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FINAL REPORT

PPC/CDIE Workshop  
"Rapid, Low-Cost Data Collection Methods"  
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EVALUATION AND DEVELOPMENT INFORMATION METHODS  
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## FORWARD

The Agency for International Development (A.I.D.), Bureau for Program and Policy Coordination/Center for Development Information and Evaluation (PPC/CDIE), together with Food for Peace and Voluntary Assistance/ Office of Private and Voluntary Cooperation (FVA/PVC), organized a conference on rapid, low-cost data collection methods. The purpose of this conference was to identify and demonstrate a spectrum of practical, rapid, and cost-effective appraisal methods that can be used to effectively monitor the progress and evaluate the impact of A.I.D. programs.

The conference, "Rapid, Low-Cost Data Collection Methods," was held on July 9-11, 1990 in Rosslyn, Virginia; and it comprised a series of plenary sessions, panel discussions, and workshops (see Appendix A: Conference Program). The approximately 120 conference participants represented a range of development-oriented entities, including A.I.D., private voluntary organizations/ nongovernmental organizations (PVOs/NGOs), and management consultant firms (see Appendix B: Conference Participants).

The conference contained five sets of plenary sessions and panel discussions/case studies devoted to the use of specific rapid appraisal techniques: 1) focus groups, 2) community/group interviews and direct observation, 3) remote sensing, 4) key informant interviewing, and 5) mini-surveys. Further, 12 workshops were given on a variety of related rapid assessment topics that ranged from particular data-gathering techniques to generic methods for monitoring, compiling, and reporting assessment information.

These Proceedings do not describe in detail all that transpired during the course of the three-day conference. Rather, they attempt to capture the conference's key elements and to synthesize them into a document that will be of practical utility to development specialists interested in the application of rapid assessment methods in the field. For more in-depth information, copies of the papers presented in the conference may be obtained from A.I.D./PPC/CDIE (see Appendix C: Conference Papers).

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- A. Conference Program
- B. Conference Participants
- C. Conference Papers

## I. INTRODUCTION

The conference opened with an introductory session which provided the orientation and framework for the three-day meeting on rapid, low-cost data collection methods.

Wendy Stickel, Acting Director of PPC/CDIE, welcomed the conference participants. She noted that although it had been initially anticipated that the meeting would have an attendance of about 30 individuals, the interest created by the conference's subject had generated such an enthusiastic response that it produced an audience of over 120. Ms. Stickel pointed out that it was very important to those in the PPC/CDIE office to have the opportunity to meet with, learn from, and share perspectives with individuals and organizations working in the field. She also invited the conference participants to visit the nearby Rosslyn-based PPC/CDIE headquarters. Ms. Stickel then introduced Reggie Brown, A.I.D. Assistant Administrator.

Mr. Brown told the audience of A.I.D. Administrator Ronald Roskens' remarks to him in which the key importance of evaluation was expressed. Mr. Brown stated that A.I.D. development programs are now undergoing more scrutiny than ever before. He noted, however, that the major changes now taking place in the world--in Eastern Europe, South Africa, and Central America, for example--could represent a great opportunity in the field of international development. Yet demonstration of program effectiveness, together with internal evaluation, will be very important. Mr. Brown concluded by stressing that rapid appraisal, including the attention given to its methods in this conference, will be central to this evaluation process.

Krishna Kumar (PPC/CDIE) provided an overview of the conference. He also pointed out that two factors must be borne in mind regarding the rapid assessment methods to be discussed in the conference: 1) needs must determine the selection of methods to be employed; and 2) to make an appropriate selection among assessment techniques, one must be aware of their relative strengths, weaknesses, and applicability to the informational needs being addressed.

Harry Wing (FVA/PVC) spoke for Sally Montgomery, Director of FVA/PVC. He stated that rapid assessment represented a key element of evaluation, and that evaluation will play a crucial role in addressing the salient issue of program sustainability.

Thomas Marchione (FVA/PPM) then spoke to the point of the conference's purpose. The purpose is not to call for more research or the development of more academic research methodology. Rather, the conference's practical purpose is to improve the evaluation capacity of PVOs/NGOs; to improve feedback

from and interchange with the field; and to improve communication among PVOs/NGOs and others working in international development.

## 2. FOCUS GROUPS

### 2.1 Plenary Session

(presented by Michael Ramah, Porter-Novelli)

Michael Ramah opened with a brief background on the use of focus groups. The focus group has grown in popularity over the past fifty years, developing most rapidly in the 1950s-1970s as a popular marketing research technique. In the 1980s, the focus group began to be used in a number of new arenas, including politics, service industries, and the social sciences. In international development, focus groups have come to be recognized as a fast, cost-effective method for gathering certain types of qualitative information. In this regard, focus groups can be particularly valuable for use with adults in developing countries where literacy rates may be low and survey research may be difficult.

Salient features of marketing focus groups include:

- o sessions should be accomplished in 1 1/2-2 hours;
- o all members of the focus group must be carefully screened and may be recruited from pre-cleared data lists, club memberships, etc.;
- o groups should be as homogeneous as possible; participants should not know each other, and they should be rewarded for their time.

Ramah noted that in developing countries, it is more common for participants to know one another, and/or to be recruited through community networks. Participants may also expect to be able to bring their children and spouses to focus group sessions.

Focus groups should rarely be run more than four times with the same homogeneous groups unless new hypotheses are being generated and tested. All focus groups should be run under the leadership of a skilled moderator who works with a carefully crafted outline. The session should move from the general to the specific, the moderator should probe deeply for greater information, and a variety of group techniques may be employed, including projective techniques. All sessions should be tape recorded, and notes should be taken. Both the moderator and the analyst (if different from the moderator) should attend the each

session, and all sessions should be conducted in a quiet, private location.

The ideal discussion outline serves as a "roadmap" based on objectives which acts as a memory aid for the moderator, not as a script. A skillful moderator will use the guide as a flexible tool, to be modified as the process continues. The moderator is key to the focus group method, and must be able to establish rapport, move the session forward, provoke discussion, respond effectively to the group, and summarize group responses. The moderator should also be able to assess and provide information about the non-verbal interactions of the group. Care should be taken in the selection and training of moderators. More important than credentials and educational background are strong interpersonal skills, a conceptual grasp of issues, and the ability to be both a good listener and a good talker.

In analyzing the results of the focus group, it is critical to treat the information as qualitative information not amenable to quantitative analysis, and to remember that the material being analyzed is complex. The use of quotations is important when reporting a focus group session. Issues to be considered include the key words used, the context, internal consistency, and specificity of response. Wherever possible, the "big" ideas (e.g., patterns, themes) culled from the group should be highlighted.

In closing, Michael Ramah pointed out that a few cautions should be kept in mind in using the focus group method:

- o every conversation is not a group discussion;
- o focus groups require a skilled moderator;
- o do not believe everything you hear: probe and challenge to get "below the surface"; and
- o do not attempt to use findings quantitatively.

## 2.2 Applying Focus Groups for Marketing Research in Nepal

(presented by Robert Haggerty, University of Idaho)

This presentation began with an overview of The Commodity Systems Assessment Methodology (CSAM). Robert Haggerty explained that CSAM is a rapid, low-cost data collection method that utilizes a form of focus group discussion. The CSAM was developed to provide scientists and decision-makers with a methodological tool for collecting field data on causes and magnitudes of postharvest losses. One premise of the CSAM is

that examination of perceived problems cannot take place without considering the commodity system in which the problems exist, including the participants in the system. A second premise, which led to the use of a focus group approach, is that the various participants in a commodity system ( e.g., farmers, merchants, financiers) are familiar with different aspects of the system and know how well it is functioning. These people have insights about what the problems are, and can generally propose solutions. Further, the CSAM supposes that a group of system participants can prioritize their problems, recognize commonalities, and propose specific solutions or improvements that will benefit the whole system.

The CSAM applies focus groups in a workshop setting in order to achieve objectives that are clear to all participants. The methodology requires focus groups to complete a set of about 30 questionnaires representing functional components of the commodity system. Depending on the situation, there may be more than one focus group operating simultaneously in the same room; and unlike the more standard focus group approach, each discussion group includes people playing different roles in the commodity system and is therefore heterogeneous in composition. CSAM further differs from the traditional focus group method in that the discussions are not completely open-ended. Instead, CSAM focus group discussions are directed toward objectives, and each focus group answers the same series of questions from a structured questionnaire. Answering the questions, however, does require discussion and sometimes requires consensus within the group.

Each focus group requires a moderator to guide the discussion and to ensure that the questionnaires are answered. At least one observer should be present to assess the non-verbal reactions of the group(s) and to note observations of group dynamics for postgroup discussions with the moderator(s). A report is written by the moderator at the conclusion of a series of focus group sessions. The report summarizes the results, incorporates the moderator's interpretation of group findings, and serves as a document to help stimulate the recommended next action by the appropriate organization. In contrast to the traditional focus group method, CSAM uses a group of host country specialist moderators called the "coordinating committee" to develop the workshop, moderate discussions, conduct postgroup discussions with an observer, and prepare the final report. The coordinating committee usually includes a U.S. consultant whose role doubles as overall CSAM moderator and trainer in focus group research.

Haggerty described how a CSAM focus group workshop was held using the above methods to develop a larger information base on ginger production and marketing in the Rapti region of Nepal.

The 40 participants used the information to identify salient problems and to devise ways to effectively address them. Moreover, the workshop was highly useful in promoting dialogue among farmers, merchants, and facilitating services personnel.

In response to the audience's questions about the limitations of the CSAM approach, Haggerty made the following observations:

- o CSAM is appropriately used to assess a specific commodity in a limited geographical area. Covering a very large geographical area makes it more difficult to accurately describe a commodity system, for with increasing size of area, the process becomes more cumbersome and the information less reliable.
- o CSAM is better suited for identification of problems internal to the functioning of a commodity system than it is for identification of problems in government policy and institutional inputs. Farmers are not likely to be well informed about detailed aspects of national policy and institutional inputs. It is also likely that the dynamics of focus group discussions would be impaired if high-ranking government officials joined focus groups with local farmers and merchants, in that persons of lower social status would probably experience inhibition and not contribute openly to the group discussion. In fact, the heterogeneity of participants called for in the CSAM focus group approach in itself requires that moderators give very close attention to ensuring the balance of group discussions and hence the reliability of information.
- o It is critical that questionnaires be tailored for each application of the CSAM. Appropriately refined questionnaires are essential to the use of CSAM.

### 2.3 Focus Groups for Health Communication: A Case Study in Nigeria

(presented by Cecelia Cabanero-Verzosa, Academy for Educational Development)

In Nigeria, as in other developing countries, young children are very susceptible to diarrhea and other childhood illnesses. Not surprisingly, poor nutrition often predisposes these children to disease. Often a pattern of feeding is followed during the weaning period that seems to exacerbate infant susceptibility to diseases, including diarrhea.

Cecelia Cabanero-Versoza described how the Dietary Management of Diarrhea (DMD) Project was implemented in Nigeria to address this problem. Traditionally, children begin the weaning process at four to six months. Their first weaning food, called eko, is a very watery concoction made from a maize pap. Children are given eko daily and are introduced to more nutritious solid foods only at a much later date.

The DMD Project created a formula of eko fortified with locally available ingredients that would provide the required ingredients for weaning age children. The new product came to be known as eko ilera, or "eko for health." Eko ilera was then introduced in the Kwara State of Nigeria, composed of the Yoruba ethnic group, which offered a good mix of urban and rural communities and provided a homogeneous audience for the communication and research effort.

Focus groups were held at various stages of the intervention project to aid decision making. There were basically two types of decisions: the first dealt with the composition and mixing of eko ilera; the second with the nature of communication support needed to effectively encourage the acceptance of eko ilera among mothers. A number of product-related and communications questions were developed, and focus groups were conducted to answer them.

The qualitative, exploratory nature of focus groups proved ideal for examining reactions to this new product. Because group discussions lend themselves to probing and discovering perceptions, attitudes, and feelings, the focus group approach was useful for gauging mothers' impressions about a new food. Moreover, Cabanero-Versoza stressed that because eko ilera deviated from traditional practices, focus groups provided a viable format for informally exploring possible resistance and for learning what appeals might prove persuasive to the Nigerian mothers.

Cecelia Cabanero-Versoza summed up by noting that Focus groups represented one element of an overall research program that included in-depth interviews, ethnographic assessments, observational studies, cost monitoring, clinical studies, and surveys. The major contribution of focus groups, she emphasized, consisted in the opportunities for group dynamics and consensus building that they provided to effectively complement the other methods of research.

## 2.4 Open Discussion on Focus Groups

(presented by Michael Ramah, Porter-Novelli)

Michael Ramah advised this session's participants that a focus group moderator may not necessarily be a skilled analyst, but must be oriented to understand the study objectives; and he stressed the point that a moderator's interpersonal skills are more important than his or her level of formal education. Information gathered by moderators should be debriefed immediately after each session. The project investigator/analyst must participate as an observer in the session in order to supplement the moderator's information because the latter is often busy conducting the discussion. In case the investigator/analyst cannot be present at the session, some delegate must be designated.

In determining a focus group budget, it is advisable to start with the local private sector norm and then to work the budget down from there. In Mexico, for example, it ranges from U.S. \$1200 to \$2500 per session. This would include all phases, including initial briefing, guide development, pretest, discussion session, transcript, and analysis. If analysis is separately done by the investigator, 10 percent may be discounted from the budget. Most often an NGO can offer trained moderators who need only be oriented to the substantive matter of a project. Unless repeated use is anticipated in a long-term project, it is advantageous to farm out the training of moderators, as against training the in-house staff. Health workers and educators, when available, can be oriented and trained to play the role of listeners and serve as moderators. The use of a focus group is to open up a new source of information to policy-makers.

Selecting participants for a focus group is a process of screening for the desired characteristics according to study objectives. The focus group should be recruited within the community and as part of the community. In case it is difficult to get participants, the focus group discussion session and facilities may have to be moved to the field. If an initial meeting proves to be unfruitful, it is better to break it up and reconvene. Focus groups are easier to moderate if the composition is homogeneous. Ramah cautioned that a focus group consisting of representatives of different social statuses can be volatile and should in the main be avoided unless, for example, one is interested in the dynamics of interaction between statuses in an organization. Likewise, for some study objectives, a mixed gender group may prove be useful as well.

In reply to questions raised about the possible skepticism of host country governments about the viability of this research

method, Michael Ramah stated that one major use of a focus group is to suggest to ministry officials and professionals that they change their ways of seeing things. It involves efforts to overcome status differences, perceived threats, etc., and to demonstrate the usefulness of the results of a focus group study. One often made mistake is to take the study results out of the country without feeding back to the host government. The decision-makers and managers should be educated to be good clients: they should be involved in the dynamics of the study process and convinced of the usefulness of the study results. In closing, Ramah underscored the point that, to be effective, the project team must understand the dynamics of the host country hierarchy and build this working knowledge into the project management system.

### 3. COMMUNITY/GROUP INTERVIEWS AND DIRECT OBSERVATION

#### 3.1 Plenary Session

(presented by Krishna Kumar and John Mason, PPC/CDIE)

In noting that experience has shown that community/group interviews can be a valuable source of information and ideas for development projects and programs, Krishna Kumar provided an overview of their general features. He observed that whereas in focus group the participants discuss a subject among themselves, in community interviews the investigators ask questions, raise issues, and seek responses from participants. The main interactions are between the interviewers and participants rather than among participants.

Community interviews take the form of public meetings open to all of the members of a community or village. The dates and locations of meetings are announced in advance. The groups are usually large (more than 15 persons), but certain groups, especially women and members of lower socioeconomic strata, are often underrepresented because of sociocultural constraints.

Community interviews are ideally conducted on the basis of a carefully prepared interview guide that lists all important questions to be asked in a meeting. Although community interviews can be conducted by one investigator, a team of two or more is preferable because it is difficult for one interviewer to preside over the meeting, ask relevant questions, and record the answers. Moreover, moderators representing different disciplines can complement each other in asking probing questions.

Kumar cautioned that to avoid bias, it is important that the communities/groups selected for interviewing be representative of

the total population. The techniques of quota sampling or expert sampling can be used to help maximize representativeness in the selection of communities.

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John Mason pointed out that direct observation represents a very rapid, low-cost method for data collection. It is most effectively used in conjunction with other rapid assessment techniques.

Useful, timely information can often be obtained by systematically observing a phenomenon, process, or physical objects. Data gathering through direct observation is systematic, not casual or informal: it involves careful collection of data on the basis of well-designed instruments, including observation record forms and questionnaires. In most instances, direct observation also entails individual and/or group interviews.

Direct observation, Mason emphasized, is better conducted by a team of experts than by a single individual. A team approach provides a more comprehensive picture and helps to prevent individual biases.

### 3.2 Systematic Observation as a Component of an Analysis of Primary Health Care Services in the Philippines

(presented by James Heiby, S&T/H/AR)

James Heiby opened his presentation by explaining that a lack of efficacious technologies is no longer a major reason for the continued high mortality among children in developing countries. Effective vaccines are available to prevent common infectious diseases; oral rehydration solutions can prevent the dangerous dehydration that can result from severe diarrhea; appropriate measures are available to prevent malaria; and children's growth can be monitored to catch malnutrition in its early stages. In many cases, however, these potentially effective technologies are not implemented effectively by primary health care workers.

In many health care delivery systems, managers routinely obtain service and epidemiological data, and from this information they can recognize that the system is failing to meet its target objectives. As a rule, however, these data cannot explain why this is so, and thus provide managers with little hard information upon which to take corrective action. In order

to address this problem, PRICOR and its associates in a number of developing countries have developed a systems analysis method that identifies deficiencies in primary health care service system inputs and process activities. This method is firmly based on structured direct observation of health workers as they perform the multiple tasks required to provide high quality primary health care.

Heiby then described how this systems analysis was applied in one representative province of the Philippines to a number of components of the primary health care system directly related to the survival of young children. The systems analysis focused on 54 primary care facilities and their staffs, and took about four months for data collection in the field, plus about one month to analyze the data.

Many operational problems were identified. For example, health workers were not obtaining all the information they needed to make correct diagnoses for such problems as acute respiratory infections. Some workers were producing misinformation about children's nutritional statuses. A widespread problem, one that undercuts the basic primary health care strategy of the Philippines, was a failure to communicate adequately with mothers to enable the latter to follow through with requisite treatments at home. Supervision was revealed to be weak, with supervisors greatly overestimating how well their supervisees were performing their manifold tasks. As a result, a number of short, sharply-focused operations research studies to correct some of these problems are being carried out directly by Department of Health staff or have been commissioned by the Department of Health for implementation by research groups of its choice.

James Heiby underscored the important lessons that were learned from this experience in using direct observation. First, the level of detail obtained through direct observation cannot be produced in any other way. Second, with appropriate training, a team can effectively observe health workers on the job without seriously disturbing normal performance. And finally, to promote reliability and consistency, he recommended that observational data collection instruments be made as structured and objective as possible.

### 3.3 The Use of Group Interviews in the Mid-Term Evaluation of an Area Development Project in a Southern African Country

(presented by Krishna Kumar, PPC/CDIE)

Krishna Kumar described how, in performing a mid-term evaluation of a rural area development project in southern Africa, the project evaluation team decided to expand the boundaries of the usual record and official evaluation review, and to move out to interview those most directly affected by the project: members of farmer clubs that were supported with A.I.D. monies. In addition to other services, the clubs provided low-cost loans to farmers to assist the acquisition of inputs for farming, such as seed and fertilizer. The clubs had an astonishing rate of return on loans made to members, approaching 100 percent--a figure rarely seen in loan programs.

The evaluation team created an interview guide, and targeted twelve farmer clubs in the program. Each club was informed that the team would be visiting. After making the initial visits to each club, the team's association with the donor organization was downplayed in order to obtain responses that would be more informative and less predictable than those typically offered by beneficiaries to donor program evaluators. Instead, team members emphasized their personal backgrounds and provided information on their countries of origin.

Kumar then revealed how unexpected elements entered into the conduct of the evaluation. For example, it was anticipated that only a percentage of the farmers within each club would attend each meeting. Yet due to the strong intervention of the government, virtually all farmers in each club attended meetings in numbers that had not been anticipated in designing the interview format. Also, an official government translator was provided to the team, which raised some concerns during the early meetings that people might be intimidated, or that information might be adjusted to suit a more governmental view of the program. After the first few meetings, therefore, the team employed another translator to work in tandem, thus effecting a balance for the remaining meetings. Further, although women attended the early sessions, they were usually very reluctant to participate in discussions. Thereafter, the team used humor to alleviate the women's reticence and to encourage them to take active part, and these efforts proved somewhat successful.

Kumar delineated the lessons learned from this assessment experience:

- o It is useful to employ a semi-structured interview guide which allows for flexibility in pursuing information.

- o Preliminary cultural information is required to avoid such unanticipated phenomena as the arrival of awkwardly large numbers of farmers to take part in group discussions.
- o The ideal evaluation team should include both country experts and non-experts: the former provide knowledge essential to the conduct of the evaluation, and the latter lend a fresh and often valuable perspective.
- o Gender balance on the evaluation team would improve overall team effectiveness, and holding separate meetings with local women might enhance their participation and candor.
- o Very often the initial responses to questions tend to be predictable, and it is therefore necessary to probe and ask oblique questions in order to evoke the more interesting and revealing responses.
- o Post-meeting discussions are often very useful and informative, providing a format that can generate unexpectedly valuable data and insights.
- o Preparation of reports should be collaborative and should be accomplished as soon after a session as possible in order to capture all of its essential elements.

#### 3.4 Open Discussion on Community/Group Interviews and Direct Observation

(presented by Krishna Kumar and John Mason, PPC/CDIE; and Robert Rhoades, International Potato Center)

In response to various inquiries arising out of the earlier plenary session on community/group interviews, Krishna Kumar offered guidance on the use of this rapid research method. He noted that community/group interviews are most appropriate when:

- o village/community level data are required. Participants are frequently able to supply accurate information and to correct any incorrect responses.
- o the extent of potential grass-roots support for a specific initiative needs to be assessed.

- o assessment of the needs of communities is to be made in order to develop suitable programs. Participants are usually candid in such matters and eager to articulate their views.
- o an evaluation is to be conducted of the development initiative affecting a majority of the community members. One caveat to keep in mind, however, is that in many parts of the developing world, villagers and other deprived groups are reluctant to criticize public officials and outsiders, and therefore may be guarded in their comments on a development project.

Kumar listed the advantages of community/group interviews as follows:

- o They permit direct interactions between investigators and a large number of people in the project population. The interviewer is able to record not only their verbal responses, but also their nonverbal behaviors, thus gaining better insight into their views, concerns, aspirations, reservations, and reactions.
- o Community interviews can also generate some quantitative data that are usually of one or two types: 1) community-level statistics, best gathered by using a predesigned form to enter information provided by various participants in a meeting, or 2) quantifiable data about behavior, attitudes, or opinions of the participants, which are gathered by tallying the "yes" and "no" responses to answers on specific topics. This type of data will be biased if the participants in the community group meeting are not representative of the wider populations about which generalizations are to be made.
- o Another merit of community/group interviews is their built-in mechanism for correcting inaccurate information. Participants tend to correct each other, thereby improving the validity of the data. A participant cannot easily lie in the presence of others. Other participants will generally signal an inaccurate response, either verbally or through their facial expressions.

However, Kumar cautioned that this method entails certain limitations:

- o Community interviews can be easily manipulated. Often elites try to use them as a forum for articulating their own perspectives. For example, interested village leaders can control the direction of a meeting by inviting people selectively, holding meetings at times

when individuals with different points of view are unable to attend, or by simply asking them to keep quiet. Thus, the views expressed at a meeting might support the objectives of large land owners rather than those of the smallholders for whom the project is designed.

- o A few articulate people can monopolize the discussion at a community meeting. Whether their intent is to speak for the majority or to protect their own interests, the result is that the very purpose of the community interview is defeated. Well-trained investigators can deal with this problem by adopting various techniques to ensure balanced participation.
- o Many issues that can be discussed in individual encounters cannot be examined in community interviews. Most people are hesitant to make critical remarks that could be construed as a reflection on the capabilities or character of concerned individuals. Moreover, each society has its own cultural taboos, norms, and codes that prohibit public discussion of certain subjects.

In reply to questions on the practicalities of using this method, Krishna Kumar stated that five to six weeks are usually needed for conducting a reasonable study based on community interviews. It takes time to organize community meetings in remote areas of developing countries because many logistical problems can arise. An investigator or team of investigators can usually conduct only three or four community interviews per week. Thus, if ten community interviews are proposed, it will take three weeks to conduct them. In addition, a week is required for literature review and preparation for the interview. Finally, the investigator needs time to complete the report.

\* \* \*

Direct observation is a mid-range method between the in-depth case study and a large-scale survey. John Mason explained that generally this intermediate method is most appropriate when:

- o statistical representativeness is unnecessary;
- o comparisons of community, institutional, or physical settings and socioeconomic conditions are sufficient to meet informational needs;
- o constraints limit budgets or time frames; and

- o host country capacity or local conditions make this mid-range method more practical, even though quantitative data may be demanded by donor countries.

On the other hand, the direct observation method is inappropriate if:

- o control is needed over extraneous variable, as in a crisis;
- o the human error resulting from observation cannot be adequately controlled, as in using untrained observers;
- o the personal or cultural values of a proposed observer may intrude on a group or community;
- o substantial amounts of quantitative data are required;
- o information on opinions and attitudes is needed.

Mason indicated that effective utilization of the direct observation method requires clearly delineated project objectives, explicated values, an observation framework, and a prepared observation record form. A minimal checklist for observations includes the significant elements of the social and material setting or environment, especially those elements which are suggestive of directions of observation that may otherwise be overlooked. The observation form should contain the following elements:

- o the participants: who they are, how they are related to one another, and how many of them there are.
- o the setting: general appearance, physical description, and what kinds of behavior it encourages, permits, discourages, or prevents.
- o the purpose: official purposes.
- o frequency and duration: when a given situation occurs, how long it lasts, is it typical or unique.
- o observer's frame of reference: the point of view should be explicitly stated in defining the questions to be answered.

When queried about how to gain access and establish rapport, John Mason commented that the prior experience of the researcher/observer in the community setting is often helpful. Further, he noted, in many cases intermediaries are useful in facilitating entry into a community.

Robert Rhoades stressed that the direct observation method should always be complementary to other techniques of data collection. It is particularly useful in application to agricultural programs because it provides a bird's-eye view of the setting/environment. However, there are differences in observers' cognitive mappings, and it is possible to look at something but fail to observe it. This is all the more reason why observation should be used in combination with other methods.

Rhoades then addressed the question of how to structure data that is to be passed on to other observers. He concurred that it is often difficult to maintain consistency from one research setting to another. Therefore, observation data need to be structured, and it is important to so design the observation form as to make it transferable. Data need to be systematized, and qualitative data must be displayed in some structured form.

A major strength of the direct observation method is its usefulness in checking consistency between verbal behavior and non-verbal behavior. To make this distinction, one needs to be explicit about how observation has been conducted. It is suggested that the observer keep two sets of field notes, one according to the observation guide, and the other recording one's own reactions to what has been observed. At times, the observer may become too familiar and involved with the community concerned and lose sensitivity of observation. A corrective procedure is to feed back the results of observation to the community to find out what may have been missed.

Another strength of using observation in evaluation research is to assess the quality as against the quantity of development services rendered. In this regard, Robert Rhoades agreed with comments from the audience to the effect that it may be useful for A.I.D. mission officers to spend more time in the field conducting direct observation which can contribute to a more comprehensive analysis of development program impact.

#### 4. REMOTE SENSING

##### 4.1 Plenary Session

(presented by Allen Falconer, U.S. Geographical Survey)

Allen Falconer opened this presentation by pointing out that remote sensing through "satellite imagery" represents a readily available resource that can complement the utilization of other data collection methods. Remote sensing is effective for depicting such features as forest cover and bodies of water, and it can be used in conjunction with other sources of information

on weather, soil, and agricultural productivity for a variety of purposes.

Remote sensing is usually employed to produce pictures on very large geographical zones, although it can also be calibrated for more complexity and detail to examine smaller areas and pick up such man-made features as villages and roads. It should be borne in mind, however, that higher degrees of resolution entail higher costs.

In response to inquiries about how to secure remote sensing data, Falconer explained that such information can be obtained through a variety of sources, including the U.S. Geographical Survey, the U.N. Food and Agriculture Organization, and the Famine Early Warning System. Remote sensing stations are located in various parts of the globe, and virtually all governments have access to them and maintain their own remote sensing data archives. Moreover, he added, new remote sensing information systems are coming on line and are becoming available at relatively low cost.

#### 4.2 The Use of Remote Sensing for Monitoring Flood Damage to Crops in Bangladesh

(presented by Thomas Wagner, Environmental Research Institute of Michigan)

Thomas Wagner provided an overview on conditions in Bangladesh as a prelude to his presentation on remote sensing and agriculture in that country.

Bangladesh contains a population of 110 million people living in 55,134 square miles, approximately the size of the state of Wisconsin. Bangladesh is one of the five poorest countries in the world, with a 27 percent infant mortality rate. Eighty-five percent of the country's precipitation occurs during the monsoon season.

Rice represents a major source of food in Bangladesh. There are three major rice crops, with the Aman crop representing 50 percent of the entire rice crop. Planted in July and August, and harvested in November, Aman is grown on 70 percent of all the cultivatable land in the country.

In 1987 and 1988, Bangladesh suffered from catastrophic flooding, and the 1988 floods were the most devastating in the country's history. Flooding affected 50 percent of the land, and over 2,000 lives were lost.

Wagner then described how the Environmental Research Institute of Michigan (ERIM) utilized weather satellite information for several years to form a baseline of images of Bangladesh both during flooding and in non-flood years. District maps were overlaid on the satellite images. The number of pixels (visual/graphic point depictions) for each area of the map were computed and the normalized vegetation (greenness measure) for each pixel was analyzed. Given that the locations of forest and homestead areas were known, these areas were subtracted from the map to leave crop areas highlighted. ERIM also attempted to estimate the crop yield from the pixel analysis. The objective was to look at individual districts to set a baseline and then to see which were most damaged by floods and which might have surplus crops.

Using this method of analysis, ERIM provided pre-production estimates for the year 1988 of 7.06 metric tons. The post-production government estimate was 6.84 metric tons, representing a difference of approximately three percent. Further, an A.I.D. ground estimate was approximately 1 percent higher than the ERIM estimate. A possible explanation for the discrepancy between the ERIM and the government figures may be that it is to the advantage of the government to have a lower figure, especially in times of crisis, in order to leverage greater aid for the area.

Thomas Wagner concluded by making a number of general observations on the use of remote sensing. The procedure for doing crop assessments through the use of remote sensing is straightforward and objective, and results can be enhanced further with a better database and revised procedures. To strengthen procedures, more accurate satellite baseline photos for estimating normal conditions should be obtained to yield a baseline which could be used from year to year to monitor crop production.

One of the outcomes of utilizing this technology is that the country can project import needs of basic foods, and keep imports low in order to protect home markets. All such estimates need to be made prior to production, and can be additionally utilized to help estimate the need for aid by donor agencies. This information can assist the government in seeing where crops are failing and where they are thriving in order to predict needed distribution patterns and to avoid the unnecessary importation of foods.

The use of remote sensing provides a useful research tool to complement other assessment methods, and the data it produces are readily available. Moreover, in times of disaster such as the 1988 flooding in Bangladesh, the satellite may come to represent the only accurate source of information on crop availability.

#### 4.3 The Reference File Method: A Low-Cost Alternative for Improving Agroecological and Crop Data of Developing Countries

(presented by Robert Rhoades, International Potato Center)

Robert Rhoades explained how the International Potato Center (CIP) has developed a low-cost method of systematically gathering agroecological data and crop information. Through analysis of the "gray literature," focused key informant interviews, and a systematic procedure of data storage and retrieval, CIP has built one of the most extensive data bases available on any mandated food crop. The information has been used to generate agroecological maps and a relational data base that is easily accessible to national and international development organizations.

Information has been entered into a computer and now forms part of a computerized GIS (Graphic Information System). The GIS is used to do graphic analysis of potato production with such independent variables as climate, diseases, and soil temperature. The joining of the potato information with GIS techniques made for a powerful analytical device that can be applied to similar agroecological situations.

Rhoades added that this research method is low-cost and effective--if not rapid. Further, it is complementary to and uses elements of other assessment approaches. Moreover, this reference file system is compatible with others, such as the satellite data on crop production, and through refinement it is becoming increasingly compatible with more systems.

#### 4.4 Open Discussion on Remote Sensing

(presented by Allen Falconer, U.S. Geographical Survey)

When asked about the use and cost of remote sensing technology for development program research, Allen Falconer replied that satellite image information is useful primarily for a large area of coverage at a relatively low cost. For small area studies requiring data of great detail, areal photos taken from an aircraft may be more suitable. In terms of detail, the capacity of 10-meter resolution of satellite remote sensing can very well identify many features at the local area level, but not all. That is, it can reliably delineate village boundaries, most roads, and natural environmental areas, but not house clusters or individual dwelling.

Audience questions about remote sensing's applicability to non-agricultural development sectors prompted Falconer to point out that although its utility for agricultural programs may be more obvious, remote sensing can also be used indirectly for non-agricultural development efforts. For example, where problems in health and nutrition are environmentally linked, remote sensing can provide relevant data relating to such phenomena as parasite infestations. The interphasing boundaries can be identified by remote sensing data. Likewise, in terms of human environment, satellite information may be used, for example, to trace the growth of a slum area. Moreover, in some cases the remote sensing data on agricultural conditions can be used to help interpret primary data otherwise collected.

Allen Falconer closed by reiterating that in the conduct of international development research, remote sensing should be utilized where appropriate as an adjunct or complement to other data collection methods.

## 5. KEY INFORMANT INTERVIEWING

### 5.1 Plenary Session

(presented by Krishna Kumar, PPC/CDIE; William Millsap, Consultant; and Michael Hendricks, Consultant)

Krishna Kumar initiated this session on key informant interviews by noting this method's attributes:

- o Because information comes directly from knowledgeable people, key informant interviews often provide data and insight that cannot be obtained with other methods.
- o Key informant interviews can be based on semi-structured interview guides that specify only the study issues and topics. This allows for flexibility to explore new ideas and issues not anticipated in planning the study.
- o Conscious effort should be made to recruit key interviewees from a wide pool of knowledgeable informants so that different perspectives may be represented.
- o The interviewer should take extensive notes, including information on who is interviewed and how issues are discussed. When notes are taken selectively, interviews can become biased. On the other hand, what sometimes may appear at first to be trivial and insignificant may

later prove to be relevant and important.

- o Finally, interviewers should carefully record their own impressions, feelings, and insights; and at the end of interviews, they should check their notes for signs of bias.

In the same theme, William Millsap and Michael Hendricks illustrated through a mock interchange how--and how not--to conduct interviews with key informants. The essential elements for interviewers were then delineated:

- o be prepared;
- o establish rapport;
- o convey the study objectives;
- o make no reference to secondary documentation;
- o conduct the interview in a setting that is private and in which the informant feels comfortable;
- o ensure that the informant is not treated in a humiliating or patronizing manner in the interview process;
- o ensure that questions are not limited to an original hypothesis or perspective, but instead follow through on potentially fruitful avenues of inquiry that may develop in the course of the interview;
- o ensure that the questioning process is neither too rigid nor too random;
- o ensure that listening is not selective or biased;
- o ensure that answers are not left incomplete;
- o probe;
- o ensure that interviews do not extend for too long;
- o ensure confidentiality according to the informant's wishes.

## 5.2 Rapid Reconnaissance Methods for Agricultural Marketing and Food Systems Research in Developing Countries

(presented by John Holtzman, Abt Associates)

At the outset, John Holtzman stressed that rapid reconnaissance methods, including key informant interviews, are extremely useful for agricultural and food systems research in developing countries. He noted that it is helpful to have a formal paradigm and a very structured study guide as the basis for a rapid assessment study using such methods as key informant interviews, although one must be flexible and probing in the field. Commodity traders and farmers may have their own parochial perspectives, but a researcher should soon discover how to distinguish among them. The composite reality may well differ from what the various parties perceive and say.

In conducting food systems research key informant interviews, Holtzman indicated that the following points should be kept in mind:

- o Learn as thoroughly as possible beforehand the commodity system being studied, and particularly about specific crops in the commodity subsystem. A lack of substantive knowledge on the researcher's part can be detected easily by informants, who then tend to respond with little respect.
- o Commodity-oriented interviews should be conducted away from the marketplace as much as possible.
- o Comportment is important. Interviewers should be attentive, not wear (eye-avoiding) dark glasses or wear locally inappropriate dress, cross their knees, or yawn during the course of interviews.
- o A team of two to three persons of different disciplines with varied expertise, with a mix of senior and junior level personnel, is effective. The inclusion of a junior to mid-level government official in the field can be facilitative.
- o An interview should be conducted in a private setting with a structured protocol but informal style.
- o Interviews should not be conducted at the height of market business, but instead at the beginning or the later part of the day.
- o Note-taking during interviews may distract the informant or generate suspicion. Memorization and post-session

writing of notes are required. A team of two to three persons is helpful in reconstructing what has taken place.

- o To interview women traders, it is necessary to have women interviewers in the team.
- o Never open interviews with sensitive topics like taxes, profits, and smuggling.
- o A large number of interviews may not be always be required or feasible. Information on development program problems and constraints usually emerge before many interviews have been held.

Holtzman then provided his audience with practical rules of thumb that govern rapid reconnaissance techniques in general and key informant interviews in particular:

- o What people say may not be the same as what they do; therefore, informant interviews need to be supplemented by observations and other methods.
- o A variety of informants, not only the elite but also people on the street, should be included.
- o Conditional questions get only conditional answers.
- o Rapid appraisal represents only a snapshot which cannot replace a continuous long-term study for evaluating change.
- o Data on only the most recent transactions can be retrieved; recall responses are difficult to verify.
- o Economic anthropologists may be better interviewers than agricultural economists because the former spend more time in the field and the later rely more on secondary data.

In conclusion, John Holtzman observed that rapid reconnaissance in general, and the key informant interview in particular, provides a viable method for conducting feasibility studies and for identifying and appraising the status of development projects. Key informant interviews can also be used to monitor and evaluate the impacts of policy change. The key informant data collection method can be useful for cross-checking the results of formal surveys and for updating changing conditions. Moreover, periodic key informant interview data help shape the design and guide the progress of long-term development programs.

### 5.3 Participatory Rural Appraisal for Resource Management: A Kenyan Case Study

(presented by Richard Ford, Clark University)

Richard Ford's presentation demonstrated how Participatory Rural Appraisal (PRA) functions as a variant of rapid rural appraisal. The illustrative case example concerned the manner in which the PRA complemented Kenya's District Focus for Rural Development, a strategy to encourage rural institutions to initiate their own development.

PRA is rooted in the conviction that participation works. In the past, lack of a structured methodology made participation costly and inefficient for development agencies. PRA provides a structure which brings together residents and leaders from the community, technical officers assigned to the area, and NGOs. Bridging the gap between intended beneficiaries and those who manage resources introduces practices that village institutions can maintain.

Holtzman emphasized that PRA maximizes participation by gathering data in group discussions, using mostly visual instruments. It holds community meetings jointly with technical extension officers to rank options according to village priorities and to draw up a Village Resource Management Plan. The plan indicates what is to be done, who will do it, how materials will be organized, and who will manage the implementation.

PRA comprises eight basic steps:

#### 1. Site Selection

Sites for PRA analysis are picked either through requests from the community or upon the recommendation of an extension officer or government official. Locations tend to be places where there have been prolonged ecological difficulties or downturns in productivity. Administrative units in Kenya where PRA has worked effectively tend to contain less than 10,000 people and to be smaller than 15 square kilometers.

#### 2. Preliminary Visits

A PRA Team generally consists of four to six specialists of whom at least half are technical officers assigned to the area. Specializations include water, soil, forestry, livestock, community development, and other skills related to natural resources management. The Team meets with village leaders before starting a PRA to clarify what PRA will do as well as what it will not do.

### 3. Data Collection

There are four basic data sets to be gathered. All four are in addition to secondary information and data on existing projects, institutions, and government services.

#### 3.1 Spatial Data

A village SKETCH MAP is compiled in cooperation with village leaders to identify physical and economic details and to locate the community's infrastructure. FARM SKETCHES are organized for a representative sample of households in the community.

#### 3.2 Time-related Data

The PRA Team meets with residents to discuss what they consider to be the most important events in the community's past and to prepare a TIME LINE. Data are gathered in group meetings which include community residents from different backgrounds and perspectives, including the young and old, and men and women. Problems and opportunities are discussed. TREND LINES are developed, based on village perspectives, of a thirty or forty year pattern of changes in resource issues such as rainfall, crop production, soil loss, deforestation, health, population, and other topics of concern to the community. The PRA Team organizes groups of residents and leaders for this exercise. The PRA Team develops a SEASONAL CALENDAR, using group meetings similar to those for the time line and trend analysis. Data on such topics as land use, hunger, disease, food surplus, and cash availability are organized and entered into a time scale of 12 to 18 months.

#### 3.3 Social Data

Individual FARM INTERVIEWS are carried out at those households where sketches are compiled. These interviews provide a check on the information gathered in group meetings. The PRA Team also gathers data about village institutions. Groups of residents are asked to rank community institutions in order of importance and to construct diagrams that indicate the relationships between and among village units.

#### 3.4 Technical Data

The technical officers on the PRA Team assemble information on ECONOMIC AND TECHNICAL FEASIBILITY (e.g., water, soils) needed to help villagers in ranking project activities.

### 4. Data Synthesis and Analysis

The PRA Team, sometimes with one or two village leaders, organizes the collected data and compiles a list of problems and

opportunities, which can be organized by sectors or simply set out as a long list of topics.

#### 5. Ranking Problems

Villagers come together to rank the listed problems. The discussion may be lead by either a PRA Team member or a village leader. The outcome is a set of problems that village groups agree are ranked from most to least severe.

#### 6. Ranking Opportunities

Village groups then rank opportunities that address the highest priority problems. Criteria for ranking include stability, equity, productivity, sustainability, and feasibility. Technical officers play an important role in the discussion in order that potential solutions will be feasible in technical, economic, ecological, and social terms.

#### 7. Adopting a Village Resource Management Plan (VRMP)

The highest priority solutions are organized into a VRMP which takes the form of a contract between village groups, technical officers, NGOs (if any are involved), and external groups (such as a donor or international development agency). In the five Kenyan villages where VRMPs have been used, the VRMPs have become basic work plans for all elements in the community, including leaders, women's groups, church associations, credit cooperatives, farmer groups, and political organizations.

#### 8. Implementation

Once the VRMP is completed, it is time to commence the work. The best results in follow-up have been achieved when a village leader has taken the lead. In every case, the work has been performed primarily by the community's self-help groups.

The single greatest advantage of PRA is its capacity to mobilize community institutions around issues of sustainable development. Use of participation and visual materials enables the PRA Team to maintain interaction with knowledgeable members of the community, and preparation of the VRMP enables villagers to rank solutions based on local priority, technical feasibility, ecological sustainability, and cost effectiveness.

In reaction to queries about the essential thrust of PRA, Richard Ford acknowledged that PRA is more oriented toward community action than evaluation per se, but has strong data

collection features. Further, PRA may be carried out rapidly, requiring only three days of fieldwork and three days of organizing; and costs can be minimized by using technical officers who are already assigned to the field site.

#### 5.4 Open Discussion on Key Informant Interviewing

(presented by William Millsap, Consultant; Michael Hendricks, Consultant; and Krishna Kumar, PPC/CDIE)

William Millsap opened this session with the caveat that, in using the key informant interview rapid assessment method, the selection of informants is of crucial importance. Every effort should be made to choose informants that are broadly representative of their social groups. No community is entirely homogeneous (e.g., differences in gender, age, socioeconomic status), and therefore the sample of informants should include a representative cross-section of the local society in order to attain a composite picture. In this regard, the interviewing team should be balanced in terms of gender. Representativeness in informant selection is especially pertinent to the conduct of rapid appraisals, for unlike extended ethnographic fieldwork, this method does not permit the time or opportunity to broaden the informant sample at a later point. Further, Millsap indicated that caution should be exercised regarding those who may first volunteer to serve as informants, in that sometimes individuals who are considered deviant and have been marginalized by their communities may be those who are most eager to interact with outsiders but may not be very representative of their societies.

Michael Hendricks pointed out that care should be taken in setting the right attitudinal tone for informant interviewing. The interviewer's ability to project sincere interest, establish interpersonal rapport, and make the informant feel comfortable are extremely important. The interviewer should be consciously on guard to ensure that his or her culturally-based conversational styles and assumptions do not interfere with the either the flow or the interpretation of verbal information.

Krishna Kumar emphasized that, in conducting an interview, one should avoid asking questions that can be answered with a simple affirmative or negative, but instead try to have the informant phrase and think out his or her responses, which should be followed up in the course of inquiry--in terms both of the interview in progress and of others to follow. Too much attention to note-taking during the course of the interview can distract and cause uneasiness on the part of the informant, and

therefore this activity should be confined to recording key points while the interviewer's attention remains focused on the informant.

In response to questions about the technical aspects of data gathering, Kumar noted that sometimes the use of tape recorders is neither advisable nor useful: the recording of their words may make informants uncomfortable and constrain their statements; and tape-recorded data requires subsequent extensive analysis and winnowing which are not appropriate for rapid assessment work. Interview notes should be worked up and fleshed out as soon as possible after the end of each interview to enhance accuracy and to avoid selectivity in short-term recall and interference from data received through subsequent interviews.

## 6. MINI SURVEYS

### 6.1 Plenary Session

(presented by Krishna Kumar, PPC/CDIE; Kurt Finsterbusch, University of Maryland; William Millsap, Consultant; and Robert Rhoades, International Potato Center)

Krishna Kumar opened this session by remarking that the popular perception of surveys is that of large investigations involving hundreds and even thousands of respondents generating data on a multitude of variables. Such surveys are costly and time-consuming and require an efficient organizational apparatus. However, surveys can also be done on a smaller scale by concentrating on a few variables and using a small sample. For lack of a commonly accepted term, these surveys are referred to here as "mini surveys."

Mini surveys have the following features:

- o They focus on a narrowly defined issue, question, or problem. For example, they address such questions as what proportion of targeted farmers is using the recommended technical package? How do project participants evaluate the services provided by a micro-enterprise development project? Are the majority of farmers willing to pay user fees to utilize necessary health facilities?
- o They contain in most cases only between 15 and 30 questions. In this respect, mini surveys resemble public opinion polls rather than traditional household or agricultural surveys in which questionnaires may run into several pages. Mini survey questionnaires are designed to be completed at most within half an hour.

- o Their sample size is kept small, usually between 25 and 70 cases. The small sample size has several implications about the generality of the findings.
- o They can use informal sampling, although probability sampling is the preferred procedure.
- o Interviewers enjoy greater flexibility in conducting interviews. They may even be permitted to ask questions not mentioned in the questionnaire. In some instances, they may be required to observe the phenomenon under investigation. For instance, in rapid rural appraisal surveys, interviewers also observe farming practices.

Kumar noted that the advantages of mini surveys are quite obvious and require little elaboration. First, unlike other rapid, low-cost data collection methods, mini surveys generate quantitative data.

Second, mini surveys can be completed in 3-7 weeks, which makes them practically the only alternative when quantitative data are needed, but not enough time is available to mount a comprehensive survey. For example, when an evaluation team has only about four weeks for a field visit to assess the impact of a microenterprise project, it will obviously not be able to launch a comprehensive survey of the local entrepreneurs assisted by the project. However, the team will easily be able to design and implement a mini survey that can produce reasonably credible data for the evaluation.

Third, nonsampling errors tend to be low in mini surveys. Since only a few interviewers are involved, they can be better trained and supervised. The small sample size and fewer questions reduce interview and coding errors. Moreover, the investigator has a better grasp of the data because of the small volume of data involved. The cumulative result is that the overall quality of the data tends to be better in mini than in large surveys.

Finally, mini surveys can be managed with relatively low cost. The small size of the sample and of the questionnaire minimizes manpower requirements. In fact, an investigator does not require much outside help and can manage with two or three full- or part-time assistants.

Despite the advantages described above, Kumar cautioned that mini surveys have several limitations that should be carefully weighed before they are used. First, in many instances the small sample size does not permit an elaborate statistical analysis. For example, if out of 50 farmers in the sample eight are women, the investigator cannot make a comparative statistical analysis of the behavior of male and female farmers.

Second, findings are susceptible to biases when probability sampling is not used. Analysts cannot be sure that the sample is representative of the population, nor can they compute the sampling error. Even experienced researchers can make mistakes when they rely on informal sampling.

Finally, credibility is always a problem with mini surveys. Many policy- and decision-makers may consider findings from mini survey to be unreliable because of their small sample size. The widely-held perception is that the larger the sample size, the greater the validity of the findings.

It should be recognized that mini surveys should not be construed as substitutes for carefully designed and efficiently implemented large surveys to study complex social and economic subjects. However, Kumar pointed out that there are ample situations in project and program settings when the data generated by mini surveys will appropriately serve a specific purpose.

First, mini surveys are appropriate when limited time and or resources do not permit or justify the launching of a large sample survey. For example, mini surveys may be extremely useful for conducting feasibility studies, preparing project papers, assessing beneficiaries' responses, and preparing outcome and impact evaluations. In such situations, the analyst is more interested in learning about broad patterns, trends, and tendencies than in precise measurements.

Second, mini surveys are appropriate when the purpose is to develop questions, hypotheses, and propositions for further testing. In such cases, mini surveys can be a prelude to more comprehensive, large-scale surveys. Mini surveys can provide cogent information to sharpen study questions, design relevant questionnaires, and develop sampling strategies.

Finally, mini surveys are appropriate when some quantitative data are needed to supplement qualitative information. The combined use of qualitative and quantitative rapid assessment methods can not only strengthen overall evaluation efforts, but also help legitimize qualitative research findings in the eyes of quantitatively-oriented policy- and decision-makers.

Kurt Finsterbusch commented that despite the bias against surveys with small samples, such surveys usually can capture essential information, and their results are often used in the policy- and decision-making process. Expansion in sample size will increase the time and expense of conducting surveys, but will not necessarily augment validity or usefulness. Hence, while researchers may consider a survey with a small sample (e.g.,  $N = 75$ ) to be too small for meaningful statistical analysis, major marketing and government determinations are made

on the basis of carefully-crafted surveys with small sample size.

Robert Rhoades remarked that the collection of quantitative data is often incorrectly equated with conducting large-scale questionnaire surveys. Further, survey questionnaires often reflect the preconceptions or the ignorance of the researcher. Moreover, a large questionnaire survey may be inappropriate for a number of reasons that include fiscal, temporal, or sociocultural constraints. It should be borne in mind that a number of data collection methods--including rapid assessment techniques--may often be better suited to the research task at hand.

William Millsap explained how laptop computers can serve as an interactive tool when conducting rapid assessments--including mini surveys--in the field. A laptop computer can be used as an adjunct to a desktop or mainframe computer system in the home office. The selection of laptop computer hardware and software should take into consideration the nature of the environment in which the fieldwork will be carried out and its compatibility with other systems available to the field researcher.

## 6.2 The Use of Farmers' Estimates in Lieu of Crop-Cutting Methods for Estimating Yields

(presented by Josette Murphy, World Bank)

Josette Murphy began her presentation with the observation that timely availability of crop production data remains a problem in many less developed countries, making it difficult for public and private agricultural agencies to plan, design, and manage their programs. The cropping conditions for dryland agriculture in Africa raise particularly difficult methodological issues for the estimation of harvest size. She observed that one source of information that remains underutilized is the farmers themselves.

Murphy pointed out that a number of field reports have demonstrated that farmers throughout Africa are capable of estimating their cereal production with adequate accuracy for decision making. A key advantage of using the farmers' estimates is that the data can be obtained through one or two visits, with much flexibility allowed in the timing of the visit(s). This makes it possible to work with a widely dispersed sample of farmers, a fact which decreases the size of the sample needed for a given level of accuracy by as much as a factor of 8, as compared to the sample size required if clustering around the villages of residence of the enumerators were required for logistical reasons.

However, data collection on the farmers' estimates of production raises both general methodological issues common to all data collection and issues specific to the rapid assessment. As always, before data collection methods can be selected, three questions must be answered: 1) for what purposes will the information be used? 2) when is it needed for decision making, and what resources are available? 3) what is the population to be considered?

The answers to these three questions will narrow down the choice(s) of data collection methodology. In addition, a key principle of data collection is that one never relies on one source of data alone. The farmers' answers must be verified and interpreted in the broader context, against evidence from various sources, such as:

- o agro-meteorological data (rain pattern, vegetation index, pests, and disease incidence);
- o storage, marketing, and price data on these and other crops and livestock;
- o historical data on previous years;
- o actual measurements (weighing of total plot production) on a subsample of plots; and
- o socioeconomic indicators (which in bad years will show how serious the situation is likely to become, as seen by the people concerned).

A combination of methodologies for data collection, verification, and analysis should be selected which will yield answers that are most appropriate to the information needs of decision-makers. The goal is to provide an analytical interpretation which is "good enough, soon enough" to be useful in planning, management, and resource allocation.

Of the rapid assessment methods, Murphy indicated that key informant interviews and groups discussions would tend to be very useful, remote sensing somewhat useful, and focus groups less so for data collection on farmers' estimates of production. Mini surveys are especially appropriate and necessary if the quantified estimates of production are to be extrapolated. Because no physical measurement is required and because timing is flexible, the interviewing process can be brief. The topic can be often be combined with a related survey, such as a monitoring study on adoption rates of selected practices, as long as the population of interest is the same. The survey can be done by mobile teams of enumerators who can work on a widely dispersed

sample rather than in a sample clustered around the residence villages of front line enumerators.

Issues specific to farmers' estimates of production are related to the identification of the appropriate respondents, the means of ensuring the veracity of responses, the conversion of traditional units to the metric system, and the level of production unit, ranging from individual plot to total holding production. Households in the rural areas of Africa are complex production units, and the person most appropriate for interviewing may not necessarily be the head of household, but rather the individual responsible for the plot for which production information is needed. For food crops in particular, the household is likely to have several plots under cultivation, each with a different manager.

In reply to audience questions on how to gain entry and gather necessary information, Murphy emphasized that, in order to ensure cooperation and truthfulness, it is crucial that the interviewer take careful to introduce the survey to the proper authorities as well as to farmers, together with a clear explanation as to why the questions are being asked, who will use the results, and for what purposes. It should also be made very clear that the survey is not related to the distribution of food aid or to any special reward or punishment relative to the participating households. Finally, each interview should take place on the plot in question in order to make it clear as to which plot is under discussion. The recall period for such key information is likely to be quite long.

Josette Murphy concluded by explaining how the steps involved in data collection and analysis of farmers' estimates of production can build on each other in the following order:

- o review agro-meteorological data from various sources (including remote sensing) to estimate what production figures one might expect;
- o interview key informants to identify any special circumstances of relevance;
- o conduct a mini survey on an appropriate sample (remote sensing can facilitate the selection of an area frame sample);
- o present the aggregate results to groups of farmers and conduct group discussions to verify and explain the results;
- o possibly re-interview key informants or interview additional key informants on identified topics;

- o possibly conduct focus groups on very specific identified issues; and
- o prepare a short, decision-oriented report and brief key decision-makers on the findings and their implications.

### 6.3 A Case Study of Mini Surveys in Rapid Rural Appraisal Evaluations in Developing Countries

(presented by Kurt Finsterbusch, University of Maryland)

The term mini survey may refer to a survey with a small sample size or a survey covering a small number of questions, or both. Kurt Finsterbusch focused his discussion on small sample size.

There are three different viewpoints from which to determine the purpose of evaluation or appraisal: 1) the scientific viewpoint, wherein the purpose of evaluation is to obtain certainty of knowledge; 2) the legal or political viewpoint, wherein the purpose is to see if something is credible and can stand up in court; and 3) the rational viewpoint, wherein the purpose is to see if something can serve as the appropriate means to given ends. Here we subscribe to the rational perspective, i.e., a cost-benefit analysis of collecting additional information.

The informative value of mini surveys is demonstrated by a chart called "Confidence Belts for Proportions." Finsterbusch explained how this chart depicts for sample estimation of different proportions as the population parameters, a diminishing return for sample size increment. Mini surveys with even such a small sample size as 20 can capture empirical ranges of variation in estimating proportions. Even with a sizable range of sample variation, the great majority of sample estimates fall within a reasonable and acceptable limit.

Finally, Kurt Finsterbusch noted that the mini survey concept can be used to make survey work dynamic. After pretesting the survey instrument, a mini survey is administered and analyzed. Questions are then dropped, improved, or added on the basis of what has been learned. A second mini survey may then be administered and analyzed, a process that can lead to further modifications. The information obtained from a mini survey can also triangulate with other sources of information, literature, and expert knowledge, and it can serve as a probe for larger studies or waves in a dynamic survey study.

#### 6.4 Open Discussion on Mini Surveys

(presented by Krishna Kumar, PPC/CDIE)

Krishna Kumar opened with the observation that one important reason for the use of mini surveys is that policy-makers want "hard facts," and in order to give them a full range of information, a marriage of qualitative and quantitative methods may be most effective. The mini survey is a useful vehicle for gaining fast, economical information to use with more qualitative information.

In reply to inquiries on the construction of mini survey instruments, Kumar stressed that the preparation of questions for surveys is critical. How questions are worded, mixing closed- and open-ended questions, the neutrality of wording, and the handling of sensitive material are all crucial to efficacy. The asking of questions on certain information (e.g., demographics) which will not be used either to qualify a survey respondent or in analysis is a poor use of time and space.

The translation of questionnaires is often required, and it is crucial that all translated materials be back-translated into English to check for both cognitive and word-choice errors. In this regard, the careful pretesting of all materials is very important.

In regard to questions posed about sample selection, Kumar stated that the selection of participants can be done with a variety of methods, including probability sampling, cluster sampling, convenience sampling, judgment sampling, snowball sampling, and quota sampling. Each of these techniques has advantages and disadvantages depending on the type of population to be targeted for surveying.

Krishna Kumar summed up by reiterating the point that mini surveys represent a quick, economical tool for gaining focused information from small population samples that can serve as a useful juncture between qualitative and quantitative methods.

### 7. WORKSHOPS

#### 7.1 Establishing Monitoring and Evaluation Systems

(presented by Nena Vreeland, PPC/CDIE)

At the outset, Nena Vreeland remarked that managers too often gather far more data than they require and still lack the

specific information needed with which to monitor and/or evaluate programs. In designing evaluations, she advised, there are key questions which need to be taken into account:

- o Who is likely to need information from or about the project, and what do they need to know?
- o Why do they need to know (i.e., how would they use the information if they had it)?
- o When do they need it?
- o How accurate must it be?
- o When and how should data be collected and analyzed?
- o Who is responsible for what?

In the planning of evaluations, those who are most involved or affected are those most often excluded from the evaluation process: the project beneficiaries. Instead, the beneficiaries should be the first to be consulted about evaluation. PVOs are in a much stronger position than the government to effect this type of involvement. An additional source of information which is frequently overlooked in evaluation are other projects and organizations working in the field.

Vreeland explained that traditionally, monitoring and evaluation were discrete exercises that were undertaken only once or twice over the course of a project and were often of a retrospective nature. However, both monitoring and evaluation are now much more likely to be found as part of the program plan, and to be more determinative and useful in focusing and refocusing the project, with ongoing evaluation functioning as part of project monitoring.

Some possible issues for project monitoring and evaluation include: efficiency/effectiveness of implementation; likelihood of success; broader effects; sustainability and replicability; impact on national policies and programming; enhanced institutional capacity; and "unplanned" effects.

A comprehensive monitoring and evaluation plan should entail a series of procedural steps: identify key information users; clarify project and program information needs; identify priority questions; select key indicators and identify sources of existing data; determine appropriate methods for obtaining additional information; identify roles and responsibilities and ensure commitment; establish feedback procedures; develop budget; and specify evaluation schedule.

Monitoring and evaluation must be considered as equally critical elements in project oversight; the absence of either

presents risks to the success of the project.

Nena Vreeland closed with the observation that impact is rarely measured and that it is important to be able to make funding and other decisions before impact is assessed. Therefore, interim indicators, also known as leading or precursor indicators, are sometimes employed. These indicators allow the project and its evaluators to assess the likelihood of success in achieving objectives or of having a particular impact. Rapid assessment methods that combine quantitative and qualitative data represent effective tools for generating interim indicators.

## 7.2 Participatory Evaluation of Development Projects

(presented by John Hatch, Foundation for International Community Assistance)

John Hatch introduced "participatory evaluation" as a technique that allows project beneficiaries to design their own evaluation instruments, conduct interviews, and tabulate and analyze the resulting data. Hatch stated emphatically that participatory evaluation also produces information of the highest quality, usually at a fraction of the cost and the time required by conventional research executed by external professionals.

Participatory evaluation can be organized in three stages and requires the monitorship of one or two professional advisors or staff members. It starts with a design workshop of 2-3 days to which selected beneficiaries are invited to create their own evaluation questionnaire. Next, the participants return to their own and/or neighboring communities for a period of 1-2 weeks to conduct the interviewing. Finally, the participants come back for a 2-4 day analysis workshop to tabulate and analyze the data.

Hatch pointed out that the central concept of participatory evaluation consists in the EMPOWERMENT of project participants. Empowerment is defined as the shift in mindset from "I cannot" to "I can." The key to successful empowerment of participants lies in their being able to take responsibility for their own actions and reality, rather than to let others create the rules, design the solutions, and make decisions for them.

In participatory evaluation, no limiting factors should be presupposed. Literacy problems of the participants can be overcome. Participants usually possess minimal reading, writing, and arithmetic skills. However, if they are illiterate, they can bring along a literate child for company. Expectations of the rural/urban poor should not be limited, even when projects are technical.

In response to queries about the role of development specialists in participatory evaluation, Hatch provided some basic guidelines. In designing the interview instrument, professionals should first withhold their own questions and instead let questions emerge from "brain storming" in the design workshop. They can check and fill the gaps, if necessary, at the end of the workshop. In generating questions, it is often effective to use the projection technique, e.g., to ask participants to picture what the community is currently like and what they would like it to become. After conducting the design workshop, professionals should train the participants, monitor the interviewing process, and then conduct the data analysis workshop.

### 7.3 Gender Issues in Rapid, Low-Cost Data Collection

(presented by Mari Clark, PPC/WID)

Mari Clark opened this workshop with the observation that Women in Development (WID) has come to represent a cross-cutting theme that plays a role in all types of international development programs, e.g., health, nutrition, education, agriculture, community development, small enterprise development. The planning, implementation, and evaluation of development programs increasingly take gender issues into account.

A.I.D.'s WID-oriented efforts now give particular attention to specific areas of concentration, such as women's productive roles, employment patterns, and participation in formal and informal labor markets; the linkages between economic policy reform and women's economic roles, productivity capacity, and production responses; and the linkages between women's productive capacity and the development or maintenance of human capital--their own and that of their children.

In response to participants' request for specific information on current A.I.D./WID program activities, Clark described three subprojects through which WID commissions studies, compiles data, works with other agencies, and disseminates information pertaining to women's roles in developing economies.

Mari Clark concluded by noting that A.I.D. management has adopted the policy that gender-related data must now be disaggregated. Program evaluations--including the use of rapid assessments--should be adapted to ensure that the important but previously often neglected dimension of gender is now included in all elements of program planning, implementation, and reporting. Gender-related informational materials and program guidelines are available through A.I.D./PPC/WID.

#### 7.4 Rapid Approaches to Assessing Food Consumption and Food Needs at the Regional and Community Levels

(presented by Kathleen DeWalt, University of Kentucky)

Food consumption behavior is studied as a link between available food supply and nutritional status. Kathleen DeWalt emphasized that it should be kept in mind that people do not consume nutrition, but food--which is a social category. An understanding of people's knowledge, attitudes, and practices pertaining to food is therefore key to successful programs.

Sustainable approaches to ensuring adequate nutritional status must include stability and enhancement of food security at not only the national, but also the regional, community, and household levels. The status of food consumption/ food security at the national level may not be indicative of problems at more localized levels due to differences in access, ecology, and culture, and therefore programs and projects need to be fine-tuned to the scale and needs of people in specific contexts.

To gather requisite program-relation information at the regional, community, and household levels, rapid assessment methods are particularly appropriate when necessary data are unavailable, when available data need to be updated for specific project purposes, and when time and/or financial resources are limited.

When asked which rapid assessment methods are most appropriate and useful for gathering data on food consumption at the regional and community levels, Kathleen DeWalt explained that an effective approach includes judicious combinations of small-scale quantitative (mini) surveys with such qualitative methods as informal surveys, small group/focus group interviews, and direct observation.

#### 7.5 Communicating Evaluation Findings

(presented by Michael Hendricks, Consultant)

Michael Hendricks began this workshop by making the point that, in presenting evaluation findings, one does well to adopt the mindset of a salesperson presenting the product of information to decision-makers in the context of competing interests and limited time and resources. Therefore, it is important to be very conscious of how to effectively package and present information in order to maximize its impact.

The ideal evaluation report is one that encourages action. A report must be read to have impact, and too often the presentation of reports militates against their being read and acted upon. In planning evaluation reports which will encourage action, it is crucial to give attention to such matters as tone, language, appearance, formatting, and graphics to ensure the greatest impact.

Hendricks emphasized that the policy briefing is the most powerful of methods for communicating evaluation information. The briefing is more in keeping with the normal habits of managers: short meetings which involve both presentation of information and a discussion format. The purpose of briefings is to create a forum for discussion, to convey information and answer questions, and to generate momentum for action. In planning policy briefings, there are key factors to be kept in mind: 1) preparing materials (briefing charts and handouts); 2) setting the stage (determining who will do the briefing, who will comprise the audience, practicing the briefing, establishing the agenda, and making miscellaneous arrangements); and 3) manner of presentation (absorbing, informative, understandable, interactive, true to life, professional, balanced, and effective).

In generating recommendations, attention should be given to what aspects of the work the recommendations address, when recommendations should be developed, sources of information, specificity and gravity of recommendations, clarity of recommendations, and following up on recommendations.

Workshop participants expressed concerns about potentially negative reactions to recommendations and the ambiguous role of evaluators in making recommendations. Hendricks advised that, in recommending major changes, evaluators should notify decision-makers in advance so that they can give thought to potential changes and not be caught by surprise when the recommendations are formally presented. Moreover, it can be appropriate for evaluators to act in an advocacy as against a neutral role in recommending changes, and managers should bear in mind that fresh perspectives are needed and that the overall purpose of evaluation is to improve services. Michael Hendricks closed with the suggestion that, in positioning recommendations in the body of the report, it is important that they be included with the findings, as well as in the annex, and that those in the annex be cross-referenced to the findings.

### 7.6 Country Program Logframe: The Basis for Monitoring and Evaluation

(presented by Cynthia Clapp Wincek, AFR/DP/PPE; and Gerald Britain, PPC/CDIE)

Cynthia Clapp Wincek described the logframe model that A.I.D. uses for monitoring and evaluating programs. The logframe comprises a logical framework matrix model for designing and performing projects. The models' left-hand column lists, starting from square one and in descending order: goal, purpose, outputs, and inputs; and starting from square one, across the top from left to right: narrative summary, objectively verifiable indicators, means of verification, and assumptions. Gerald Britain explained how logframe guidelines delineate appropriate goal, purpose, output, and input markers and explain how to correlate them with program progress indicators. The A.I.D. Africa Bureau's approach was used to illustrate the application of the logframe model.

Cynthia Clapp Wincek noted that the logframe methodology for program planning and evaluation has been extensively modified and adapted by A.I.D. into the "Objective Tree" for designing and performing program evaluation functions. She and Gerald Britain answered the participants' queries about the system's terminology, and they pointed out that detailed information on the theoretical basis, terminology, and programmatic applications of this important monitoring and evaluation tool may be obtained from A.I.D./PPC/CDIE.

### 7.7 Using Laptop Computers in Rapid Rural Appraisal

(presented by William Millsap, Consultant)

William Millsap opened this session by pointing out that the laptop computer can be used as an "interactive tool" in the fieldwork experience, and it is extremely useful for the functions of data collection, on-site analysis, and report production. The laptop computer is particularly well suited, if not absolutely necessary, for conducting rapid rural appraisal studies in general and mini surveys in particular.

Millsap advised that, in selecting a laptop, the key is to determine one's needs and the price one is willing to pay. Further, one should determine beforehand whether the laptop will be used as a primary computer or simply as an adjunct to a personal computer or a mainframe computer system. The important hardware specifications to be attended to are: screen display and format, memory, diskdrives, data transfer, and compatibility.

In answer to questions concerning appropriate laptop software, Millsap observed that the initial needs assessment of equipment will in part establish the constraints for determining software. Software requiring a small memory is preferred (for example, WordPerfect Exec 4.2 would be preferred to WordPerfect 5.1).

Increasingly popular are integrated programs which combine all functions of word processing, spreadsheets, and database programs. A printer is required only when hard copy is needed in the field and no printer is available on site.

For mini surveys with an N of no more than 50, Millsap recommended the software package "Epi Info" that has been developed by the Centers for Disease Control. It possesses the capacities of word processing, questionnaire editing, data processing, and statistical analysis. Moreover, it can currently be purchased for only \$18.00.

#### 7.8 A.I.D. Impact Evaluation Approaches: A Rapid Response Method

(presented by Annette Binnendijk, PPC/CDIE)

In this session, Annette Binnendijk presented an overview of A.I.D.'s impact evaluation approach. She noted that this approach focuses on the whys and hows of a given program and the assessment of its impact at one to two years after the program's completion. These short-term, team-conducted studies use a variety of data collection techniques, but by and large they rely upon the use of key informants in-country, in A.I.D., and in other agencies that might have had some responsibility for a given project. The scope of work of each evaluation is highly specific to the country concerned and the project under assessment. The scope of work also constitutes part of the dialogue with the country mission.

In replying to questions about causal linkages between A.I.D. program efforts and impact, Binnendijk acknowledged that it is sometimes difficult to establish a definite causal link between projects and outcomes. For some sectors such as in-country policy reform, it is relatively easy to accurately attribute causality. For other types of sectors, it is more difficult, and therefore results must be interpreted with more caution.

When asked about the intended audience for evaluation reports, Annette Binnendijk replied that A.I.D. senior management and policy planners comprise the primary audience for impact evaluations, and it is they who will determine how the

information will be used. However, she added, the results of these studies are available to the public and can be obtained at A.I.D./CDIE.

7.9 Using Central Place Commercial Counts to Evaluate an Agricultural Project in Zaire

(presented by Gordon Appleby, Academy for Educational Development)

Gordon Appleby described how an evaluation challenge was raised by questions as to whether or not a large, rural development project in Zaire had a definable impact on the socioeconomic structure of the targeted area. This challenge was particularly formidable because the project had changed in form and size, and no direct baseline data had been collected. In addition, the evaluation team was given only ten days on-site, and the project covered an area of some 15,000 square kilometers. Given all of the above, a novel method for assessing impact had to be devised.

It was decided that a reasonable equation for impact might be: if the project had been successful, more corn (being the key cash crop) would have been produced, more corn would be marketed, farmers would have greater income, and that in turn would produce heightened commerce in the area. It was determined that looking at markers of enhanced commerce would therefore be indicative of project impact.

The next challenge was to decide how to reasonably measure increased commerce. A baseline was established by looking at information provided in a Belgian report from 1976 on commerce in the area, and also by conducting retrospective interviewing concerning the prevalence of trucks and shops in the area. The marketplace had not existed at the earlier date, and so it was clear that this innovation in itself represented an increase in commerce. Since this project was the only one in the area, attribution of cause was not an issue.

Appleby explained how the evaluation team then looked at specific development by conducting a "commercial census." Shops and market stalls were counted, and the types of merchandise being offered were analyzed. The merchandise analysis was considered to be a particularly useful indicator of impact in that specialized displays suggest the existence of sufficient income to support the selling of exclusive goods, rather than a generalized array of standard, necessary items.

In closing, Gordon Appleby stated that the analysis of the growth of commerce and of the types and forms of merchandise

being offered indicated that the project had indeed had a lasting, positive impact on commerce in the area.

7.10 Rapid, Low-Cost Uses of Available Household Food, Nutrition, and Health Data

(presented by Charles Teller, Pragma Corporation)

At the outset of this workshop, Charles Teller pointed out that growth charts represent a potentially valuable source of nutritional information, despite the fact that data are rarely tabulated and used. The growth chart can provide the following basic data for rapid assessment: nutritional status for age, rate of growth over time, major illnesses, breast feeding and weaning foods, attendance at growth monitoring sessions, and vaccination status. For a community-based nutrition program, growth chart data can be systematized to provide the following important categories of indicators: adequate/inadequate patterns of growth, program coverage of the at-risk population, concentration (frequency) of participation of beneficiaries, and coverage of targeted high risks for follow-up intervention.

Focus group interviews can be conducted with the community health workers to explore program objectives, problems, growth charts, assessment, education programs, rapport, self evaluation, motivation, and recommendations. Community surveillance can provide complementary information. Systemization and analysis of growth chart data on a continuous basis will prove to be most fruitful.

Data collected through rapid assessment can then be analyzed and utilized to enhance the effectiveness of individual screening, home visits, peer counselling, community education and surveillance, and program planning, supervision, and evaluation.

In response to queries as to how community-based NGOs should use growth charts in service delivery and the evaluation of the services, Teller provided the following advice: use growth chart information as an integrative tool; deliver services in a manner approved by mothers and primary care providers; tie data in with service delivery as an ongoing monitoring and improvement feedback device; and present data to program decision-makers in a straightforward and effective fashion.

### 7.11 Rapid Rural Appraisal Techniques and Resource Management

(presented by Aaron Zazueta, World Resources Institute)

Aaron Zazueta opened this workshop by enumerating basic considerations that should guide the conduct of a participatory rapid rural appraisal: selection of a manageable geographical area (e.g., 10 square kilometers, 10-12 villages); formation of an interdisciplinary team that includes local participation; cooperation with local communities in the planning and preparation for the study; acknowledgement of documented data; distribution of available materials to team members prior to holding the preparatory study workshop; conduct of the study over a short period of 3-4 weeks; and construction of minimal (not comprehensive) data sets during the course of the appraisal.

The collection of field data entails local participation and includes the following: spatial data (sketch maps of site, transect, farm sketches); time-related data (time line, trend lines, seasonal calendar); social data (farm households, community institutions and their interrelations); and technical data on resources.

Community/group discussions are then conducted for the purposes of delineating problems and opportunities, ranking problems and opportunities, and creating village resource management plans. Zazueta remarked that this series of procedures will result in village resource management plans that can then be implemented with the active participation--and leadership--of community members.

### 7.12 Forty years of A.I.D. Assistance in the Guatemalan Altiplano: a Rapid Appraisal

(presented by Gary Smith, OICD/Guatemala)

Gary Smith told how, in the fall of 1988, the A.I.D. Guatemala mission was directed to conduct within six months a complete retrospective study of the impact of A.I.D. programs in that country over the past forty years. In light of the incompleteness and unevenness of existing records on approximately 150 projects, and of limitations in the time and funds allocated for this effort, the mission staff decided to use a rapid appraisal approach in carrying out the study. Although secondary sources provided background information, the principal data collection methods employed were key informant interviews and direct observation.

Three months of preparation were devoted to compiling a mass of documentation that included the following: CDIE project

summaries and evaluations; information from other development organizations; records of the counterpart Guatemalan government ministries; construction of matrices to portray all of the project sectoral major and minor components; and development of a chronogram to delineate programmatic activities over time. Moreover, a 15-member rapid assessment field team was put together which included in-country experience and interdisciplinary expertise (e.g., public health, education, agronomy, economics, sociology). The team was subdivided into five three-person units to concentrate on the areas of agriculture, education, health, infrastructure, and coordination.

On the basis of this documentary background and previous in-country experience, the team commenced the six-month rapid assessment. Smith described how each week for five months the team units fanned out over the country to interview key informants and conduct direct observations in the sites where A.I.D. projects had been carried out; and each Saturday morning the team members convened at the mission to debrief and to analyze their collective findings, which were written up on Saturday afternoons. The results of this intensive and extensive rapid assessment data collection endeavor were then compiled into a three-volume report which is available in the offices of A.I.D./CDIE.

## 8. CONCLUSION

The conference's closing session provided a summation of the ground covered during the course of the three-day meeting and pointed to future directions in the use of rapid, low-cost data collection methods.

Annette Binnendijk, Chief, PPC/CDIE, observed that the conference had successfully met its three objectives: 1) to encourage the use of these rapid assessment methods; 2) to present illustrations on the applications of these methods; and 3) to provide a forum in which practitioners could learn about and share their experiences with these methods. She also stated that the conference had provided PPC/CDIE with a wealth of ideas that will be used in the study of program impacts.

Krishna Kumar then described the kinds of activities that will stem from this conference. These will include dissemination of the conference proceedings; PPC/CDIE's production of a series of about 10 case studies in which these rapid assessment methods are used; the joint A.I.D./World Bank publication of a case study volume; the willingness of PPC/CDIE to entertain proposals for the production of more "cookbook" materials on rapid appraisal methods; and the readiness of PPC/CDIE to render assistance on the use of these methods, including the provision of information

and feedback.

The session culminated in an open discussion in which the participants expressed their satisfaction with the conference's orientation and subject matter, as well as their hope that it would be followed by future meetings devoted to evaluation methods in general and to rapid assessment techniques in particular. Moreover, a number of salient points were addressed:

- o Evaluation research should be combined with service delivery in order to build in a monitoring mechanism to provide ongoing feedback to management.
- o PVOs/NGOs have gained a great deal of experience in developing countries which should be more fully utilized in program planning and evaluation.
- o A number of national and regional evaluation organizations already exist, and they should be better used as sources and forums for the exchange of information on effective assessment methods.
- o Evaluation workshops that include rapid assessment methods should be held in regions and developing countries where they can be available to host country representatives.
- o Host country governments should be made aware of the appropriateness and effectiveness of rapid, low-cost rapid assessment methods, including the efficacy of their use and the validity of their findings.

Appendix A:  
Conference Program





3:15-4:15 WORKSHOPS

1A "Establishing Project Evaluation and Monitoring Systems"  
given by Nena Vreeland (PPC/CDIE)

SHEN " A

1B "PVO workshop/"Participatory Evaluation of Development  
Projects" given by John Hatch (FINCA)

CLUB ROOM

2C "Gender Issues in Rapid Low-Cost Data Collection" given by  
Mari Clark (PPC/WID)

BOARD ROOM

DAY 2: JULY 10, 1990

9:00 PLENARY SESSION (SHENANDOAH A/B)

REMOTE SENSING: Allen Falconer (USGS)

10:00-10:15 Break

10:15-11:15+ PANELS/CASE STUDIES on REMOTE SENSING

2/3/A "The Use of Remote Sensing for Monitoring Flood Damage  
to Crops in Bangladesh with Satellite Data"  
by Thomas W. Wagner

BOARD  
ROOM

Read by: Thomas W. Wagner (EROS)

Facilitator: Randy Adams Reporter: C. Crain

2/3/B "The Reference File Method: A Low-Cost Alternative for  
Improving Agroecological and Crop Data of Developing  
Countries" by Robert Rhoades

POTOMAC  
ROOM

Read by: Robert Rhoades (International Potato Institute)

Facilitator: Connie Ojile Reporter: David Baker

2/3/C "Open Discussion on Remote Sensing"

Conducted by: Allan Falconer

SHEN "  
A

Facilitator: Niel Tashima Reporter: Che Fu Lee

4.

11:30-1:00 LUNCH (another opportunity to eat in Rosslyn)

1:00 PLENARY SESSION (SHENANDOAH A/B)

KEY-INFORMANT INTERVIEWING: Chair, Krishna Kumar

1:45-2:00 Break

2:00-3:00 PANELS/CASE STUDIES on KEY INFORMANT INTERVIEWING

2/4/A "Rapid Reconnaissance Methods for Agricultural Marketing  
and Food Systems Research in Developing Countries" by  
John S. Holtzman

BOARD

ROOM Read by: John S. Holtzman (Abt Associates)

Facilitator: Niel Tashima Reporter: Che Fu Lee

2/4/B "Participatory Rural Appraisal for Resource Management:  
A Kenyan Case Study" by Charity Katutha and Richard Ford

POTOMAC

ROOM Read by: Richard Ford (Clark University)

Facilitator: Connie Ojile Reporter: David Baker

2/4/C "Open Discussion on Key Informant Interviewing"

Conducted by Krishna Kumar/Michael Hendricks

SHENANDOAH A

Reporter: Charles Cheney

3:00-3:15 Break

3:15-4:15+ WORKSHOPS

2A "PVO Workshop/Rapid Approaches to Assessing Food Consumption  
and Food Needs at the Regional and Community Level"

BOARD ROOM

given by Kathleen DeWalt  
(Univ of Kentucky)

2B "Communicating Evaluation Findings" given by Michael  
Hendricks

SHENANDOAH A

1C "Country Program Logframe, The Basis for Monitoring and Evaluation" given by Cynthia Clapp Wincek (AFR/DP/PPE)  
Gerry Britain (PPC/CDLE)

POTOMAC ROOM

DAY 3: JULY 11, 1990

9:00-10:00 PLENARY SESSION (SHENANDOAH A/B)

MINI-SURVEYS: A PANEL

Panelists: Krishna Kumar, Kurt Finsterbusch,  
William Millsap  
Discussant: Robert Rhoades

9:45-10:00 Break

10:00-11:00 PANELS/CASE STUDIES on MINI-SURVEYS

3/5/A "The Farmers' Estimates as a Source of Production Data;  
Methodological and Organizational Implications"  
by Josette Murphy

BOARD

ROOM Read by: Josette Murphy (World Bank)

Facilitator: Niel Tashima Reporter: David Baker

3/5/B "The Mini-Survey: A Rapid Means for Testing Policy  
Formulations" by Kurt Finsterbusch

POTOMAC

ROOM Facilitator: Randy Adams Reporter: Che Fu Lee (Univ. of MD)

3/5/C "Open Discussion on Mini-Surveys"

SHEN " Conducted by: Krishna Kumar  
A

Facilitator: Connie Ojila Reporter: C. Crain

11:00-11:15 Break

11:15-12:15+ WORKSHOPS

3/1/A "Using Laptop Computers in Rapid Rural Appraisal"  
given by William Millsap (AED)

BOARD ROOM

6.

3/1/B "AID Impact Evaluation Approaches: A Rapid Response Method"

given by Joe Lieberson (PPC/CDIE)

SHENANDOAH A

3/1/C "Using Central-Place Commercial Counts to Evaluate an Agricultural Project in Zaire" by Gordon Appleby

POTOMAC

ROOM given by Gordon Appleby (AED)

12:30-1:30 LUNCH (Your last chance in Rosslyn)

1:45-2:30 WORKSHOPS

3/2/A "PVO Workshop: "Rapid Low-Cost Uses of Available Household Food, Nutrition, and Health Data" given by Charles Teller

(Pragma Corp)

POTOMAC ROOM

3/6/B "Rapid Rural Appraisal Techniques and Resources Management" given by Aaron Zazueta (World Resources Institute)

BOARD ROOM

3/6/C "Communicating Evaluation Findings" given by Michael Hendricks

SHENANDOAH A

2:30-2:45 Break

2:45 Conference Town Meeting

Chair: Janet Ballantyne (Director/PPC/CDIE)

Unfinished business; Suggestions;  
Recommendations

Closing Remarks; Evaluation of Conference

**Appendix B:**  
**Conference Participants**

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Appendix C:  
Conference Papers

## CONFERENCE PAPERS

- 1/1/A "Applying Focus Groups for Marketing Research in Nepal"  
by Bob Haggarty and J.E. Armstrong
- 1/1/B "Focus Groups for Health Communication: A Case Study in  
Nigeria" by Caby Verzosa, Cecile M. Johnson, and Olabode  
Kayode
- 1/2/A "Systematic Observation as a Component of an Analysis of  
Primary Health Care Services in the Philippines" by  
Stewart Blumenfeld, Manual Roxas, and Maricor de los  
Santos
- 1/2/B "The Use of Group Interviews in the Mid-term Evaluation of  
an Area-Development Project in a Southern African Country  
by Krishna Kumar
- 2/3/A "The Use of Remote Sensing for Monitoring Flood Damage  
to Crops in Bangladesh with Satellite Data"  
by Thomas W. Wagner
- 2/3/B "The Reference File Method: A Low-Cost Alternative for  
Improving Agroecological and Crop Data of Developing  
Countries" by Robert Rhoades
- 2/4/A "Rapid Reconnaissance Methods for Agricultural Marketing  
and Food Systems Research in Developing Countries" by  
John S. Holtzman
- 2/4/B "Participatory Rural Appraisal for Resource Management:  
A Kenyan Case Study" by Charity Katutha and Richard Ford
- 3/5/A "The Farmers' Estimates as a Source of Production Data;  
Methodological and Organizational Implications"  
by Josette Murphy
- 3/5/B "The Mini-Survey: A Rapid Means for Testing Policy  
Formulations" by Kurt Finsterbusch
- 3/1/C "Using Central-Place Commercial Counts to Evaluate an  
Agricultural Project in Zaire" by Gordon Appleby