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SHARED CONTROL OF NATURAL RESOURCES (SCOR)

Review of the Monitoring and Evaluation,
Organization and Theme Actualization of
the Shared Control of Natural Resources
(SCOR) Project

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SCOR seeks to increase the users' share of control of natural resources in selected watersheds through partnerships between the state and users that contribute to greater production while conserving the natural resources base. SCOR will promote integrated planning for the use of land and water resources in two pilot watersheds with spread effects to other areas. The SCOR project is a collaborative effort of the Government of Sri Lanka, the United States Agency for International Development (USAID) and the IIMI.

**Review of the Monitoring and Evaluation,
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Shared Control of Natural Resources (SCOR) Project**

by

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There is an increasing body of evidence from Sri Lanka that farmers, even those with very small holdings make production responses to the economic and natural environment within which they carry out their agricultural activities. These responses are influenced by the degree of control the farmers can exercise over their means of production, the availability of information about market conditions and opportunities, and the necessary supporting services. In Sri Lanka, even modest increases in control over water achieved by farmer groups in several projects have resulted in significant increases in agricultural production and greater efficiency in the use of land and water resources. Increasing the users' share of control over natural resources through group action and their active participation in making management decisions can be vital prerequisites to improved management of those resources, and interventions aimed at improving natural resource management through local control could result in high rates of return.

The SCOR Project builds on the progress already made in Sri Lanka in irrigation management and in social forestry, applies an organizational approach on a watershed basis, and demonstrates the appropriateness of the SCOR Approach in selected provinces of Sri Lanka, chosen for their differing social, agricultural, and environmental characteristics.

The project's goal is to increase the sustainable productivity of the natural resource base in Sri Lanka in ways that will improve people's livelihoods beneficially and equitably, now and in the future, with due regard for the environment.

Review Objectives

The objective of this assignment is to review the current direction of the SCOR Project in relation to:

- a. the adequacy of the monitoring and evaluation system currently adopted by the project, and
- b. the structure and status of organization, roles, and functions of the professional team of the SCOR Project.

Organization

There are five components of SCOR Project organization:

1. central staff and leadership
2. field managers and technical resource advising
3. catalysts and farmer participation
4. project monitoring and establishing baseline data
5. scientific research developing knowledge.

Nine months into the project, it can be safely said that the plans of this organization have been brilliantly conceived and executed. The central staff have nurtured a spirit of cooperation which advocates leadership wherein the strength of each individual is brought to bear at appropriate times, without creating stress; while at the same time loyalties are engendered so that decision making can be facilitated.

The technical staff comprise experienced individuals who not only possess proficiency but also embrace the aims and goals of the project. It is especially evident that they also share the common value of the importance of participation by farm families in the planning process and the relevance of collaboration among farmers and their organizations, government officials, and technical advisors as the key to successful intervention in the development process.

The Catalysts have evolved as key individuals in the SCOR Approach. First, the selection process was thorough, resulting in individuals with unusually strong motivation and dedication, who embrace the tenet of farm family participation. Secondly, they have been well trained so that they can coordinate the disparate requirements and aims of the project and interact meaningfully with other team members. Most importantly, they have been encouraged to adapt to the exigencies of their assigned areas in ways that reflect their personalities and their interpretations of the best ways to achieve cooperation and success. Each has, thus, evolved a different approach to the problems and interventions in their areas, some of which are highly creative. Farm families have extremely high praise for their efforts.

The CORE staff, all of the components, have been highly successful in collaboration with diverse government agencies and farm organizations. Indeed, from observations, this collaboration is extraordinary. There are few, if any, examples of this degree of success in other parts of the world. Numerous case studies in the literature of "local participation/PRA/RRA" have lamented the fact that collaboration between farmers or villages on a regional scale are impossible.

Adequacy of the Monitoring and Evaluation System

The monitoring and evaluation tasks of the SCOR Project comprise several components: establishing baseline data and information; reporting changes in watershed characteristics;

preparing progress reports for USAID; monitoring production, environmental, and participation indicators required by USAID; tracking expenditures; and developing an effective Geographic Information System. In all of these tasks the project has been well served; the M&E is well organized, thorough in its coverage; innovative in its design; and already fully operational at field sites and the Colombo office.

The monitoring aspects of the SCOR Project are highly professional and almost unprecedented in their thoroughness. This is because the monitoring task has not been viewed as simply a "reporting task" to the granting agency, but rather it has assumed the responsibility of establishing baselines for a system which would allow careful and valid measurement of the changes that can be expected over the life of the project. The SCOR Project can become a test case of meaningful intervention for development in many parts of the world. For this to happen, it is essential that the "story" of the project be fully revealed and its successes and failures carefully measured. Thus, this degree of monitoring is extremely important and desirable.

The quarterly progress reports to USAID have not been acceptable because they have provided too much detail. The reports have emphasized statistical data with very limited text. It is suggested that the reports concentrate on only the statistics requested by USAID, and that the textual information be organized around SCOR principles or objectives. Supplemental data and GIS visuals can then be made available as an appendix document.

Most importantly, it would be advisable for SCOR management to focus the M&E activities toward more responsiveness to the immediate concerns of USAID, dealing with impacts of SCOR activities so as to justify expenditures to Washington. The SCOR Project, on the one hand, is complex in its objectives and operations, but it has also been very successful in a very short period of existence. There are already significant field results, important research findings, and records of successful participatory and collaborative proceedings. These need to be immediately presented to a wider audience so that the impacts of the SCOR Project justify its extension. This issue is noted in a letter from M. Siribaddan (USAID Project Manager), dated 30 August, 1994.

The weaknesses of the M&E are: 1) while only in the first year, baseline maps still have not been prepared for most of the Upper Nilwala Watershed and for sub-project areas in Huruluwewa Watershed; 2) while many statistics are being compiled, there exists uncertainty, especially with regard to USAID reporting, as to the most appropriate and key indicators needed. Clearly, these issues should be incorporated with the GIS activity.

The Use of GIS

The Geographic Information System has become operational in a very short period of time, and it has proven to be a valuable addition to SCOR activities. As a research tool it has significantly assisted SCOR staff in selecting operational sites that could only be determined by spatial analyses. As a tool in organizing the project data bases, it can provide invaluable insights to

measuring impacts of alternative interventions. And, it will be a valuable tool for planning and decision making. The system now requires support to make it more fully integrated into the operations of the SCOR Project, as well as to incorporate more recent advancements in GIS. At some point in the very near future it is imperative that it include remote sensing imagery into analyses, monitoring, and evaluation.

SCOR Themes

The purpose of SCOR is to increase the share of users' control over land and water resources in selected watersheds through state-user partnerships **based on formal agreements** that contribute to intensified and sustainable agricultural production while conserving the physical, biological, and social environments. The project is designed to strike a balance between "**production**" and "**protection**" in relation to the utilization of land and water resources in selected pilot watersheds through the intensification and institutionalization of collaborative and participatory processes coupled with appropriate technologies.

In effect, the SCOR Approach seeks the balance between production and protection by limiting the scope of activities to a region of meaningful and manageable size -- a watershed, which uniquely focuses upon the single, critical factor of water in the development process. Further, the SCOR Approach introduces another critical component of collaboration between various stakeholders and with their participation in planning and implementation.

To achieve these goals, SCOR utilizes a team of highly qualified technical experts and a well-trained and innovative staff of Catalysts. In this way, appropriate and technically sound changes in land use, and especially vital water management practices, are introduced to watershed planning. The Catalysts, then, act as "Agents" who work with farm families so as to create awareness of the meaningfulness of proposed changes as well as to guide the implementation of site specific projects.

Finally, SCOR has wisely recognized that participation is achieved by utilizing and building upon the existing farmer organizations already present in the watershed. The SCOR Approach also seeks to facilitate a process of developing new organizations when necessary and when requested by farm families. The uniqueness of the SCOR Approach is the integration of concepts and sound development practices focused upon: a watershed, participation, collaboration, technical expertise, and personalization or sensitivity to individual farm family concerns.

Another interesting addition to the regional planning and implementation character of SCOR is its micro concentration on small contiguous areas within which "every inch of surface" is carefully planned and monitored for the impacts of interventions.

This approach is not novel in that each of the components are widely recognized as valid in conceptualization and appropriateness to the development process. The originality lies in SCOR

combining and integrating the components and in adapting each to suit the objectives of the country and the feasibility of successful and sustainable implementation.

Considerable, useful, and thoughtful consideration was given to conceptualizing the SCOR Project. And, this deliberation is recorded in numerous documents. Still, there remains a lack of clarity to the SCOR Approach; or, put another way, after nine months of operation, there exists an opportunity to more carefully articulate the substance and philosophy of the SCOR Project. One way to address this issue is to convene a series of workshops, which include invited outside participants, to debate and evaluate the SCOR experience of Phase I. The preparations of material for these sessions, alone, would be a useful and meaningful exercise.

For example, how much emphasis should be given to research and technical inputs to project planning? Does the "balance" in the production-protection equation rest more on the production side with farmers, while on the preservation side with SCOR staff and government officials?

One can make a strong case that the most important contribution of SCOR is the collaboration component, for this is already the striking achievement of the project, and it is this aspect which is at the forefront or "cutting edge" of development thinking. Yet, the collaborative strategy and operationalization have not received prominence in reporting, nor has attention been given to monitoring this aspect.

The work of the Catalysts is truly exceptional. This aspect of the SCOR Project should not be overlooked, for the real contribution of the project will ultimately be measured by the degree to which farmers actually share control of resources, and implement appropriate changes. The research activity on process documentation will be useful on this issue.

The point being made here is that it is prudent to rearticulate how the components of SCOR should be presented; and, at the same time, the use of limited resources to conduct research and monitoring should reflect the assignment of strategic concerns. Further, this process of rearticulating SCOR components would serve as a vehicle toward internalizing the project over its six-year lifespan.

Further, the SCOR Project should start planning and conceptualizing as soon as possible for its next phase (extension). The task of more clearly defining SCOR themes is a valuable component of that task.

Finally, it is interesting to note that this diversity of emphasis for the project has led to different interpretations of SCOR. Because of its originality and complexity, individuals require considerable and more careful explanation of the SCOR Approach. Since each brings different experiences and different backgrounds to the task, imaginative presentations are required. For example, in an interview with one Divisional Secretary, he emphasized that SCOR was primarily directed to protection, as in environmental concerns. He failed to recognize the importance of collaboration or participation. Thus, if this secretariat was to assume the responsibility for long-

term implementation of SCOR activities it is doubtful whether that office would be equipped to continue the Catalysts' tasks. (Parenthetically, it can be observed that the Catalyst role under SCOR is making up for the failures of agricultural extension agents.)

Differences in Watersheds

The Upper Nilwala Watershed Project appears to be significantly different from the Huruluwewa Watershed Project. Numerous training exercises and workshops have ensured that the fundamentals of the SCOR Approach be similar in both study sites; however, the philosophical and conceptual bases of the SCOR Project have not been absorbed in the same way by both staffs.

Part of this difference may be the result of a failure by Colombo staff to effectively educate the Upper Nilwala Watershed staff on the theoretical and methodological framework which accentuates the SCOR Project. Specifically, in that watershed the emphasis is upon environment/protection aspects and participatory/ mobilization tasks, neglecting the inter-organizational/ collaborative components. In the Huruluwewa Watershed, the "shared control" collaborative aspects have become prominent features. This difference could present a problem of internalization of SCOR, especially as transferability becomes an issue.

On the other hand, the distinction in the Upper Nilwala Watershed could be a result of the specific problems of that area. There, water scarcity is not a problem; instead the major system-unifying problem is land, specifically slopes and erosion. Shared control of scarce water in the Huruluwewa Watershed is a simple, readily observable constraint to development. In the Upper Nilwala Watershed the unifying problem is land use associated with different slopes -- a much more complex and complicating set of development principles, requiring an imaginative approach.

Also, the emphasis upon mobilization of farmers into effective organizations in the Upper Nilwala Watershed is more difficult because that region does not have a history of farmers organizations that is evident in the Huruluwewa Watershed.

Further, the Upper Nilwala Study has put a great deal more effort in working with governmental agencies and has demonstrated originality of purpose in achieving good success. The formation of service organizations and working groups to enlist the cooperation and participation of farmer organizations and government agencies has already shown success and can become a useful operational device in sustaining the SCOR Approach. In this regard, that region shows promise for the transferability of SCOR activities and action, possibly expediting policy changes. This innovation and its mode of operation should be investigated for its appropriateness in the Huruluwewa Watershed.

In summary, the SCOR Approach in the Upper Nilwala Watershed bears close scrutiny and deliberation to ascertain if the region itself and its delimited boundaries best serve as demonstration of the SCOR Approach. This issue was indirectly revealed by the Chief Secretariat who responded to a question of "errors" by SCOR; he suggested that the next project site of SCOR should be in a drier area of the district.

Further, the Chief Secretariat expressed very positive views of the SCOR Project in his district. He acknowledged the importance of environmental protection in the district, and he observed a change in local views, by both farmers and government officials, to participation in dealing with the environment. He felt that sustainability of SCOR actions is a real possibility if government agents can be both trained and educated in the SCOR philosophy.

The Secretariat added an anecdote, regarding the need to change government officers' views on management of the environment, about the experience of a former director of the Forestry Department who articulated policy by instructing his agents to guard the forests from encroachment by farmers; now as a participant in the SCOR Project, the former director has changed his attitude to reveal that farmers have a shared responsibility and that the Forestry Department agents should work with the local people.

The Chief Secretariat also noted that the SCOR Approach could be most useful in informing government policy in another dry zone part of the district, especially with regard to new settlers -- "there is dire need to formulate new policy for settlers schemes."

Future Staffing

The SCOR Project has been in operation for less than one year. There has been some turnover in staff, perhaps reflecting internal problems such as salary deficiencies, but this has been minimal and not unusual for projects of this scope. However, the project has not yet become fully operational, while staff responsibilities have already reached their capacities. It is recommended that careful evaluation be undertaken to reassess the roles of individuals so that appropriate adjustments or additions be put in place for the next phase of the project. For example, one might observe that the role of the Catalyst is the most critical for the success of the project; further, that more tasks -- such as statistical reporting; monitoring and evaluation of farmer organizations; training and implementation of GIS, etc.-- are being required of the Catalyst. Thus, additional Catalysts should be hired, or a different organization be put in place in which each Catalyst has a paid assistant/trainee (selected from the local area). One Catalyst has enlisted the (unpaid) help of an assistant (the teenage daughter of the farm organization leader), training her in the SCOR Approach.

Selection of Watersheds (study regions)

The selection of the two watersheds for Phase I of the SCOR Project was made by an outside agency (Land Use Division). While this selection seems to have been sound, there was no evaluation as to whether these were the best regions for study. This can be an issue when the questions of transferability of the SCOR Approach is addressed or when the sites for the next phases are selected. It is recommended that research be undertaken to determine essential differences in the characteristics of watersheds in the country and selection criteria be established: e.g., scale or size of watershed; proximity to Mahaweli; distance from major urban centers; conditions of infrastructure; cultural and historical contexts; existing planning structures, etc.

This is a critical issue for the next phase (extension) of the SCOR Project. The lessons learned from Phase I, especially with regard to the characteristics of the Upper Nilwala Watershed, should be carefully and thoughtfully deliberated. It is not an easy assignment; the full contribution of the SCOR Project rests with these selections. For example, is the SCOR Approach only applicable for dry areas where scarcity of water is the overriding problem? Likewise, is the approach only feasible in areas where farm organizations have a history (and how strong)?

Research Projects

The SCOR Project has initiated 15 research studies dealing with technical and social science aspects of the SCOR approach. These studies will contribute to the monitoring and evaluation process as well as provide important information and data to the SCOR team to use in appraising interventions in the study regions.

There are other research topics that could enhance the SCOR approach and could significantly contribute information to the aims of SCOR. These topics focus upon a better understanding of the innovative ideas adopted by SCOR. For example, one topic of research should focus upon the sociological aspect of the collaborative experience in Huruluwewa watershed. These farmer organizations have indicated their willingness to accept the plans and changes proposed SCOR. However, they also said that they cannot guarantee nor promise compliance by all the members of their organization; that this compliance depends upon many factors. What are these factors? What are their magnitudes of influence? How does the influence of these factors vary across the space of the watershed? If the critical issue for the SCOR Project and the farmer's organizations is to demonstrate collaboration and cooperation, can one predict what changes will work and where they will work? The assistance of an outside source, such as a university, could be assigned this research.

Other research studies could cover:

- a. a survey and analysis of farmers to measure the effectiveness of the Catalysts in their roles as agents of change--validating their obvious effectiveness.
- b. Catalysts must work efficiently with farmers in future projects. It is not clear how their farm families are selected, and which families receive what kind of attention and information. This process of selection is important; for one thing, because those selected are intended as adopters in a diffusion process; future programs would benefit from the most efficient adoption process. Therefore, some farmers may be better (or best) adoption agents, receiving more attention from the Catalysts.
- c. There exists a rather comprehensive literature on collaboration, describing a variety of settings and problems, results, and methodologies. It is not apparent that the SCOR team has been exposed to that literature. It would be useful to study that literature and cull the experiences relevant to SCOR practice.

Dissemination of Results

It is extremely important that the SCOR activities reach a wide audience--especially through the USAID network. Further, the SCOR Approach would benefit from translation into an academic style for presentation. The following papers have already been prepared:

1. C.M. Wijayaratna, "Shared Control of Natural Resources: An Integrated Watershed Management Approach to Optimize Production and Protection," a paper presented to the Annual General Meeting and Seminar of the Sri Lanka Agricultural Economics Association, Peradeniya, Sri Lanka, 12 June, 1993.
2. C.M. Wijayaratna, "Integrated Land and Water Resources Management in a Watershed Context," a paper submitted to the seminar on Agricultural Resource Management organized by the Alumni Association of the Faculty of Agriculture, University of Peradeniya, Sri Lanka, 25 June, 1994.
3. G. P. Bautuwitige, "Information Technology for Policy Analysis and Change for Sustainable Integrated Watershed Resources Management," a paper presented at the training course on Information Technology for Sustainable Development at Kualalampur, organized by the Asian and Pacific Development Center, August, 1994.

These should be prepared as "working papers" for dissemination along with the newsletters and brochures (after careful editing). Included in this task is the development of a dissemination network and mailing.

Miscellaneous

The equipment available to the SCOR staff is not adequate. Each field site has only two personal computers for the entire staff, and these are fully utilized for data storage for the M&E and baseline information as well as secretarial duties (an Underwood mechanical typewriter at the Upper Nilwala Watershed Office) leaving no time for field, technical, or catalysts staff. It is inappropriate for a highly sophisticated staff to be left to pencil and paper to respond to their duties. Providing a number of lap-top computers and a few printers would not only expedite their assignments but also allow the staff to interface with the data systems they contribute to and use. In addition, other equipment such as video and voice recording devices would greatly enhance the mission of SCOR.

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