

**Mixed Paradigms:  
Combining Participatory and Positivist Research Methods  
Guyanese Case Studies**

This practicum is presented to the Faculty of Arts at Saint Mary's University in partial fulfilment of the Master of Arts in International Development Studies.

c Michael Shock 1993

  
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## Abstract

The debate between proponents of participatory and positivist research methodologies has been long and at times heated, but in four months research work in Guyana, the author found elements of the two paradigms melding. Positivist researchers are found to be less than completely objective in practice, while participatory researchers adopt positivist tools for use in their studies. In short, hard drawn lines of demarkation between the two schools of thought become blurred in the field.

The implications of this blending of methodologies are explored, both theoretically and in the light of practical experience. Can field researchers not have the best of both worlds, combining positivist and participatory methods as these fulfil research needs? Or are the two approaches worlds apart, with practices appropriate to one invalidating the results and conclusions of the other? The key to the puzzle lies in who sets the research agenda and controls the generation of knowledge.

## Acknowledgements

I would like to take this opportunity to thank Dr. Henry Veltmeyer for his continuing support in my return to academia at what some would call mid-life. I have appreciated the flexibility of the IDS programme which allowed me to chart my own course, pursuing interests I didn't even know I had through an eclectic mix of course and field work.

Thanks also to Gerry Cameron for support and encouragement, along with helpful hints which helped unlock some of the esoteric secrets of our national development agency.

I reentered the academic world in 1990 without the slightest intent to acquire an advanced degree, just a single course to upgrade skills I needed to do my job. That course and many subsequent ones proved to be interesting, challenging and exciting due to the professionalism, enthusiasm and energy of people like George Perly, Bessa Whitmore and Bob Sargent. Thank you all for your continuing inspiration and encouragement to this unintentional student.

## **Mixed Paradigms:**

### **Combining Participatory and Positivist Research Methods Guyanese Case Studies**

From April through July, 1993, I was involved in two research programmes in Guyana, one of which included participatory research elements in a positivist research framework, the second of which uses a positivist based survey in an overall participatory research design. This paper, submitted in fulfilment of the practicum requirement of the Master of Arts degree in International Development Studies, explores the theoretical and practical aspects of this mixing of methodologies.

### **Industrial Social Welfare Benefits Research**

The initial research programme in which I took part was a study of industrial social welfare benefits in Guyana's two major industries, bauxite and sugar. In this programme, I was responsible for the coordination of worker interviews at LINMINE, the country's largest bauxite company. Working with a team of eight University of Guyana researchers, my roles included interviewer training, maintenance of data accuracy and creation of the data entry and editing software.

The overall research design was positivist, with methodologies and theories regarding the effects of privatization on bauxite and sugar workers' benefits having been set out by the project directors at Dalhousie University. Most of the Guyanese researchers had studied at Dalhousie and were involved in their first research programme since receiving their degrees. The team also included economists and statisticians in management and advisory capacities.

The research was begun in 1992 with the purpose of documenting the effects of IMF structural adjustment programs, especially the privatization of national industries, on the welfare of workers. It was theorized that, in preparation for privatization or in the actual transfer of industries to the private sector, the level of industrial social welfare benefits would decline. The current phase of the research involves the establishment of baseline data regarding benefit levels at a time when the bauxite and sugar industries remain in public ownership.

Recent events tend to support the theory of declining benefits, as the administration of most of the benefits provided by LINMINE, were recently down loaded to a holding company, thus separating the provision of benefits from the production aspects of the company. Labour leaders in Guyana

feel that this move is preparatory to the ultimate down loading of benefits to a government department to make the industry more profitable and thus more attractive to private investors.

The establishment of baseline benefit data includes archival research in sugar and bauxite company records, a survey of workers to determine patterns of benefit access for various classes of workers, and community meetings to determine the level of benefits provided to non employees and the population at large. The first two of these research phases, along with the overall research design, are set in a positivist framework using quantitative analysis, random samples of employees and a standardized, pretested questionnaire.

The third phase of the research, a series of community meetings on four sugar estates and in Linden, was set out as a participatory process in the original research plan. I was tasked with designing this research activity, which will take place in the fall of 1993. The design for this phase is detailed in Appendix A.

My initial concern in organizing interviews and training researchers was assuring the objectivity and accuracy of the interview data. Great pains were taken to

involve both management and the unions in the interview process in the bauxite industry; company management agreed to deliver letters inviting randomly selected workers to the interviews, and the unions provided field workers to contact interviewees and encourage their participation. A neutral venue was arranged for interviews, rather than holding them on company property or at the union halls. Interviewers were instructed in the maintenance of neutrality in asking questions and probing for answers.

A total of 270 interviews were conducted over a five week period by six University of Guyana researchers and eight interviewers who were recruited in Linden and trained in the use of the survey questionnaire. My observations were that the Linden researchers were more interested and responsible in carrying out these interviews than the University of Guyana researchers, who maintained an aloof distance from the "locals". The Linden interviewers, being residents of a company town, were involved in the issues, interested in the outcome of the study and aware of their own learning through the research process.

Both the Linden interviewers and the University research team members recognize that the data generated by the interviews could provide a powerful bargaining tool for organized labour to fight for the maintenance of current

levels of benefits when the industries are privatized. The fact that most of the research team members are sympathetic to labour's cause holds great potential for introducing bias into interviews and other data collection and analysis processes.

This pro-labour stance was dramatically illustrated at a preliminary conference, where the University of Guyana researchers spoke of the need to ensure the continuance of company provided benefits through the privatization process and expressed very strong anti-management sentiments.

Yet I feel that a relatively high degree of objectivity was maintained through the interview process by the use of practice interviews and the monitoring of individual interviews. I was present at over eighty per cent of the interviews conducted, and did not observe any overt attempt to bias responses or lead the interviewees. Still the potential is great for the University researchers to introduce bias into the analysis and presentation of research findings due to their unquestioned pro-labour stance. An example may serve to illustrate the unconscious nature of this bias:

As we prepared to train interviewers and commence interviews in the sugar industry, a problem arose regarding

the delivery of incentive payments to interviewees. In Linden we had given each interviewee a chit which entitled them to a free snack at a local restaurant; this was seen as a significant incentive. No convenient restaurants exist on the sugar estates, so the researchers decided to provide a cash incentive.

Yet it seemed unwise to entrust the interviewers to pay out the incentives, so it was decided to again provide a chit at the time of the interview and have the interviewees pick up their incentive at the union hall! None of the university researchers saw any problem with this scenario or recognized the bias which such a procedure was bound to introduce.

At the end of the exercise, I concluded that the conscious or unconscious bias of the University researchers held far greater chance of invalidating the results of the research than any lack of objectivity introduced in the interview process. Had the programme been designed as a participatory research exercise, these biases would have been recognized and set out in the report. In a more participatory process, the local interviewers would have played a more central role in designing the research instruments and been empowered by their learnings and involvement, rather than being seen as temporary employees

with no stake in the results being produced.

Though it may have been a longer and more difficult process, a participatory approach would have involved company, union and government representatives, along with university and community workers in the research design and procedure. Still the outcome of such research would have taken the interests of these groups, which are not as disparate as they seem, into account, thus more effectively ensuring the maintenance of worker and community benefits than will the "objective" conclusions of a purely academic exercise.

## **Baseline Development Indicators Research**

During the month of July, I was contracted by the Futures Fund, a CIDA executing agency, to design a methodology for collecting baseline data against which to measure the impacts of some twenty million dollars in small project grants aimed at ameliorating the effects of structural adjustment in Guyana. I took a participatory research approach to this design process, consulting with twenty six project holder groups, the NGO community in Guyana and the Futures Fund project officers in ascertaining appropriate methodologies, project evaluation procedures and indicators of project impacts.

The baseline research design (Attachment A) uses a household survey within an overall participatory research framework involving key informant interviews and household diaries. Committees made up of representatives of project holder groups in each community will undertake baseline data collection and project evaluations for their own projects with the assistance of a three person research team, which will provide interviewer training, conduct key informant interviews and perform data entry and analysis.

My experience with the industrial social welfare benefits research influenced my design of the baseline data

collection methodology in several ways. First, I recognized that members of project holder groups could be as effective and unbiased as members of the academic community in conducting interviews. Also, members of these community groups are more intimately familiar with their communities' needs and dynamics than any outsider, and can thus provide significant inputs regarding how to measure project impacts.

Finally, the insertion of a positivist based household survey in an overall participatory framework seemed more responsive and understandable to community groups than an overall positivist design with participatory elements. In fact, I met with two community groups which had undertaken household surveys as part of their needs assessment and project design process. The fact that the questionnaires used seemed intentionally designed to lead interviewees toward specific development priorities does not detract from the groups' awareness of surveys as a tool for gathering information.

Meetings with twenty six project holder groups reenforced some of my preliminary design concepts while leading to the rejection of others. For example, most groups confirmed my feeling that few interviewees would provide reliable income information, and that relative

wealth could best be measured by questions regarding consumption patterns. Most groups also agreed with my assessment that interviewees would be more willing to cooperate with someone from their own community than an outsider.

On the other hand, my initial inclination to use only female interviewers and interviewees to gain more relevant information regarding household nutrition, education and health than would be provided by male heads of households was rejected by most project holder groups. The compromise in this case was to specify that at least one of each group's two representatives is to be female. Although some women's groups have received project funding, most groups have predominantly male membership. It is hoped that this stipulation will result in gender parity in most of the community research committees.

Though project holder groups provided a great deal of input to this research design, the design process was not truly participatory in the sense of belonging to the group membership. I was contracted to design a process which would answer certain questions for CIDA, and thus the objectives of the research were dictated from outside Guyana. Yet my goal was to design a process which would

strengthen and empower project holder groups as much as possible while providing the information CIDA needs to evaluate the Futures Fund programme.

Baseline data collection and project evaluation are unlikely to take place without some outside impetus, yet these processes can provide important information to project holder groups, especially those which go on to design and implement further development initiatives in their communities. Most groups see the project cycle as completed at the end of the implementation phase and have not considered the benefits of project evaluation and the application of learnings to subsequent undertakings.

As in many participatory research projects which involve outside facilitators, some balance points must be established which are comfortable to the contracting agency (Futures Fund), the research team and the project holder groups. These balance points can be established only as the work progresses and trust is built among the three groups, and will determine whether project holder groups or Futures Fund exercise more or less control and ownership over information, what use is made of the data collected and how the work is actually carried out. Many of these factors are likely to vary according to the race, gender mix and urban/rural location of the project holder groups.

Facilitating the establishment of these balance points will require a great deal of sensitivity on the part of the research team.

Ideally, this team would function as a human resource pool which would provide expertise in research and interviewing methodology to strengthen project holder groups' own research initiatives. In reality, this group will provide much of the impetus and direction to these groups, most of which have never carried out a data collection or project evaluation exercise. To effectively facilitate these processes, the research team must itself be balanced in terms of gender, race and fields of expertise.

## **Participatory and Positivist Research: The LDC Perspective**

This chapter sets out a theoretical framework for the combination of positivist and participatory research methodologies and illustrates these principles with examples from the two Guyanese research experiences. It is my view that very few research projects, especially in the social sciences, are purely participatory or positivist. I believe this contention is amply supported by the following "objective" analysis.

Positivist research methodology has been the standard approach in most areas of research throughout the twentieth century. The social sciences have often attempted to fit their researches into the dominant paradigm of objectivity and replicability in order to gain credibility and the status of true sciences. Similarly, many researchers have adopted positivist methodologies in their investigations of both physical and social phenomena in less developed countries.

Research can be defined as, "The systematic collection and interpretation of data to answer a certain question or solve a problem." (Brownlee, 1992). This definition, with which both positivist and participatory researchers can be comfortable, underlies the following analysis. It applies

equally to pure and applied research and to the more subjective and action oriented approaches used at the community level.

Today an increasing number of researchers in developing countries, along with some funding agencies, are moving toward more participatory approaches to research. Canada's International Development Research Centre (IDRC) has, since its inception, concentrated on programmes initiated and conducted by researchers from less developed countries. IDRC is currently moving toward funding programmes of a more participatory nature, which involve multidisciplinary teams (Wiltshire, 1992).

The reasons for this trend are many and varied: participatory research tends to decentralize knowledge and power, empower grass roots movements and lead more directly to concrete results than positivist research. Increasingly, researchers of both schools are coming to recognize that the objectivity upon which the dominant paradigm is based is virtually impossible to achieve.

Most developing countries have no tradition of positivist research. Where experimental and sample survey research is being carried out, it is either based in a colonial heritage or initiated by institutions in the North.

Participatory research methodology, on the other hand, was developed in Latin America and Asia, partly in response to incompatibilities between positivist research principles and the cultures and perceptions of the South. Thus the following comparison of positivist and participatory principles, taken from a Southern perspective, favours participatory approaches. This is not to say that positivist methodologies have no place in developing countries, or indeed within research programmes set in a participatory framework.

A central principle of participatory research is that it places control of the research process and results in the hands of the people most affected by the process (Tandon, 1981). Positivist research tends to produce results which are inaccessible to the majority of stake holders; reports are held by the universities, corporations or institutes which commissioned the research, and the language of these reports is often incomprehensible to the people upon whom the research was conducted.

The involvement of a wide range of stake holders in the design and conduct of participatory research ensures that studies focus on the problems and concerns of the users of the systems being researched. When the research agenda is set by outside bodies and funding agencies, the process

tends to serve their needs, often at the expense of the subjects of the research. The valorisation of indigenous forms of knowledge and the ownership of research results and processes underlies the empowerment principle of participatory research.

In the case of the industrial social welfare benefits research, the university researchers have no intention to distribute reports or findings to the employees who conducted the majority of interviews in Linden, though they have expressed interest in this information. The findings will be distributed to unions and management, who may or may not disseminate the information to the rank and file. Copies of the research reports will also circulate in government and academic circles, and may have an effect on policy.

In any case, it is quite clear that the ownership of knowledge will remain in the hands of the educated and empowered segments of society. Even in the community meetings, which are designated in the research design as participatory elements, academics are simply using participatory methods to obtain information from members of community groups which serves their own research purposes.

In the baseline data collection process, representatives of community groups will have a degree more control over the data collected and its uses. Still, the research has been initiated by an outside agency, and must serve their information needs. As in many participatory research exercises, there will be trade offs between the interests of community groups and the agencies which control funds. It is hoped that placing the project evaluation function in the hands of the community research committees will strengthen and empower these groups through their own uses of the research results.

Participatory research processes are considered incomplete unless an action phase results in some concrete change in the researchers' circumstances. Though applied research assumes some improvement in industrial processes or the transfer of technology, recommendations are often not implemented if the end users of the research results have not been directly involved in the study (UNCTAD, 1990). It is generally assumed that pure research is intended to add to the body of knowledge in a field rather than lead to any concrete activity.

Though the industrial social welfare benefits research is set in a positivist framework, researchers foresee concrete results from the research in the form of organized

labour's empowerment in the struggle for the maintenance of their members' benefits. This activity is seen as distinct from the study's influence on company and national policy. Yet the university researchers, in an attempt to maintain the appearance of objectivity, have limited the unions' inputs in defining the information needed to carry on this struggle. Thus the action phase is more implied than designed into the study, and opportunities may be lost to strengthen the unions' hand in future negotiations.

Positivist research methodology propounds an objectivity by which every phenomenon can be accurately measured and the measurements replicated in subsequent studies, at least statistically, if not physically. Yet individual researchers have their own interests and biases, which intentionally or unintentionally influence the conduct and results of their research. These vested interests can lead to the falsification of research results (Soto, 1993) or a more subtle shift in perception in which specific viewpoints are either overemphasized or ignored in the research.

Participatory research recognizes the subjectivity of individual researchers, and preconceived notions and biases are set out in the initial research design so that subsequent users of this information can be aware of the

perceptual viewpoint of these investigators. Since the research is designed to involve a wide range of stake holders, it ensures that a variety of views will be heard in the research process, and that the team must synthesize solutions to problems which answer as many individual concerns as possible.

The possibility of university researchers intentionally or unintentionally biasing the results of the industrial social welfare benefits research has been mentioned. In the baseline data collection research, it is assumed that project holder group members will naturally be inclined to see their own groups' projects in a favourable light, and thus may render a more positive evaluation of their projects than would an outside agent. The establishment of community research committees made up of members of several project holder groups is designed to provide a degree of balance, as committee members will be involved in the evaluation of each others' projects. The functional word in this description is balance, rather than objectivity; the evaluation of what constitutes a successful project is quite subjective and best left for the community members most effected to judge.

The educational aspect of participatory research is not seen as operating from the top down. The knowledge and perceptions of the subjects of research, the researchers

themselves being included in this population, is valued and used as inputs to educational programmes directed at a wide spectrum of actors, from peasants to government officials. Positivist researchers, if they assume an educational function to be part of the research process, generally see the flow of knowledge as being from the university or research institute to an uninformed populace.

The baseline data collection process and subsequent project evaluations are designed to valorise local perceptions of what constitutes a successful project. The development literature is all too full of examples of successful projects which have ruined a lot of people's lives. There is thus great potential for fund administrators to learn from programme beneficiaries what the complete range of project impacts are.

In the industrial social welfare benefits research, the potential for university researchers to learn from the Linden interviewers was great. These individuals have lived their whole lives in Linden, and know the intricacies of the bauxite company, union and community interrelations inside out. One aspect of this learning process was a debriefing session, in which the university researchers sought to record information which the Linden interviewers had gained informally through the interviews, information which emerged

spontaneously, but which the standard questionnaire was not designed to capture.

Often positivist research instruments, such as questionnaires and interview forms contain open ended verbal questions which are not amenable to quantification or statistical analysis. Yet these data are collected and analyzed using qualitative methods and the results incorporated into reports along with the studies' quantitative data. Participatory research tends to focus more on qualitative data, and sets out methods of analysing and interpreting such data and integrating qualitative and quantitative data so that reliable, if not replicable, results are obtained.

The industrial social welfare benefits interview questionnaire contained three open ended questions, whose responses were coded and entered into the data base as quantitative data. Yet when the Dalhousie research directors visited the project, their interest was primarily in the verbal responses to these open ended questions, which tended to give a dramatic impression of the attitudes and feelings of the interviewees. It is difficult to assess how much information is lost in reducing a paragraph of a bauxite worker's feelings to a single digit.

Participatory research is often multidisciplinary, involving specialists in several relevant areas, as in the case of the Rapid Rural Appraisal approach, where research teams consist of farmers, extension workers and representatives of the agriculture ministry. The vertical organization of universities and research agencies does not facilitate the formation of multidisciplinary research teams. Doctors, social scientists, economists and political scientists all have their own jargon, which may be incomprehensible to their fellow researchers. The necessity to overcome a language barrier and master the concepts, methodologies and technology of another discipline deters many potential research partners from joining a multidisciplinary team.

The community research committees set up to collect baseline data and evaluate Futures Fund projects will be made up of a wide range of individuals, from professionals to labourers to small business persons. The potential for these individuals learning from one another and from the successes and lessons on each others' projects is enormous. Fledgling groups which have come into existence to implement the project being evaluated will learn from the experience of more mature groups, and PTA members will learn of the concerns of agricultural co-ops. A key consideration in this process will be to ensure that the committee members

disseminate their learnings to the general membership of their groups.

A problem which extends across most academic disciplines is that the end of the research process is seen as the publication of results in some prestigious international journal. These journals are seldom read by policy makers in developing countries, as they are often unfamiliar with the jargon used. Thus much research in technical fields and the social sciences is not utilized in the formation of policy or solutions to local problems.

Like most Caribbean nations, Guyana struggles to be recognized in the international community, and the pressure to publish internationally is at least as great as it is in Canadian universities. Yet the genuine desire of the University of Guyana researchers to make a contribution to the welfare of labour will likely ensure that their research findings will not simply gather dust on university shelves. Several of these individuals are participatory researchers at heart, and most feel that the results of their efforts can make a real difference in the lives of the bauxite and sugar workers who are seen as fellow labourers.

The positivist based industrial social welfare benefits research continues to unfold with participatory undertones:

academics learn from labourers, unions are empowered by the research results, and workers will actively pursue better, or at least a similar level, of benefits. The one element of the participatory equation which has sadly been missed is the involvement of the full range of stakeholders in the design and control of the study.

Though the baseline data collection process was designed as a participatory research exercise, elements of the dominant paradigm will influence how the work is actually carried out. Ownership and control of the process and results will be shared between community groups and the executing agency. The research team will provide a great deal of impetus and organization to the data collection process. And very likely, all parties to the research will conspire in the conclusion that community group members have more to learn from "experts" from Georgetown and Canada than vice versa.

Though beliefs in dominant and alternative paradigms are strong and the merits of each are hotly argued in academic circles, researchers, especially those working in mixed cultural contexts, tend to do what works. Participatory researchers get a bit objective and even controlling at times, and positivist researchers have been known to relax their objectivity when off campus. In the

end, conclusions are drawn, based on the very best of our humanly value free expertise, and only the purists get vexed if we borrow a few tricks from the other team's bag.

## Conclusions

Must positivist and participatory research methodologies be mutually exclusive? Can these approaches not be combined in a research design where the individual strengths of each methodology are used to greatest benefit?

While there are iron clad strictures against the use of participatory methodologies in positivist research, current practice often sees positivist methodologies inserted into participatory designs (Pinto, 1985, Tandon, 1981, Whyte, 1981). In fact, examples of purely participatory research designs are difficult to find.

Though individual proponents of Participatory Research warn against mixing positivist methodologies into participatory designs (Tandon, 1981, Lincoln, 1991), the practice seems valid as long as the implications of one methodology are not extended to research phases using the other approach. Laboratory experiments and the use of random sampling, quantitative questionnaires and statistical analysis can be viewed as tools for participatory researchers to access needed information as long as these methodologies are constrained to discrete phases of the research which are recognized and documented as positivist

phases. Researchers must, of course, guard against the temptation to project positivist principles of replicability and the representative nature of random samples across a study which contains both participatory and positivist elements.

In practice, positivist researchers unwittingly incorporate participatory approaches into their designs. Despite strictures against collecting data prior to the setting out of research hypotheses, it is virtually impossible to formulate these hypotheses in a knowledge vacuum. Researchers commonly collect voluminous data through literature searches, key informant interviews and discussions with colleagues in a process of refining and reconstructing hypotheses quite similar to the dialectic process of emergent design in participatory methodology.

It seems improbable that any researcher who has the depth of interest in a topic to acquire funding and design and implement a research project will not hold strong opinions regarding the results of the process and the use to which they are put. That these opinions often influence the conclusions of research and move researchers to push for some concrete change in the circumstances being studied is hard to deny.

If the two methodologies are to be combined in a research design, the most valid pattern would be the use of positivist methodologies within an overall participatory research programme. In this scenario, the research belongs to the people who are studying their own areas of concern, so that the hypotheses and information needs are defined by those most affected by the studies. Research results would be defined as leading to some action which is aimed at improving the conditions of the researchers and the general populations they represent.

The empowerment principle of participatory research stems both from this action phase and the valorisation of indigenous forms of knowledge rather than those sanctioned by external agencies. Participatory research designs recognize the subjective nature of the world and people's perceptions, valuing these perceptions and indigenous forms of knowledge. It is a democratic process which can value a sugar worker's understandings and concerns and recognize that an academic or bureaucrat on the research team can learn from that person.

At the same time, the sugar worker can be empowered through the use of an academic's abilities in collecting, quantifying and analysing information. The important consideration is whether the academic serves the sugar

worker's needs through the research process or vice versa. The use of positivist methodologies within an overall participatory research design is more likely to serve the interests of the subjects of research than either methodology used alone.

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**Appendix A**  
**Community Meetings**  
**Group exercises**

**1. Graphic representation of community group relationships.**

**Objective:** To explore and describe group linkages and structures through a graphic representation of the interrelationships among community groups and with other bodies.

**Indicators to be identified:** Type and degree of group organization, number and types of linkages to outside bodies including LINMINE, GUYSUCO and their community support organizations, and the group's dependency on key group members.

**Participants:** Six to ten representatives of community groups, two facilitators and a recorder.

**Equipment:** A large table covered with newsprint or other drawing surface (Do not attempt to use a blackboard for this exercise, as it will create distance among participants.), felt markers of several colours.

The participants are seated around the table, introductions performed, and the purpose of the exercise described by the facilitator. The opportunity for groups to learn more about each other and their use of industry provided facilities, and the possibility of examining ways in which groups may work together should be mentioned.

Next, several community organizations are represented on the paper, eg. municipal government bodies, bauxite or sugar industries, schools, health facilities, community centres. Different categories of organization can be represented with different colours, shapes, etc. Distance or closeness of organizations should be represented, and some obvious linkages between groups drawn in.

In drawing linkages, use different colours to represent a type of linkage, eg: green = financial links, orange = shared members, blue = joint involvement in projects. Also, the recorder should write in the type of linkage above the line joining two organizations.

Next the facilitator asks representatives of one community group to indicate or draw in where his/her group fit in the diagram and what linkages exist. Continue this process with the other groups. Allow participants to draw linkages or the recorder may continue to do so.

Next, explore historic linkages which have lapsed, then move on to desired or possible future linkages. Add any additional organizations to the diagram as they are mentioned. As one participant mentions a type of linkage or new group, others may realize that their group has similar linkages and want to enter these. Do not limit participation; government ministries or international funding agencies may be added, and new types of linkages invented.

As activity slows, break into smaller groups with a facilitator assigned to each group. All groups should remain around the table or in sight of the diagram. The facilitators then ask each group representative to describe or draw on a separate sheet of paper the internal structure of her/his group. Examples could be given of hierarchical structures, strong leadership models and consensus style organization. The facilitator assists participants in drawing or depicting the way his/her group structure is envisioned.

Next refer to the linkages between the community group and other bodies and enter on the small diagram the person, people or office which carries out that linkage. A picture will emerge as to whether a few or many members are involved and whether the leadership takes a great deal of

responsibility or duties are spread among a broad cross section of the members. The facilitator can initiate discussion of these issues as the patterns become apparent and question whether others in the group might be able to carry out certain functions. This can lead into a discussion of the roles and responsibilities of specific group leaders and the general membership.

Next move back into the large group for a discussion of the different group structures and responsibility patterns. Facilitators should take care to limit any value judgements as regards the types of structure described. The purpose of this discussion is for participants to learn from one another the types of organizational structures and linkages possible and the strengths and weaknesses of each.

The facilitator should wrap up the discussion by asking what people learned and how they felt about the process. The individual group diagrams can form the basis of field notes on each group, with additional comments recorded from the large diagram and discussions. The exercise should provide a clear picture of the structure, linkages and level of involvement with industry provided facilities for each group.

Following the graphic representation group exercise, the same participants will be comfortable with each other and the research team facilitators and ready to explore other aspects of community group relations with company provided facilities.

## 2. Focus group exercise.

Remaining seated around the table used in exercise 1 or in an open circle, the community group representatives will be led in discussions of the issues listed below by a group facilitator. The session can be taped if participants are comfortable with this, or a recorder can keep notes. Facilitators must ensure that all group representatives have a chance to provide input, and techniques such as the talking circle can be used to ensure that everyone's views are heard.

The talking circle is a Native American custom in which the group agrees to allow one member exclusive right to speak without interruption. A shell, stone or other token is passed around the circle, and whoever holds the token speaks uninterrupted on the topic in question until he/she wishes to pass this right to the next person. The

facilitator introduces the topics and the token makes as many rounds of the group as necessary for participants to reach closure on the issue.

#### Topics for focus group discussions

a) Group formation: How did the community group come into existence? Did it come into being to implement a specific project? How was the group structure determined? What were the stages the group evolved through? What volunteer/self help projects have been undertaken?

b) Sustainability: What measures have been put in place to ensure the group's survival? What supports are needed to ensure the successful continuation of group activities? What training or HRD workshops would help the groups in their work? eg. small business management, skills training, co-operative or group management, agricultural extension.

c) Environmental impact: What effect does the industry's activities have on the quality of air, water, soils, vegetation or wildlife? Are these effects temporary or long term? Did the company cause people to move to/from an area? Were any agricultural chemicals, human wastes or industrial wastes generated or concentrated? What provision was made for these? Are company activities likely to result in soil

erosion due to construction or changes in agricultural practices? Has the company generated any positive environmental effects: clean ups, aesthetic improvements or side effects?

d) Gender impact: Do the company's activities have different effects on women than men? Has their presence shifted work roles? Are women doing more unpaid labour due to changes brought about by the industry? Has the company changed the pattern of family incomes? What effects has this shift had on women's roles? Do women and men have differential access to company provided benefits?

e) Development priorities: What are the development needs of the community? Which are most important/urgent? What inputs or structures will be needed to provide for these needs? How can the company assist community groups in undertaking development initiatives? What changes could be made to broaden company benefits in the community?

f) Company image: How is the company perceived in the community? Do residents feel dependent on the company: for employment? for community services? for development initiatives? What would happen if the company went out of business? What will be the effects of the company's privatization?

**Attachment 1**

**FUTURES FUND  
Baseline Data Collection  
July, 1993**

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## EXECUTIVE SUMMARY

During July, 1993, a consultancy was carried out to develop a baseline data design for Futures Fund projects. The baseline indicators selected are to provide a means of measuring the social and economic impact of Futures Fund projects and the effectiveness of the Fund in meeting the objectives of the programme. The specific objectives of the consultancy were:

To review data available in Futures Fund files to identify usable baseline data for the purpose of project monitoring and evaluation,

To conduct searches for baseline data from other sources and examine the appropriateness of such data,

To design methodologies and research instruments for gathering data to fill any gaps in the existing data,

To recommend schemes for analyzing and presenting existing and collected data as inputs to monitoring and evaluation processes.

In carrying out this consultancy, meetings were held with representatives of international NGO's, Futures Fund project holders, Government of Guyana Bureaus and the University of Guyana. Indicators were identified both in Futures Fund files and in studies carried out by other agencies which can be used in measuring the effects of projects funded. Yet much of this data is too general and broad based to allow for the accurate measurement of programme impacts and appropriateness. Thus a data collection methodology was developed to collect baseline data from project holders to be used in the programme evaluation process.

This data collection methodology will involve the project holders themselves in a tripartite research programme using interviews of key informants, a survey of participant households and in depth case studies. This participatory research process will empower and strengthen the project holder groups and further develop the linkages among community groups in each community where Futures Fund projects have been initiated. The data collection methodology was developed with the participation of twenty six community groups currently implementing projects.

The project holders surveyed during the consultancy expressed a strong interest in being involved in the project

evaluation process. They suggested that committees made up of representatives from each project holder group in their community carry out the baseline data collection process after attending a training programme in interviewing techniques. These committees would then be involved in the evaluation of each committee member's project with the guidance of an independent project evaluation team.

#### OVERVIEW

In order to become familiar with the overall objectives and progress of the Futures Fund in its first two years of operation, the consultant reviewed the programme's Inception Report and quarterly reports. Referring to the Project Design Logical Framework, it is understood that the consultancy was not intended to provide baseline data relating to the import and distribution of fertilizer, overall increases in food production resulting from fertilizer imports or the reduction of balance of payments deficit resulting from the project. These indicators should be readily available from the Ministries of Finance and Agriculture and the Bureau of Statistics.

The consultant has focused on identifying indicators against which to measure the rationale, effectiveness,

efficiency, impacts and effects of development initiatives funded from the proceeds of fertilizer sales. Again referring to the Project Design Logical Framework, this study sets out to provide objectively verifiable indicators for use in answering the following broad questions:

Were the designated target groups reached by the programme?

Were the living standards of project holders improved?

Were the project holder groups strengthened in the process?

Indicators and procedures were identified to determine whether the Fund is answering the needs of specific target groups which are vulnerable to the effects of structural economic adjustment, notably disadvantaged urban and rural groups, women and children and residents of depressed hinterland communities.

A community household survey will be carried out to provide an indication of the impact of projects on employment, economic prosperity, access to services and infrastructure improvements. Measurement of the environmental impacts of projects is also essential to the

evaluation process, and indicators of these effects have been identified.

Central to the approach of Futures Fund is the strengthening of community groups. Qualitative indicators for determining whether this has taken place have been identified as a basis for identifying changes in group structure and organization.

The project holders saw the value of their members being involved in every step of the project cycle, from design through implementation to evaluation and the application of lessons learned to future project designs. This participatory baseline data collection and project evaluation approach fulfills the Futures Fund mandate of strengthening community groups through each phase of the project cycle.

#### Indicators Available in Futures Fund Files

In the Futures Fund office, a review was conducted of reports and files relating to active and completed projects, those under appraisal and applications which had been rejected or had lapsed due to lack of follow up on the part of the requesting organization. Financial records, project files and the Project Approval Memoranda were reviewed in

search of data which would provide pertinent objectively verifiable indicators which could be used to measure the accomplishment of goals set out in the Project Design Logical Framework, ie:

- Improved living standards of target groups,
- Increased food production,
- Decreased levels of unemployment,
- Increased access by the poor to food and other basic needs,
- Improved income generation of target groups,
- Improved health, literacy and community involvement,  
and
- Infrastructure improvements.

The main source of appropriate indicators is the Project Approval Memoranda (PAM's), which set out the purpose and objectives of each project, major project outcomes and the numbers and categories of primary and secondary beneficiaries. The PAM's also contain some indication of the capacity of requesting organizations, an environmental impact assessment and gender analysis for each project funded, though in some cases, this information appears to be rather superficial. In a few cases, no indication of numbers of project beneficiaries is given, though the categories of beneficiaries are indicated.

These indicators provide baseline information against which to measure whether specific project objectives were met, whether the project will contribute to the achievement of CIDA development priorities and, in conjunction with financial information, how efficiently the project was carried out. These indicators will be most effective in determining the improvements in community infrastructure achieved by a specific project.

Identification of each project's primary and secondary beneficiaries will provide a basis upon which to evaluate whether specific target populations were reached by the interventions, yet additional information will be needed to ascertain whether project holders are indeed members of the identified target groups. Data contained in the PAM's also indicate what consideration was given to the projects' environmental impact.

The information contained in the PAM's regarding the capacity of requesting organizations to implement projects provides baseline data against which to measure the group strengthening impact of Futures Fund interventions. One would anticipate an increase in group membership and positive changes in the qualitative indicators of group capacity to undertake new projects. Among these qualitative indicators are the skills training and leadership abilities

of group members, involvement of membership in group activities and a sense of empowerment of the group to undertake development initiatives.

While the indicators available in Futures Fund files provide baseline data against which to measure the accomplishment of project and programme objectives, they do not allow for the quantitative measurement of project impacts and effects. Nor are they sufficiently detailed to identify project beneficiaries as members of specified target groups. Additional baseline data was sought to provide these indications.

#### Baseline Data Available from Other Agencies

The following organizations were consulted to ascertain what research and data collection had been carried out which could provide baseline data indicators relevant to Futures Fund projects:

Guyana Bureau of Statistics

Inter-American Institute for Cooperation on Agriculture

United Nations Development Programme

Unicef

Social Impact Amelioration Programme

University of Guyana Institute for Development Studies

Canadian High Commission

Caribbean Engineering and Management Consultants

From these sources, five data collection processes were identified which will provide timely and relevant baseline indicators against which to measure the focus and accomplishments of the Futures Fund programme:

The Household Income and Expenditures Survey of 7500 households throughout Guyana, carried out by the UNDP and Guyana Bureau of Statistics from May, 1992, through July, 1993, with reports scheduled for publication in October, 1993.

The Guyana Living Standards Measurement Survey of 1875 households throughout Guyana, carried out by the World Bank and Guyana Bureau of Statistics from May through July, 1993, with reports scheduled for publication in October, 1993.

The 1991 Population and Housing Census carried out by the Guyana Bureau of Statistics in May, 1991, with reports scheduled for publication in December, 1993.

The Guyana Rural Socio-Economic Survey 1993 of 700 households in coastal communities, carried out by the Inter-American Institute for Agricultural Co-operation and the International Fund for Agricultural Development early in 1993, with reports scheduled for publication in July, 1993.

Report on Socio-Economic Surveys of 3927 urban households carried out by the Guyana/IDB Rehabilitation Programme Unit during 1992, with reports published in May, 1993.

These studies provide an up-to-date measure of household income and consumption levels, poverty line indicators, housing standards, access to health, educational and community service facilities and agricultural productivity for all areas in which Futures Fund projects are being implemented. They thus provide data against which to measure the level of prosperity, access to services and productivity of project holders as compared to the populations of various regions or Guyana as a whole. These comparisons can accurately pinpoint whether Futures Fund projects are serving the targeted groups in terms of income, minority group status and access to services.

The results of these studies will not, however, provide a baseline against which the impact of Futures Fund projects on specific communities can be measured, as it is unlikely that a statistically significant number of project beneficiaries were interviewed in any community. In order to determine the effects of specific projects, information regarding beneficiaries' incomes, employment, housing, agricultural productivity and access to health, education and community services must be collected both before and after the project's effects take place.

#### Baseline Data Collection Methodology

The objective of the data collection process is to create a data base of indicators against which the rationale, effectiveness, impacts and effects of individual projects can be measured. The process should strengthen and be compatible with data identified in Futures Fund files and the results of surveys carried out by other agencies. Structures set up for the collection of baseline data should enhance the overall evaluation process.

Table 1 refers to the Project Design Logical Framework, and sets out the conditions which would indicate that the programme's goals and purposes have been achieved, the objectively verifiable indicators involved and the sources

of baseline data for each of these indicators. The baseline data collection process described below provides information relevant to nearly every objectively verifiable indicator listed, either as the sole source of data or in strengthening information available from other sources.

The conditions and objectively verifiable indicators set out in table 1 are grouped to indicate which of the three main evaluation questions they are designed to answer:

Were the designated target groups reached by the programme?

Were the living standards of project holders improved?

Were the project holder groups strengthened in the process?

The indicators selected and procedures developed for carrying out the three phases of data collection are designed as input to a participatory evaluation process. The interrelations among available and collected data and their use in the evaluation process are described in the section "Recommendations for Programme and Project Evaluation".

## Rationale

A participatory research approach to baseline data collection is seen as most appropriate as it involves the project holders themselves in the design and implementation of the study. These groups will be strengthened through the training received in interviewing and data collection techniques, by gaining a more in depth understanding of their group's living standards and potential project impacts, through involvement in all phases of the project cycle and by the strengthening of linkages with other project holder groups in their community.

The methodology described below has the additional advantages of preparing community groups to participate in the evaluation of their own projects and ensuring more efficient and accurate collection of information than if outside interviewers were used. A participatory process also holds the potential of empowering community groups to initiate further development activities.

Since both qualitative and quantitative indicators are to be collected, the study design uses a combination of data collection methodologies. The three methodologies involved in this design tend to compensate for inherent weaknesses in

any one methodology and also provide a triangulation capability to cross check data by two or more methods. The methodologies to be used are interviews of key informants, a survey of beneficiary households and in depth case studies.

The tendency of key informant interviews to focus on community leaders, who generally occupy high social positions in the community, is offset by the household survey's broad base of interviewees. The in depth case studies supplement the data collected through the household survey which, as it involves a large number of interviewers, must be kept fairly short and simple. The use of a survey and key informant interviews balances the fact that in depth case studies are too time consuming to cover a broad range of informants (Finsterbusch et al, 1990).

The embedding of participatory research methodologies in a positivist research design is generally unacceptable, though the use of positivist methodologies such as household surveys within an overall participatory design is common practice (Pinto, 1985; Tandon, 1981). Key considerations in the mixing of methodologies are the strict adherence to random sampling, pretested questionnaires and unbiased interviewing techniques within the survey phase of the data collection process. Researchers must also guard against the temptation to project the positivist principles of

replicability and the representative nature of random samples to other phases based in participatory research methodologies.

### Methodology

A three part data collection process will be carried out by an independent research team in conjunction with community research committees made up of representatives of each project holder group in a community. The community group representatives will collect the bulk of the data using pretested questionnaires and household diaries for the household survey and case study phases of the research respectively. The three member research team will conduct training programmes for community interviewers, facilitate group and research committee meetings and conduct semi structured interviews with key informants.

The following groups will be involved in the baseline data collection process:

Members of project holder groups. These people may or may not be the project's beneficiaries, but consist of the general membership and leadership of the community groups which have received approval for project funding.

Project beneficiaries and victims. These people are that segment of the community which have been impacted positively and/or negatively by the project.

Community research committees. These committees will be made up of two representatives of each project holder group operating in a particular community. In order to keep the committee size manageable, no more than four project holder groups should be involved in any committee. Community groups have expressed the desire to select their own representatives to this committee to be chosen from the general membership and group leaders. At least one of the two representatives should be a woman.

Independent research team. A three member team combining skills in programme evaluation, interviewer training and group facilitation. These people should have experience in conducting research using the three research methodologies and qualifications in the fields of economics, international development, sociological research, or social work. Team members should be familiar with structural adjustment programmes and their effects on the economics and social structures of a nation.

The procedures described below for the three phases of data collection are based on the understanding that baseline

data cannot be collected for projects which have been completed, as the majority of a project's impacts and effects may be felt during project implementation or shortly thereafter. By the same token, it is recommended that baseline data be collected only for those projects which are less than 75 per cent complete at the time of the study.

The procedures and instruments for collecting baseline data are, however, designed to be used in the subsequent evaluation process with minor modifications. The three phases of data collection can thus be carried out as part of a post project evaluation process for any completed projects which are selected for evaluation and will provide input to the rationale and effectiveness components of programme evaluation. They will provide a less reliable measure of project impacts and effects than if baseline data had been established prior to project implementation.

### Procedures

Prior to the initial visit of the research team to a community, project holder groups in that community should receive notification of the visit, a description of the data collection procedures and information regarding their roles in the process. The groups should be invited to select two of their members to serve on the community research

committee and given criteria regarding the qualities of effective interviewers and committee members. Dates should be established for the initial committee meetings and training sessions.

The first step in the data collection process is the integration of a community research committee as a working unit, the facilitation of group exercises by the research team and semi-structured interviews conducted by team members with representatives of each community group involved in the committee. These activities will be followed by a training program in interviewing and data recording techniques and key informant interviews with community leaders.

Group exercises include a graphic depiction of group structures and interrelations among community groups and other organizations and a focus group session centered on each group's experiences in designing and implementing their projects. These exercises are described in detail in Appendix A, while the information to be collected through small group processes and semi-structured interviews is listed in Appendix B.

## Household Surveys:

The research committee members will be responsible to conduct interviews with a selected sample their group's members and other project beneficiaries and victims. Committee members will be asked to provide the sample frames from which the interviewees are to be selected, and the research team will supervise the sample selection to ensure that it is representative of the target population. In some cases the sample frame will include only members of the community group in question, while in others it will include additional beneficiaries from the broader community.

In reviewing the beneficiary populations of active Futures Fund projects, it was concluded that a sample size of thirty informants would be adequate to provide statistically significant representation of most beneficiary groups. In cases where potential project victims are identified through the group processes and key informant interviews, an additional fifteen interviewees should be selected from these populations to ensure that such negative project impacts can be recorded in post project surveys.

Research team members will conduct a two day training programme in interviewing techniques with the committee, using the interview protocol in Appendix D and practice

interviews. A draft survey questionnaire is contained in Appendix C.

**Case Studies:**

Each committee member will be asked to keep a household diary to provide more in-depth data on household income and expenditures, health and nutrition and project impacts than can be captured through the household interview process. In addition, research team members will conduct semi-structured interviews with each committee member to round out the information collected in the diaries. The household diary is described in Appendix E.

**Key informant interviews:**

In addition to the semi-structured interviews with research committee members, the research team will conduct interviews with at least twelve key informants in each community from which these committee members are drawn. Key informants will be referred to the research team by research committee members, but should not be members or leaders of any of the project holder groups in that community. Suitable key informants include teachers, medical professionals, business operators, municipal government officials and members of any segment of the community which may be harmed by a project's impacts.

### Inputs from Project Holders:

Representatives of twenty six project holder groups provided input to the design of the data collection procedures and instruments. Specifically:

Most groups expressed a wish to be involved in the data collection process. With few exceptions, they felt that more accurate information would be given to a community group representative than to an interviewer from outside the community. Group representatives liked the idea of forming committees to evaluate one another's projects, but expressed concerns that individuals, rather than results, may be judged.

Several potential indicators were considered to be too sensitive, including respondents' age, marital status and household incomes. Most informants felt that interviewees would not give accurate answers to these questions and that they shouldn't be included on the questionnaire.

The only key piece of data in this category is household income, but informants suggested that a more accurate measure of relative wealth could be arrived at through a family's consumption patterns. This approach is in line with the recommendations of Guyana's Chief

Statistician, who recommends basing poverty indicators on consumption rather than income (Benjamin, 1993).

Many group representatives felt that women would have more accurate information regarding families' health, nutrition and educational patterns. This pattern would indicate the use of women both as sources of information and as interviewers. Though some men expressed reservations about women committee members, most representatives felt that the sex of interviewers for the household surveys was immaterial.

Several group representatives expressed strong views that a thorough training programme should be held to ensure the proper conduct of interviewers. They felt that full background information on each project should be presented to the committees and that the data gathering process must be totally open and transparent. These comments were made in the light of a general feeling that evaluators would seek evidence of wrong doing and shortcomings of projects, rather than ascertaining a degree of success.

Additional technical information derived from meetings with group representatives provided input to the design of procedures and instruments. For example, many people are not accustomed to ranking qualities on a scale of one to

ten, so this type of question cannot be used on questionnaires.

#### Scope and timing

In reviewing project and PAM files at the Futures Fund office, it was found that approximately sixty projects are active and less than 75 per cent complete at any one time and would thus be subject to an initial baseline data collection process. The Guyana Field Director and Programme Officers feel that the collection of baseline data would be a beneficial group strengthening exercise if undertaken early in the implementation phase of all projects approved after the initial data collection process is completed, and this approach is highly recommended.

It is estimated that the research team would require four days with each community research committee to conduct group exercises, key informant interviews, interviewer training and follow up. Committee members would conduct their household survey interviews and complete household diaries over a period of one month after training programmes were held. Research team members will pay follow up visits to each community research committee at the end of this time to collect questionnaires and diaries, debrief the data collection process and conduct case study interviews with

the community interviewers.

Initial activities of the data collection process include the recruitment and training of research team members, pretesting of the survey questionnaire and household diaries and the printing of these instruments. The timetable for the research team's three day visits with each of the twenty research committees would include:

One half day group exercises (see Appendix A),

One full day interviewer training using the questionnaire, interview protocol and demonstration interviews (see Appendices C & D),

One half day practice interviews and training on household diaries (see Appendix E),

One half day supervised interviews in the community,

One half day key informant interviews in the community.

The initial baseline data collection process would thus require four to five months to complete including the data entry and analysis process. The resultant data base will

include information from at least 1800 survey interviews, 120 household diaries and 360 key informant interviews. In the process 120 survey interviewers will be trained and twenty community research committees formed as key components of the subsequent project evaluation process.

#### Recommendations for Programme and Project Evaluation

In carrying out a Futures Fund Programme evaluation, three essential questions must be asked:

Were the designated target groups reached by the programme?

Were the living standards of project holders improved?

Were the project holder groups strengthened in the process?

The rationale, effectiveness, efficiency, impacts and effects of individual projects would also be examined as a project evaluation phase of an overall programme evaluation.

The research committees, procedures and instruments set up for baseline data collection were conceived and designed to provide extensive input to the evaluation process. A

post project repetition of the household survey will measure the impacts and effects of interventions on beneficiary groups. Additional key informant interviews will indicate the effects of project implementation on the organization and capacities of community groups. A comparison of social and economic indicators of beneficiary groups with those same regional and national indicators provided by the national census, the Household Income and Expenditure Survey and the Guyana Living Standards Measurement Survey will ascertain whether the specified target groups have been affected.

It is assumed that not every project funded will be examined in the programme evaluation process, as this would prove costly and time consuming. Yet the structures set up for baseline data collection allow for evaluations to be carried out for a large number of projects at a minimal cost. In addition, these evaluations will provide significant information to the community groups themselves and strengthen their capabilities to carry out further development initiatives.

The timing of project evaluations must take into account the time frame in which project impacts can be expected to be felt. The provision of industrial arts and

home economics instruction in a high school may have a long term effect on household incomes, health and nutrition, but these effects will not be felt until students graduate from the programmes and set up small businesses, gain employment or provide for their families using the skills learned in the high school courses.

Thus in many infrastructure rehabilitation projects, one would not anticipate a shift in social or economic indicators immediately at the end of project implementation. Here the questions to be answered concern whether the implementation was effective and efficient, whether designated target groups benefitted and whether the community groups were strengthened in the process.

It must be recognized that the baseline data collection and evaluation process may measure changes in household living standards and access to services which result from other causes than the Futures Fund project being evaluated. General economic trends and the effects of other development initiatives could affect the indicators being measured. In the case of simultaneous projects (eg. a SIMAP and a Futures Fund project) occurring in a community, it would be possible to distinguish the effects of each project on the indicators only if the two projects produce different and distinct benefits.

The baseline data collection structures and processes lend themselves to the evaluation of projects already completed at the time of the initial study. With appropriate modifications, the procedures can ascertain the effects of the project on the implementing group, the targeting of designated groups and, to a lesser degree, the social and economic impacts on households and the community.

In fact, any community research committee could perform a post project evaluation for one group's project while gathering baseline data for the other member groups. In this case, the latter groups would benefit greatly from their exposure to the former group's project evaluation experience by their participation in this process.

The participatory research processes for baseline data collection and project evaluation were designed to strengthen and empower community groups while providing reliable data to the funding agencies. To be fully effective, these processes must involve and educate the project holders at every phase from design, through implementation, to the evaluation of the evaluation process itself. In this way, local knowledge, values and modes of operation will fully inform the process of answering the questions essential to the programme evaluation process.

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**Appendix A**  
**Community Research Committees**  
**Group exercises**

**1. Graphic representation of community group relationships.**

**Objective:** To explore and describe group linkages and structures through a graphic representation of the interrelationships among community groups and with other bodies.

**Indicators to be identified:** Type and degree of group organization, number and types of linkages to outside bodies, degree of dependency on key group members.

**Participants:** Six to ten representatives of community groups, a facilitator and a recorder.

**Equipment:** A large table covered with newsprint or other drawing surface (Do not attempt to use a blackboard for this exercise, as it will create distance among participants.), felt markers of several colours.

The participants are seated around the table, introductions performed if necessary, and the purpose of the exercise described by the facilitator. The opportunity for

groups to learn more about each other and examine ways in which they may be able to work together should be mentioned.

Next, several community organizations are represented on the paper, eg. municipal government bodies, village captains, Futures Fund, local industries, schools, health facilities. Different categories of organization can be represented with different colours, shapes, etc. Distance or closeness of organizations should be represented, and some obvious linkages between groups drawn in.

In drawing linkages, use different colours to represent a type of linkage, eg: green = financial links, orange = shared members, blue = joint involvement in projects. Also, the recorder should write in the type of linkage above the line joining two organizations.

Next the facilitator asks representatives of one community group to indicate or draw in where his/her group fit in the diagram and what linkages exist. Continue this process with the other groups. Allow participants to draw linkages or the recorder may continue to do so.

Next, explore historic linkages which have lapsed, then move on to<sup>a</sup> desired or possible future linkages. Add any additional organizations to the diagram as they are

mentioned. As one participant mentions a type of linkage or new group, others may realize that their group has similar linkages and want to enter these. Do not limit participation; government ministries or bureaus may be added, and new types of linkages invented.

As activity slows, break into smaller groups with a facilitator assigned to each group. All groups should remain around the table or in sight of the diagram. The facilitators then ask each group representative to describe or draw on a separate sheet of paper the internal structure of her/his group. Examples could be given of hierarchical structures, strong leadership models and consensus style organization. The facilitator assists participants in drawing or depicting the way his/her group structure is envisioned.

Next refer to the linkages between the community group and other bodies and enter on the small diagram the person, people or office which carries out that linkage. A picture will emerge as to whether a few or many members are involved and whether the leadership takes a great deal of responsibility or duties are spread among a broad cross section of the members. The facilitator can initiate discussion of these issues as the patterns become apparent and question whether others in the group might be able to

carry out certain functions. This can lead into a discussion of the roles and responsibilities of specific group leaders and the general membership.

Next move back into the large group for a discussion of the different group structures and responsibility patterns. Facilitators should take care to limit any value judgements as regards the types of structure described. The purpose of this discussion is for participants to learn from one another the types of organizational structures possible and the strengths and weaknesses of each.

Additional topics for the open discussion following the graphic representation exercise:

Men's and women's perceptions of group structure.

Involving a broader range of members in linkages.

Appropriate group sizes for specific functions.

The dynamics of developing leadership skills.

The facilitator should wrap up the discussion by asking what people learned and how they felt about the process. The individual group diagrams can form the basis of field

notes on each group, with additional comments recorded from the large diagram and discussions. The exercise should provide a clear picture of the structure, linkages and level of involvement for each group, and may well indicate areas for potential strengthening.

Following the graphic representation group exercise, the same participants will be comfortable with each other and the research team facilitators and ready to explore the process of project design, proposal and implementation. The same questions can be explored in either the focus group process of key informant interviews.

## 2. Focus group exercise.

Remaining seated around the table used in exercise 1 or in an open circle, the community research committee members will be led in discussions of the issues listed in Appendix B by a group facilitator. The session can be taped if participants are comfortable with this, or a recorder can keep notes. Facilitators must ensure that all members of the committee have a chance to provide input, and techniques such as the talking circle can be used to ensure that everyone's views are heard.

The talking circle is a Native American custom in which the group agrees to allow one member exclusive right to speak without interruption. A shell, stone or other token is passed around the circle, and whoever holds the token speaks uninterrupted on the topic in question until he/she wishes to pass this right to the next person. The facilitator introduces the topics and the token makes as many rounds of the group as necessary for participants to reach closure on the issue.

### 3. Key informant interviews.

These interviews will take place after the above exercises when research team members are out in the community with individual research committee members conducting the initial survey interviews. In this case, committee members should be asked in advance to introduce the research team member to four or five community leaders, allowing time for appointments or arrangements to be made. These community leaders could be village captains, business people, teachers, clergy or professionals who are not members of the project holder group. If project victims have been identified, arrangements should be made to interview at least two members of this segment of the community.

The interviews will be unstructured, with perhaps a simple list of issues developed by the team member to ensure that all topics are covered. Notes may be taken or the interview written up as soon as possible after it occurs. The issues to be covered are the same as for the focus group sessions, though the perspective to be gained is that of an interested outside observer of the project planning and implementation cycle and Futures Fund's roles in that process.

## Appendix B

### Key informant interviews and focus groups

Issues for key informant interviews and focus groups: The order and emphasis of questions will vary according to whether the interviewee is a project group member or community leader not associated with any group.

a) Group formation: How did the project holder group come into existence? Was it preexistent or did it come into being to implement this project? How was the group structure determined? What were the stages the group evolved through? What other volunteer/self help projects have been undertaken?

b) Sustainability: What measures have been put in place to ensure that the benefits of the project will be sustained? What was Futures Fund's role in ensuring sustainability? What could go wrong and lead to loss of benefits? What is the projected time frame in which project benefits should be felt?

c) Group strengthening: What supports were/are needed to ensure the successful completion of the project? Which supports were provided by Futures Fund? By other agencies? Which were/are lacking? What training or HRD sessions were

provided by Futures Fund, other agencies, were lacking? eg. small business management, skills training, co-operative or group management, agricultural extension.

d) Project victims: Who was/will be harmed by the project? Did anyone lose employment, access to land, water or business opportunities? Was excessive competition created for markets? Was anyone displaced from their homes?

e) Environmental impact: Did the project harm the quality of air, water, soils, vegetation or wildlife? Were these effects temporary or long term? Did the project cause people to move to/from an area? Were any agricultural chemicals, human wastes or industrial wastes generated or concentrated? What provision was made for these? Is the project likely to result in soil erosion due to construction or changes in agricultural practices? Were there positive environmental effects: clean ups, aesthetic improvements or side effects?

f) Gender impact: Does/will the project have different effects on women than men? Has the project shifted work roles? Are women doing more unpaid labour due to changes brought about by the project? If the project has changed the pattern of family incomes, what effects has this shift had on women's roles? Have men replaced women in any of

their traditional roles or jobs?

g) Target groups: How many people benefitted/will benefit from the project? What is the social/economic status of the majority of beneficiaries? Is there a perception that certain individuals benefitted more than others / took undue advantage of project resources? What changes could be made to broaden the benefits in the community?

h) Development priorities: What are the development needs of the community? Which are most important/urgent? Was it appropriate that the current project took precedence over these other needs? How was the current project selected from among other development needs? What inputs/structures will be needed to provide for these needs? How can other projects build upon the current experience?

i) Group image: How is the project holder group perceived in the community? What is the perception of Futures Fund? How have/may these perceptions changed over the life of the project? What suggestions can be made for more effective interventions by Futures Fund and the project holder group?

**Appendix C**

**Survey Questionnaire**

### Household Survey Questionnaire

1. Interviewer's initials  2. Project number
3. Interview number
4. Is the head of the household  male  female
5. Does the head of household live with a partner?  y  n
6. What level of education has the head of household reached?  
 primary  secondary  advanced
7. What level of education has the partner reached?  
 primary  secondary  advanced
8. What is the family's race?  
 East Indian  Black  Amerindian  European  mixed
9. The house is made of  wood  masonry  make shift
10. How many rooms are in the house?
11. Do you  own  rent  Squat  Other
12. Is there land with house?  no  yes  acres
13. Is the home considered adequate for the family?  y  n
- 13a. If no, please explain \_\_\_\_\_
14. Where does the family get their drinking water?  
 Water piped into home  
 Stand pipe - distance from home  minutes  
 Creek or canal - distance from home  minutes
15. Quality of water  drinkable  should be treated

16. If a family member were sick or injured, how long would it take to reach the nearest medical facility?

hours  minutes.

17. Is that facility a:  clinic  hospital  doctor  
 dispensary  other

18. The facility is considered:

poor  adequate  excellent

19. How long does it take to reach the nearest:

a) Primary school  hours  minutes.

Facilities there are:  poor  adequate  excellent

b) Secondary school  hours  minutes

Facilities there are:  poor  adequate  excellent

c) Training facility  hours  minutes

Facilities there are:  poor  adequate  excellent

20. Is the school attendance of any child irregular because of:

distance to school  quality of services

21. Does the family have access to:

sports facilities  community centre  police  
 banks  stores  bus transport  library

22. Is the head of household currently employed?  yes  no

23. Is the partner currently employed?  yes  no

24. What proportion of the family's income is derived from:  
 employment     agriculture     business     crafts  
 remittances     forest products     other

24a. If other, please specify \_\_\_\_\_

25. If agricultural income, please indicate quantities grown of  
 rice     other grains     vegetables     provisions  
 peas     other crops, please specify \_\_\_\_\_

26. What proportion of your family's food supply do you grow?

27. Each month, how much does the family spend on:  
\$ \_\_\_\_\_ food  
\$ \_\_\_\_\_ clothing  
\$ \_\_\_\_\_ transportation  
\$ \_\_\_\_\_ entertainment  
\$ \_\_\_\_\_ medical services  
\$ \_\_\_\_\_ business or agricultural inputs  
\$ \_\_\_\_\_ drinks and snacks  
\$ \_\_\_\_\_ loan payments  
\$ \_\_\_\_\_ savings  
\$ \_\_\_\_\_ electricity and phone  
\$ \_\_\_\_\_ rent  
\$ \_\_\_\_\_ furniture and household  
\$ \_\_\_\_\_ domestic help  
\$ \_\_\_\_\_ Educational supplies and tuition  
\$ \_\_\_\_\_ Other, please specify \_\_\_\_\_

28. What facilities or services would help your family increase its income from business, agriculture or employment?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

29. What improvements would you like to see made in your community?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Appendix D

### Household survey interview protocol

The following protocol describes the questions and probing methods to be used in conducting interviews using the household survey questionnaire (see Appendix C). Interviews are to be conducted with an adult in each household, though not necessarily the head of the household. Interviewees will have been selected by a random sampling process, and may be members of a project holder group, project beneficiary or victim.

The interviewer should first introduce her/himself as a representative of the project holder group and describe briefly the purpose of the interview eg: "I am Carol James, and I'm a member of the Harper Valley PTA. We are conducting a survey in the community to help determine what effect our upgrading of the school facilities may have on parents, teachers and students. These interviews are strictly confidential; your name will not appear anywhere on the questionnaire. None of the questions are really personal, but you can refuse to answer any question you don't wish to answer. Are you willing to be interviewed?"

If the answer is positive, the interviewer should seek

to conduct the interview in a quiet, private place, away from distractions. If other adults can hear the interview, this may affect the way the person responds to certain questions. The interviewer will have precoded his/her initials and an interview number. The project number will be precoded by the research team, and is the Futures Fund three digit file number. Thus the interview begins with question number 4.

4. "Are you the head of the household?" If no, "Who is?" (marks gender) "And are you her/his partner?" (marks question 5) or, if interviewee is head of household:

5. "Do you live with a partner?" If unclear, "A partner is another adult who shares household responsibilities." Does not probe regarding marital status. (marks question 5)

6. "What level of education have you (or the head of the household) reached?" If unclear, probe: "Did you attend primary school?" "Did you attend secondary school?" "Have you had any advanced education?" (marks the highest level attended, regardless of whether the person completed that level).

7. Same as 6, but for the partner.

8. What do you consider your family's race to be?" If interviewee is confused, "We prefer to let people tell us, since we might think someone is East Indian, while they consider themselves to be of mixed race."
9. "Now I'd like to ask a few questions about your housing. Is your home made of wood or is it masonry?"
10. "And how many rooms are there in the house?"
11. "Do you own the house, or are you renting or squatting?"
12. "And is there any land connected with the house, other than a building lot?" If yes, "How many acres?"
13. "Do you consider the house to be adequate for your family?" If no, "In what way?" (records abbreviated answer, eg: size, run down, no electricity)
14. "Where does your family get their drinking water?" If from stand pipe, creek or canal, "And how long does it take to get to the stand pipe (creek or canal)?"
15. "And is the water drinkable as it is, or should it be treated or boiled?" (Does not ask whether they actually do treat or boil the water).

16. "Now, if a family member was sick or injured, how long would it take to reach the nearest medical facility?"

17. "And what is that facility?" If probing, read the full list.

18. "Do you consider the services at that facility to be poor, adequate or excellent?" Some interpretation may be necessary if the interviewee elaborates an opinion. The interviewer should check his/her interpretation with the interviewee: "Then could we say that the service there is excellent?"

19. "How long does it take (your children) to reach the primary school?"

19a. "And do you consider the facilities to be poor, adequate or excellent?" See question 18. Repeat questioning for secondary school and training facility.

20. "Do any of the children miss school because of the distance they have to travel or because the facilities aren't good?" (Ticks appropriate response only if one or more days per week are missed on average.)

21. "Does the family have access to: sports facilities? a

community centre? police services? a bank? stores? bus transport? a library?" (Tick only those facilities which are available in the community or within a distance which is considered reasonable to the interviewee.)

22. "Are you (the head of the household) currently employed?" Full time jobs or jobs greater than half time employment are ticked yes.)

23. "Is your partner (are you) currently employed?" See question 22.

24. "Can you tell me what portion of your family's income is derived from the following sources? employment, agriculture, business, sale of crafts, remittances from friends or relatives, forest products, any other sources." Reviews the list, and enters proportions as fractions or percentages. All sources should total 100 percent.

24a. If other sources of income, records the source.

25. "Does your family grow any crops?" If yes, whether for sale or home use, "What crops do you grow? And how much of this did you harvest last year?" Probes whether rice, other grains, vegetables, ground provisions, peas or other crops are grown.

26. "Do you grow any crops (use any or your crops) for the family's consumption?" If yes, "What proportion of your family's food would you say you grow?" Records as fraction or percentage.

27. "Now, I'd like you to tell me, as nearly as you can, how much your family spends each month on various purchases or services." Reads through the list, then returns to the top, recording amounts for each category. These expenditures may be sensitive information, and the interviewer should avoid any expressions which imply value judgement, eg: "As much as that?" or "So little?" Probing should be reserved until the list has been completed, when the interviewer reviews the amounts record, asking if the interviewee, upon reflection, would like to change any of the amounts.

28. "There are only two more questions, in which I'd like to get your opinions about improvements in the community. What facilities or services in the community could help your family to increase its income from business, agricultural or employment activities?" Records abbreviated response and reads this back to interviewee to ensure that the interpretation is correct.

29. "And what other improvements would you like to see made in your community?" See question 28.

**Appendix E  
Household Diary**

Please record all foods prepared for family members for one day each week for four weeks. Include snacks and meals taken outside the home, including school lunches.

Week one - Day \_\_\_\_\_

Breakfast	Lunch	Dinner	Snacks
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Week two - Day \_\_\_\_\_

Breakfast	Lunch	Dinner	Snacks
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Week three - Day \_\_\_\_\_

Breakfast	Lunch	Dinner	Snacks
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Week four - Day \_\_\_\_\_

Breakfast	Lunch	Dinner	Snacks
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Please record all household income from all sources each day for one month. Income which does not fit one of the categories should be recorded as other income.

Employment Wages	Agricultural Produce	Business Income	Sale of Crafts	Forest Products	Other Income	
1	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	1
2	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	2
3	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	3
4	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	4
5	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	5
6	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	6
7	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	7
8	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	8
9	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	9
10	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	10
11	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	11
12	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	12
13	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	13
14	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	14
15	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	15
16	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	16
17	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	17
18	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	18
19	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	19
20	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	20
21	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	21
22	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	22
23	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	23
24	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	24
25	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	25
26	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	26
27	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	27
28	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	28
29	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	29
30	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	30
31	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	31

Please record all household expenditures daily for the various categories listed. If an expenditure does not fit into any of these categories, enter that amount under other expenses.

	Food	Electricity	Fuel	Transport	Rent	Other	
1	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	1
2	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	2
3	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	3
4	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	4
5	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	5
6	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	6
7	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	7
8	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	8
9	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	9
10	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	10
11	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	11
12	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	12
13	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	13
14	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	14
15	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	15
16	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	16
17	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	17
18	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	18
19	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	19
20	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	20
21	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	21
22	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	22
23	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	23
24	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	24
25	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	25
26	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	26
27	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	27
28	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	28
29	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	29
30	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	30
31	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	31

On a daily basis, please record any family activity which is related to the project funded by the Futures Fund. For example, if the project involves agricultural support, record any farming activities, transport or sale of produce derived from the project. Also, please record any income from project activities, such as wages, sale of crafts or business income.

	Activities	Income
1	_____	\$ _____ 1
2	_____	\$ _____ 2
3	_____	\$ _____ 3
4	_____	\$ _____ 4
5	_____	\$ _____ 5
6	_____	\$ _____ 6
7	_____	\$ _____ 7
8	_____	\$ _____ 8
9	_____	\$ _____ 9
10	_____	\$ _____ 10
11	_____	\$ _____ 11
12	_____	\$ _____ 12
13	_____	\$ _____ 13
14	_____	\$ _____ 14
15	_____	\$ _____ 15
16	_____	\$ _____ 16
17	_____	\$ _____ 17
18	_____	\$ _____ 18
19	_____	\$ _____ 19
20	_____	\$ _____ 20
21	_____	\$ _____ 21
22	_____	\$ _____ 22
23	_____	\$ _____ 23
24	_____	\$ _____ 24
25	_____	\$ _____ 25
26	_____	\$ _____ 26
27	_____	\$ _____ 27
28	_____	\$ _____ 28
29	_____	\$ _____ 29
30	_____	\$ _____ 30

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