus of people-level impacts, construction of workplan for M&E Coordinator, and "...work...begun on eliciting input from the Centro Maya staff regarding impact indicators (RI 1993:14).
Sep 1993	Plans for G- and S-RARC M&E Consultants to have what is now a fifth meeting on design of M&E manual.
Sep 1993	Training by M&E Coordinator of all other RARC coordinators in: employing logframes for workplanning; writing monthly reports with M&E information, using a format established by the M&E coordinator; and developing M&E and impact indicators.
Sep 1993	First quarterly G-RARC M&E report due (according to RI annual report); but no such report could be found at the time of the evaluation.

Sep 1993 First Annual RI Report (1993:8) states that "Full-scale implementation of the [M&E] system is set to begin for...November, 1993 in Guatemala. The baseline information requirements for Centro Maya have been met by conducting a *sondeo* (survey) in collaborating communities." And "At Centro Maya, a baseline survey of collaborating institutions was conducted in mid-1993 using the *sondeo* method...directed by the M&E Coordinator and the Team Leader" (1993:13). Also, "...progress on the M&E system development is...on schedule (1993:14). Report also notes inattention to gender in M&E.

Nov-Dec 1993 M&E Consultant makes third visit to G-RARC (approximately 2 weeks). "Consultations" with 7 Central Area communities to generate general quality-of-life/people-level impact indicators for RARC efforts; iterative reformulations of question frames; synthesis and analysis of outcomes of consultations. Also review of individual staff's logframes.

Dec 1993 USAID/Guatemala review of Centro Maya "advances." The review found no quantitative data readily available for use in reporting on advances.

Jan 1994 3-day internal workshop for review and coordination -- including setting of objectives, results, and indicators -- of all 1994 workplans, led by M&E Coordinator.

??? 1994 First and only quarterly M&E report submitted to MSI.

Mar-Apr 1994 M&E Consultant makes fourth trip to G-RARC (approximately 5 weeks). Surprise of consultant to learn that no further community consultations had been held since his last visit. Four more such consultations organized and held, reportedly making for a total of 17 such meetings to this point.

Apr 1994 S-RARC M&E Consultant visits G-RARC (approximately 1 week).

Apr 1994 Consultations with 3 Central Area communities to generate project impact indicators for specific technologies extended by RARC.

May 1994 Diagnostic survey (*sondeo*) in the 5 cooperatives of the new Bethel Pilot Area conducted. Brief summary report of findings written by the Program Coordinator for Sustainable Agriculture.

Sep 1994 M&E Consultant makes fifth trip to G-RARC (approximately 2 weeks). 3 days' discussions and review of M&E and planning for M&E in new LUMP effort.

- Sep 1994 With regard to "targets for the reporting period," RI's Second Annual Report says "New monitoring/training staff person in both countries conducts on-site monitoring based on methodology and system set up by consultant (achieved by both RARCs)" and "Specific methodology and system for evaluation to be developed and implemented in Senegal and in Guatemala (achieved at both RARCs)" (1994:8). The report also notes that "*sondeo*...data have not been fully analyzed" (*ibid.*). It adds that "the Centro Maya M&E system continues to evolve into one which uses the Natural Resources Management Analytical Framework" (1994:21). Further, it writes that "The additional funds expended versus budgeted for the M&E consultant (we are \$11,000 over budget to date in that category) have nevertheless helped to ensure that M&E was prioritized at the project level, and that follow-up activity occurred" (1994:25).
- Nov 1994 2-day training of project personnel by M&E Coordinator in preparation for administration of the following two Dec 1994 items.
- Dec 1994 Survey for collection of adoption and impact data in 12 Central Area communities (N=120) on 3 technologies extended by the G-RARC (adoption of mucuna, adoption of new maize varieties, adoption of maize-seed selection techniques) and on the audience in 46 communities for the G-RARC radio program (N=240). These surveys were initiated by the M&E Coordinator because of the lack of any other type of adoption data. As of June 1995, however: some 10% of survey forms still not returned; the data from those that were returned not yet fully computerized; analysis not yet initiated; no reports yet written.
- Dec 1994 **Baseline survey of agrosilvopastoral components of farming system in 46 communities (N=240). No instruction sheets prepared. As of June 1995: not all survey forms returned; the data from those that were returned not yet fully computerized; analysis not yet initiated; no reports yet written.**
- Jan-Apr 1995 M&E Consultant makes sixth visit to G-RARC (approximately 14 weeks). Workshop presentation to G-RARC staff on methods and results of participatory M&E to date; development of an M&E plan to interview G-RARC staff and farmers; meetings on the development of evaluation surveys for M&E.
- ??? 1995 Independent assessment conducted by USAID/Guatemala on status of M&E in the MBR Project; the assessment finds little progress.
- Mar 1995 Publication of the first annual MSI report on MBR Project progress and indicators. Only 1 of the required 4 quarterly M&E reports could be documented to have been submitted by the G-RARC for this publication.

Apr 1995	Training by M&E Coordinator of Bethel Pilot Area RARC team in logframe construction and use in workplanning (with MSI M&E professional observing).
Jun 1995	As of final evaluation, no baseline, adoption, or impact data analyzed and no results available in any form.
Jun 1995	Training by M&E Coordinator in logframing and workplanning plus M&E slated for Regional (Peten) Chief of USPADA, at his request.
Sep 1995	By EOP, cross-site M&E manual to have been produced by S- and G-RARC M&E Consultants.

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*Sources:* Mainly verbal reports from the M&E Coordinator plus M&E Consultant trip reports, but also RI annual reports and interviews with MSI and USAID/Guatemala.

<sup>a</sup> This chronology does not pretend to be comprehensive nor even entirely accurate, given the highly scattered sources from which it was gathered and the fact that sometimes reports conflict as to the type of activity carried out or even whether it was in fact realized. By far the most accurate source of information was the M&E Consultant's very comprehensive trip reports.

**Monthly M&E Reporting Form:  
Centro Maya**



# **G-RARC Baseline and Radio Show Survey Forms**

**BOLETA PARA EVALUACION ESTATICA RAPIDA**

1. Localización de la finca : \_\_\_\_\_

2. Subsistema

Componente	Tamaño	Rendimiento

3. Antecedentes

Si no nació en el Petén, de donde venía ?

	Geográfico	Lingüístico
Origen		

Tiempo de estar en el área: \_\_\_\_\_

4. Familia

Cuántas personas son en la familia ? \_\_\_\_\_

Cuántas personas leen ( No. ) ? \_\_\_\_\_

5. Identificación de la parcela

Forma de uso de la tierra (Parcela individual, cooperativa, otros):  
\_\_\_\_\_

Área total de la parcela (cooperativa u otra forma de uso):  
\_\_\_\_\_

Tenencia de la tierra (propietario, arrendatario, poseedor, otros) : \_\_\_\_\_

**ENCUESTA PARA MEDIR LA AUDIENCIA**

1. Tiene usted radio? SI \_\_\_ NO \_\_\_

2. Si usted no tiene radio, escucha algún programa de radio en la casa de algún amigo o vecino?  
SI \_\_\_ NO \_\_\_

3. Qué emisora es la que más escucha?  
RADIO PETEN \_\_\_ OTRAS \_\_\_

4. Qué programas escucha los días sábado?  
PLATICANDO CON EL AGRICULTOR \_\_\_  
OTROS \_\_\_

5. Conoce el Programa Platicando con el Agricultor?  
SI \_\_\_ NO \_\_\_

6. Si no escucha el Programa Platicando con el Agricultor, cuáles son sus razones?  
\_\_\_\_\_

7. Si escucha el Programa Platicando con el Agricultor, cada cuanto lo hace los sábados?  
POCAS VECES \_\_\_ MUCHAS VECES \_\_\_  
SIEMPRE \_\_\_

8. Si escucha el Programa Platicando con el Agricultor, lo hace desde que comienza hasta que termina?  
POCAS VECES \_\_\_ MUCHAS VECES \_\_\_  
SIEMPRE \_\_\_

9. De qué trata el Programa Platicando con el Agricultor?  
\_\_\_\_\_

10. ¿Qué clase de música le gustaría escuchar en el Programa Platicando con el agricultor?  
\_\_\_\_\_

11. Cuánto le gustaría que tardara el Programa Platicando con el Agricultor?  
\_\_\_\_\_

12. Qué día y a qué hora le gustaría escuchar el Programa Platicando con el Agricultor?  
DIA \_\_\_\_\_  
HORA \_\_\_\_\_  
Por qué? \_\_\_\_\_

13. Qué temas le gustaría escuchar en el Programa Platicando con el Agricultor?  
\_\_\_\_\_  
\_\_\_\_\_

**ANNEX E:  
RESPONSE FROM  
RODALE INSTITUTE**

## RESPONSE FROM RODALE INSTITUTE

### RECOMMENDATIONS (Senegal/Guatemala RARCs):

#### Chapter 2

#### RI HDQTS

- \* **Promptly fill . . .** *Yes, this will likely occur in September, 1995. This person will be called the Socioeconomic Director. There will also be a Technical Director. These people, plus Director Jonathon Landeck, will act as a management unit. Position announcements are being prepared.*
- \* **Because of . . .** *Yes, this person will likely be hired at the \$40,000 level (minimum). This has already been discussed with the Institute president and Anthony Rodale.*
- \* **As RARCs . . .** *That will be the domain of the aforementioned Technical Director.*
- \* **Improve technical . . .** *We will standardize the reporting and information system across the International Programs by using a format that I have already proposed, the Paradox 5.0 software, and results management system (RMS) that DESFIL (a Rodale subcontract) is now promoting in support of USAID field missions. Rodale Institute's president is also interested in adopting this system for the Institute as a whole. A workshop for the RARC directors, (plus a*

*Rodale Institute U.S. Programs representative) on how to use this system will be led by DESFIL's Bill Fiebig (a Rodale Institute employee who developed the RMS) during July 25-27.*

*\* Set clear . . . This has been the responsibility and shortcoming of J. Landeck and will be rectified. An example will be included in the DIP.*

*\* Also, formally . . . This will be done, and can easily occur using our electronic network.*

#### **SENEGAL**

*\* Computerize petty . . . This can be easily done using the Quicken software already in place at the RARC. We will purchase a computer for Momar Diouf to use at his desktop.*

*\* Finish the 1993-94 . . . To be completed by December, 1995.*

*\* To the extent . . . Yes, as noted above.*

*\* Formalize relationships . . . To ensure that ISRA complies with formal agreements in a timely manner has been problematic since 1988, when we began our affiliation, although the spirit of cooperation between the S-RARC and ISRA remains high.. We will continue to work on this, particularly with respect to research that addresses issues of regenerative management.*

#### **GUATEMALA**

*\* Hire a senior-level . . . This will occur by November 1, 1995, but the person will likely be a Guatemalan rather than an expatriate. It might be possible to second the new Socioeconomic Director to the G-RARC for several months, depending upon that person's ability to be away from their domestic situation. It is a good suggestion to fold in the M&E position, or at least ensure that this person be very familiar with the M&E approach. In any case, Sergio Ruano, will not be the point person for Rodale at Centro Maya, although he will continue to be supported as a Technical Director/Rural Sociologist (his expertise) at Centro Maya.*

*\* Equip RI's accountant . . . OK, no problem.*

*\* Review . . . Sergio Ruano has already been suggesting the need for this, and it will be done.*

*\* Forward additional . . . This will be taken care of in August-September, 1995, provided that PC sees the types of tasks listed as appropriate for a volunteer. A more appropriate role for PCVs might be at the project user end, i.e., to ensure that M&E data flow to the G-RARC hdqts.*

*\* At all costs . . . Well, we don't really have the luxury of "at all costs", but the point is well taken. We will build this workshop into the 1996 workplan at Centro Maya, to be conducted during the first quarter of the calendar year. Some experts have already expressed interest in this. We have been discussing with VOCA their integration into Centro Maya's technical needs.*

*\* Correct the disjunctures . . . That is a reasonable suggestion. We will sit down with Sergio Ruano and Francisco Barquin in August to clarify CM's reporting procedure.*

*\* Sort out who . . . This will be the aforementioned senior-level female professional, who must be bilingual. We will try to ensure that the reports be concise and pointed for easy translation.*

#### **PROGRAM-WIDE**

*\* Update . . . Again, this has been J. Landeck's responsibility and, in some cases, shortfall. These SOWs/job descriptions are indispensable and will be updated and included in the DIP.*

*\* Make sure . . . Good suggestion, will do.*

*\* Train appropriate . . . Already in process (see above).*

*\* Train or hire . . . This should be one of the responsibilities of communication personnel.*

*\* Standardize technical . . . This point is good, and already noted above.*

- \* To facilitate . . . (Already noted above).
- \* Enrich the . . . Some clarification is needed here on what is meant by "enrich".

### Chapter 3 RI HDQTS

- \* Conduct an INFORUM . . . We are discussing, with Bob hart, the establishment of a global network called RARCnet, a part of which will be Rodale's U.S. Programs managed in many ways like the RARC project (i.e. the positive aspects . . .).
- \* Continue with . . . That's a sure thing.
- \* To increase . . . A-OK, already in the works.
- \* Using RI . . . This would be a feature of the RARCnet.

### SENEGAL

- \* Phase out . . . We hope to get the Senegal staff on board with this idea. Having it written into the evaluation is great. RI could always prohibit funds to be used for Entre Nous, of course.
- \* Pay the necessary . . . Sure thing, rather than being penny wise and pound foolish, as long as the resources are available.
- \* Investigate the . . . We have investigated this, perhaps not as seriously as could be. Good idea.
- \* Upgrade basic . . . We are aware of this need. It's a matter of available funds. We try to add at least one piece of equipment each year. Remember, the S-RARC is a relatively modest projects.

### GUATEMALA

- \* Assuming . . . That's a very good idea, and we'll give it a try when we can find the resources, but it is not clear that all can be done at no additional production cost. At the Russia RARC, we have already been discussing collaboration with Canada's Developing Countries Farm Radio Network. We definitely see the radio as an important tool for rural development. We may try to link up with CARE in this area as well.
- \* Write a set . . . OK.
- \* The consultant . . . OK.
- \* To increase . . . OK, as noted above.

### RARC-WIDE

- \* Expand and/or . . . No dispute here. This is part of RI's overall strategic plan. Much depends on INFORUM's available resources, or what Bob hart and J. Landeck can raise to support this.
- \* In addition . . . This is a good idea, but problematic for two reasons: 1) It is not likely to be a program priority, given other more pressing concerns, and; 2) To become adept at electronic communications, one must use the system, and that can become expensive.
- \* To defray . . . This is a good suggestion, and is done regularly de rigueur.
- \* At the same time . . . More suggestions on what such systems would be are in order.
- \* Also take . . . OK, no problem.
- \* Get even . . . OK, as long as it's affordable (paper and printing costs). This is probably better directed at hdqts.
- \* To encourage . . . This is a good idea but costly in terms of time and money. This works well in an academic setting but is more problematic within the culture of an ngo.
- \* Look to appropriate . . . OK. We'll probably try to link with RITA/ALIN in Senegal for this.

- \* Establish . . . *RI's communication program can work on developing this system.*
- \* Set up . . . *OK, assuming adequate disk and diskette space.*
- \* Review . . . *OK. This will probably run \$10,000/year/RARC.*

#### Chapter 4

##### SENEGAL

- \* Provide . . . *OK, depending upon funds. The opportunities need to be carefully targeted.*
- \* Train all . . . *OK, again a budget issue but very important, for sure.*
- \* Formalize . . . *OK.*
- \* Complete . . . *This will be done at the hdqts level and passed onto the RARCs.*
- \* To accomplish . . . *Again, a budget issue. If we want to continue our field activities, this leaves less money for publications. Our relationship with RITA/ALIN could help in this regard.*

##### GUATEMALA

(noted in the final report as "see below")

##### RARC-WIDE

- \* Promptly . . . *OK, as noted above in the Chapter 2 comments.*
- \* Devise . . . *Should be part of the MIS/M&E system.*
- \* Organize . . . *This is less of a problem at the G-RARC; though still an issue. Perhaps a solid two weeks of simply organizing the office is in order.*

#### Chapter 5

##### SENEGAL

- \* Fill the M&E . . . *To be done as per the follow-on grant. Not a bad idea that Pape Kane Diallo take over M&E. That's a real option that has been discussed already with Amadou Diop.*
- \* Expand S-RARC . . . *OK.*
- \* Determine . . . *We've decided upon the DESFIL system while maintaining the principles of eliciting input from collaborators regarding indicators.*

##### GUATEMALA

- \* Freely access . . . *Good idea, though actually they are asking us to provide them with advice, oddly enough.*
- \* Relatedly . . . *That's a real good idea.*
- \* Once an MIS . . . *Another good idea, although buying an inexpensive computer is not such a good idea. You get what you pay for and we expect to spend at least \$1,500 per computer.*

##### PROGRAM-WIDE

- \* Clearly distinguish . . . *OK.*
- \* Instill . . . *OK, as we have tried to do. This has worked best in Senegal, much less so in Guatemala and Russia, but standardizing the system should help.*
- \* Give all . . . *This will occur before the end of 1995.*
- \* Integrate . . . *Already discussed above in Chapter 2.*
- \* Include . . . *The program selected (Paradox) is powerful enough to do this.*
- \* Develop . . . *That will require input from an experienced expert.*

- \* For most . . . *OK, as needed, but should we add bilingual? I think so.*
- \* Have this expert . . . *Our ability to enact this recommendation is contingent upon available funds. We may write this into our VOCA relationship, at least for Guatemala.*
- \* At the same time . . . *Already in the works.*
- \* In light of . . . *OK.*
- \* Revamp . . . *OK, already noted above.*
- \* Assign a budget . . . *This is what we are trying to do, but will take a full year of monitoring to determine how much time is spent on M&E.*

## Chapter 6

- \* Review indicators . . . *OK.*
- \* To assure . . . *No problem, that's an integral part of our strategic approach.*
- \* Move forward . . . *OK.*
- \* Whether under . . . *OK, but when, and how to pay for it?*
- \* Include in the DIP . . . *OK, to be included in the DIP.*
- \* As planned . . . *Absolutely.*