Empowerment Process Model for Implementing Participatory Strategies: Testing a Model That Describes the Context of Food and Nutrition Problems of Dominican Women

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(ABSTRACT)

In this participatory action research study, an Empowerment Process Model (EPM) was tested for the development of feasible action plans that addressed the priority concerns and the implicit food and nutrition problems of village families within their current socio-economic and political context. The Visual Verification Survey (VVS) was used to test the EPM results and its usefulness with similar participants. An EPM with 24 village women and a VVS with 68 village women were purposefully sampled in two locations in Dominica, West Indies, along with key informant interviews with eleven agency leaders to identify, prioritize, and describe their perceptions of villagers' life problems, the root causes of the problems, and solutions. This community-based approach used participatory non-written activities and locally developed visual aids to empower Dominican women to develop feasible action plans: a sewing workshop, how to start a business workshop, coffee house project, and women's group. Thematic content analysis and participatory activities were used to identify the themes and "give voice" to the participants' perceptions of top prioritized life problems: unemployment and economic issues, alcohol and drug abuse, lack of educational services, and teenage pregnancy. When specifically asked, the women identified basic health, food, and nutrition concerns, such as a steady income to buy food, a variety of foods to maintain health, and an accessible, clean water supply. The study revealed substantial differences in the rankings between the EPM and VVS women. The differences may have been influenced by the women's educational level, family situation, and previous involvement in community activities and leadership roles. Similar top prioritized root causes associated with many life problems by the women included lack of educational services, facilities and qualified teachers; and girls exchanging sexual favors for money or possessions. Overall, key informants and the Dominican women participants had similar perceptions of prioritized life problems of typical Dominican families. The results of the research demonstrated the need for site-specific programs and assessments using participatory non-written activities to engage a variety of women and to satisfy their diverse needs and locations. To become effective and sustainable, nutrition programming should be integrated into overall life problems.

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everyone, especially me to begin this educational journey. Another ending and a new beginning for both of us.

"Cool Running--May Peace Be the Journey."

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CHAPTER 1
INTRODUCTION

Never doubt that a small group of thoughtful committed citizens
can change the world: Indeed it's the only thing that ever has.
Margaret Mead

Rationale and Purpose of the Study

Nutrition and health professionals historically have relied upon the biomedical model in nutrition interventions, which has been described as paternalistic, prescriptive and victimizing (Achterberg, 1988; Fahlberg, Poulin, Girdano, & Dusek, 1991). Empowerment of participants is an emerging approach in both health education (Fahlberg, et al., 1991; McWhirter, 1991; Rappaport, 1987; Wallerstein, 1988) and nutrition education (Achterberg, 1988; Cassidy, 1994; Cerqueira, 1992b; Hertzler, Stadler, Lawrence, Alleyne, Mattioli, & Majidy, 1995; Kent, 1988; Murcott, 1992; Rody, 1988; Rusness, 1993). The question remains, "How can nutrition and health educators incorporate a theory of empowerment into their educational practices especially in assessments and programs?" This may be a challenge for many educators, who have traditionally presented "ready-to-wear" or prepackaged nutrition programs and solutions for individuals, families, and communities (Fahlberg et al., 1991) or who used nutrient-based approaches rather than community-based approaches (Cerqueira, 1992a).

Typically, international nutrition interventions are designed and implemented by using the knowledge, expertise, and quantitative data from local and international nutrition professionals and agencies (Achterberg, 1988; Hertzler & Wall, 1984). Usually "grassroots" persons or local client groups targeted for intervention are not asked to describe their nutrition and health concerns, conditions, and solutions before nutrition strategies are developed (Fahlberg et al., 1991). Limited time, lack of money, limited language skills, or ethnocentrism may explain why "grassroots" involvement is ignored (Srinivasan, 1992). Another possible explanation may be nutrition educators' limited experience in or knowledge about developing or using participatory strategies, which engage and empower people and communities (Berg, 1993; Rusness, 1993).

An individual's, family's, and community's capacities to adopt good nutrition and health practices are also influenced by the transnationalization of agriculture and food consumption, world and local politics, weather conditions, economic conditions, and infrastructure, especially for women in developing countries (Goodman & Redclift, 1991; Grossman, 1991; Pelto & Vargas, 1992; Srinivasan, 1992; Whiteford, 1993). These elements ultimately influence everyday living conditions, concerns, and priorities. For example, Dominica's former Prime Minister, Dame Mary Eugenia Charles, stated that during the past ten years Dominican food habits, health, and West Indian cultures have been both positively and negatively changed because of increased monocropping of bananas, improved roads, and availability of jobs that have increased the amount of imported foods (K. M. Stadler, personal communication, March 10, 1992).

Grossman's (1993) research on the island of St. Vincent, West Indies, also indicated that many young people were developing a taste preference for imported foods, thereby reducing their consumption of local foods.

Nutrition and health educators throughout the world are involved in developing and implementing educational intervention programs or behavior change strategies that are intended to optimize the health and quality of life of all people. Achterberg (1988) stated that a "nutrition educator is a person who deliberately seeks to progressively empower learners to act on food and nutrition-related issues such that the learner is gradually freed from the intervention and the materials" (p.240). She defined and emphasized the highlighted words: "deliberately seeks suggests a planned effort"; "progressively suggests that the effort is a step-by-step process with each step building on the previous one"; "empower means to enable people to act in a way consistent with their knowledge and beliefs" and "to free a person from the intervention' means that in the end, we do not want the learner to rely on us or on our learning tools for direction" (Achterberg, 1988, p.240). These words reveal a powerful message that challenge us to move towards a new direction in the nutrition profession.

In both my professional and personal journeys, I have embraced Achterberg's proposal of empowering disenfranchised people--especially women and children--in oppressive situations according to their defined needs and resources. The goal of my participatory action research was to use an empowerment process that contributes to a better quality of life of Dominican families by involving people in the decision-making process of having the disenfranchised identify their own solutions. My ultimate goal during the research project was to actively involve people by "giving voice" (Bertrand, Brown, & Ward, 1992) to their concerns, priorities, and solutions, which enable them to create a healthy lifestyle and positive quality of life for themselves, their families, and their communities (Cerqueira, 1990a; Colombani, Borrini, Meira de Melo, & Irshaid, 1992).

A paradigm shift in nutrition education is required to help create the nutrition educator's practice as defined by Achterberg (1988). This participatory action research project used qualitative methodologies (e.g., focus groups, interviews, participatory visual strategies, and structured brainstorming) to give voice to Dominican women's perceptions of their overall cultural concerns and solutions.

The purpose of this participatory action research project was to test an Empowerment Process Model with women food preparers in order to develop feasible action plans that addressed the priority concerns of village families within their current socio-economic and political context. An Empowerment Process Model with village women and a Visual Verification Survey with village women not selected for participation in the group process were used to describe and compare their perceptions of Dominicans' life concerns, priorities, and the root causes of their problems. The Visual Verification Survey (VVS) was used to test the results of the Empowerment Process Model (EPM) and its usefulness with similar participants. Key informant interviews also described agency representatives' perceptions of Dominicans' life

concerns, priorities, and the root causes of the problems, which were compared to the women's responses.

<u>Research Questions</u>

This study addressed the following research questions:

(1)   What were Dominican food purchasers' overall life concerns and priorities, health and nutrition concerns, and the root causes for these problems?

(2)   What feasible, self-reliant community solutions (action plans) did Dominican food purchasers perceive would positively impact their concerns and priorities?

(3)   What were agency professionals' concerns, priorities, and root causes for making village transformations when compared with women villagers' perceptions?

(4)   What different concerns and priorities were elicited by the empowerment process model and visual verification survey?

CHAPTER II
REVIEW OF THE LITERATURE

Literature relevant to this research project was drawn from a variety of sources. The review of literature included the following: (a) main concepts of liberatory pedagogy, feminist pedagogy, and empowerment theory; (b) basic tenets of participatory action research; (c) participatory rapid appraisal techniques; and (d) research related to perceptions, specifically techniques used to measure peoples' perceptions relative to health, food, dieting, and body weight.

Liberatory Pedagogy, Feminist Pedagogy, and Empowerment Theory

The art of teaching or pedagogy is not frequently studied by nutrition educators because their formal training focuses on subject matter rather than on how to teach the subject matter. Liberatory and feminist pedagogies have similar approaches or concepts that can be utilized by nutrition educators to empower learners. Both liberatory and feminist pedagogies focus on: (a) visions of a better world through social transformation and political commitment, (b) existence of oppression in a person's material conditions and as a part of their consciousness, (c) the power of consciousness-raising, (d) seeking justice and empowerment for humanization, and (e) learners who are both teachers and students (Weiler, 1991).

Paulo Freire's (1970) book Pedagogy of the Oppressed discussed the concepts of oppression, conscientization, and dialogue to reach the liberation goal of humanization. Liberatory pedagogy focuses on adult education as a form of "cultural action" that can be described by the term "conscientization." Conscientization is the ability of all people to be knowers and creators of their world where they are conscious of their oppression and have a commitment to end their oppression.

Freire believed that teachers and students have equal status. The learner's experiences and knowledge are shared and critically reflected upon in an attempt to demystify existing forms of false consciousness (Torres, 1992). Challenging the traditional pedagogy, Freire called it the "banking" concept of education. In the banking concept of education, knowledge is deposited into the student by the teacher. This form of education oppresses students and does not incorporate the student's knowledge and experiences of his or her environment. It also minimizes both creativity and the adaptation of knowledge into everyday practice. The teacher is seen as the expert thereby justifying his or her own existence.

Feminist pedagogy (Weiler, 1991) further defines and enriches three areas of Freirean pedagogy. First, feminist pedagogy uses consciousness raising with the emphasis on women's personal stories, experiences, and feelings for social transformation. Experience as the source of knowledge and truth is a fundamental tenet of feminist pedagogy. Second, feminist pedagogy identifies students and teachers as joint learners. Feminists also recognize the various forms of

power held by teachers relative to their race, gender, and historical and institutional settings. Third, feminist pedagogy highlights the question of differences of race, sexual preference, or class in the universal category of "woman."

The empowerment theory or approach is a collaborative process in which participants (learners) and a facilitator (teacher) reflect on their own experiences to discover whether they are or are not in control of their own lives within their existing contextual frameworks (Rappaport, 1987). Another definition of empowerment by Rappaport is "a mechanism by which people, organizations and communities gain mastery over their affairs" (McWhirter, 1991). It is an ongoing process of liberation to help people act with others to improve their quality of life (Fahlberg, et al., 1991). Many of the empowerment strategies such as dialogue, consciousness-raising, sharing experiences, and non-hierarchical relationships are taken from the liberatory and feminist pedagogues. Rappaport's second definition of empowerment, "a mechanism by which people, organizations and communities gain mastery over their affairs" is a core theory in the development of this research project.

Assumptions of empowerment theories were considered and incorporated into this participatory action research design: (a) it is a multilevel construct, (b) the historical context in which a person, program, or policy operates has an important influence on the outcomes of the program, (c) the cultural context matters, (d) longitudinal research or the study of people or policies over time may be necessary, (e) the choice of language is very important, (f) multiple and locally developed solutions are more empowering than a single solution, (g) the size of the setting matters, and (h) empowerment tends to expand resources (Rappaport, 1987).

The following questions guided the development of the empowerment process model and research methodology used in this research study. Also, nutrition educators are challenged to examine these questions within their own practices: (a) what are your positive and negative assumptions of people; (b) what types of language and terms do you use; (c) how do you define your role within a group as an expert or a collaborator; (d) what teaching, participatory methods, or strategies do you use that oppress or enhance learning and participation; (e) do you trust participants to identify their own perceptions, concerns, and realities, thus empowering them to develop their own strategies and solutions; (f) do you plan time to dialogue rather than monologue with participants; (g) do you have the ability and confidence to identify and share resources with participants; (h) can you develop a variety of programs collaboratively with diverse people in cultural environments; (i) are you willing to work with a smaller number of people for a longer period of time; and (j) are you committed to empowerment as a way of freeing people from continuous nutrition and health information and resources? (Fahlberg, et al., 1991 & Rappaport, 1987).

Empowerment approaches can be incorporated into participatory action research and how we teach, but they are also a way of living and viewing all people on a daily basis. Understanding and implementing liberatory and feminist pedagogies can not only empower our

profession as nutrition educators, but can also empower us as humans who are interested in humanization--Paulo Freire's ultimate goal.

Participatory Action Research

Participatory action research (PAR) is a form of action and applied research that employs a citizen participation driven model or a bottom-up approach rather than a professional expert model or a top-down approach (Argyris & Schon, 1989; McTaggart, 1991; Mulwa, 1987; Simonson & Bushaw, 1993). PAR methodologies place lay people and practioners in a prominent role as developers of the research process by having them identify the problem, collect and analyze data, formulate the conclusions, and implement a feasible action plan (Bailey, 1992; McTaggart, 1991; Whyte, 1989).

Kurt Lewin, originator of action research in the mid 1940s, used a multiple step process of planning, acting, observing, and evaluating to produce new knowledge and solutions for real world problems (Bailey, 1992; Chesler, 1991; McTaggart, 1991). Participatory action research re-emerged in the 1970s from grassroots development in developing countries in order to promote radical change to solve problems, which were influenced by economic, political, and social issues (Brown, 1993; Fals-Borda, 1987). It is an emergent problem-posing process that embraces local wisdom, respects experience-based knowledge, and builds the capacity and sense of empowerment of lay leadership (Chesler, 1991; McTaggart, 1991; Mulwa, 1987).

The participatory action research differs from traditional deductive research by incorporating these key elements cited by Chesler (1991), Greenwood, Whyte, & Harkavy (1993), and Sanchez & Almeida (1992). First, collaborative actions between the people or organizations and academic researchers are one focus of the research. Local people or organizations are not the subjects or objects of the research, but are co-researchers and co-learners throughout the process. Conversely, academic researchers reduce their professional monopoly by becoming co-learners, facilitators, and animators who build the capacity and empowerment of individuals and organizations. Second, research incorporates indigenous knowledge and appreciation of popular wisdom to improve collective lives. Third, multidisciplinary methodologies and theories are used to create relevant interactive process, which embraces complex, dynamic problems or issues that cannot be solved by the simplest model. Fourth, case-oriented activities employ various participatory methods to generate case by case theories. Fifth, emergent problem-posing processes use participatory methods in all steps of the research. And, sixth, scientific understandings are linked with social action.

PAR is practiced in many disciplines such as agriculture, education, health, housing, social work, and community development within developed and developing countries. Domestic organizations such as the XEROX corporation, the Amalgamated Clothing and Textile Workers Union, and the Philadelphia Public schools have used PAR to solve problems, discover new knowledge, and implement new actions with great success (Greenwood, et al., 1993).

Specifically, PAR methodology was used in the United States to empower local community-based consortium members in a metropolitan area, which was the primary outcome of Bailey's participatory action research (Bailey, 1992). Community surveys, interviews, participatory observations, and analysis of records informed the data collection and problem identification to develop the consortium. Regular meetings were held with the consortium to discuss and analyze the data.

Reardon, Welsh, Kreiswirth, and Forester (1993) used PAR to involve low income residents in a community development project in St. Louis. Key informant and household open-ended interviews were used to gather people's perceptions of their community needs. Residents were involved in analyzing the problems, interpreting the results, and designing community action plans. Capacity building for problem solving was a critical outcome of the research, where empowered citizens took ownership of their community projects.

PAR was also used in the small community of Oslo, Minnesota, to conduct an assessment of the perceived needs of local residents (Simonson & Bushaw, 1993). Several quantitative needs assessment surveys had been implemented by state and private agencies, which identified a deficit of services for young children and senior citizens. Subsequently, a participatory needs assessment was executed through community meetings, surveys, informal interviews, and an action research team. PAR revealed that the senior citizens did not perceive a need for more services and disagreed with earlier quantitative findings. It also revealed that the researchers, who were a part of the community, dominated the earlier process and did not allow true community participation. However, the process did enable senior citizens to give voice to their needs and concerns.

PAR has been utilized internationally as well. Examples of international PAR have focused on collaborating with workers on health concerns in Latin America (Laurell, Noriega, Martinez, & Villegas, 1992), landless peasants in Latin America (Fals-Borda, 1987), leaders from non-government organizations from the Northern and Southern regions on social transformation to promote sustainable development (Brown, 1993), urban professionals working as a team with community members in Mexico for 20 years (Sanchez & Almeida, 1992), and literacy programs for adults in Kenya (Mulwa, 1987). In general, similar participatory methods, such as interviews, surveys, community meetings, and group dialogue were used in the above examples. These studies embraced the principles of PAR and empowered persons to improve the quality of life for their families and communities.

PAR information is validated by and with group members or co-researchers through continuous multilogues and by using various participatory activities (Chesler, 1991). Consensual validation of participants' views has also been used where only the information recognized by the total group is utilized (Laurell et al, 1992). Correct selection of team members is also an important aspect of PAR to ensure valid results. For example, Brown (1993), working with non-government organizational leaders from the Northern and Southern hemispheres, revealed that each region had a different cultural definition of participatory action research. Northern

participatory activities focused on organizational leaders, whereas Southern participatory activities excluded elites and collaborated only with poor and oppressed populations. Thus, the type of participants interacting in PAR should be accurately defined and appropriately selected to ensure participation--not the illusion of participation--for research objectives.

Participatory Rapid Appraisal

Selection of appropriate, effective participatory methods or techniques is another important consideration in crafting participatory action research. Process techniques to collect information, empower persons, and build capacity in lay leadership includes qualitative research methods and participatory rapid appraisal or assessments. A toolbox of traditional qualitative techniques ranges from key informant interviews, focus group interviews, informal discussions, direct observations, systematic note-taking, and ethnographic techniques (Tolley & Bentley, 1992). Participatory Rapid Appraisal (PRA) tools range from participatory mapping of villages or bodies, verbal autopsies, visual rankings and surveys, time line analysis, and seasonal diagramming (Chambers, 1992).

Historically, PRA techniques emerged from Rapid Rural Appraisal used in rural agricultural development within developing countries during the 1970s. At the end of the 1980s, PRA had gained academic credibility to produce quick, valid, and reliable results in eliciting and understanding local needs and perceptions (Heaver, 1992). Rifkin (1992, p. 7) defined rapid appraisals as "any systematic activity designed to draw inferences, conclusions, hypotheses, or assessments, including acquisition of new information, in a limited period of time." Rapid appraisals that involved local people to identify their own problems and solutions expanded this approach, thus creating a new term called Participatory Rapid Appraisal (La Fond, 1992).

Strengthening the capacity of leadership in people and empowering communities to manage their own problems and solutions is a goal of all PRA techniques. For example, the Joint WHO/UNICEF Nutrition Support Programs cited the need to use PRA techniques as an objective for identifying and decreasing malnutrition concerns (Moneti, 1992).

Participatory rapid appraisals can be implemented in a short time with minimal cost. Information provided tends to be highly accurate. Validation of information is cross checked by using similar qualitative and PRA techniques to further explore a concept (Cresswell, 1992). For example, Francis, Devavaram, and Erskin (1992) cross checked visual cards of family details against a village mapping technique of family homes to verify family composition.

Triangulation techniques have also been used, which employ different methodologies, locations, or sources to validate information and permit a balanced perspective by researchers and participants (Heaver, 1992). De Colombani and associates (1992) also used field notes from direct observations and informal discussions to triangulate information and interpretations to understand primary environmental care issues in Brazil.

Focus groups and conventional survey methods have been combined to elicit qualitative and quantitative information and to validate the data. The focus groups elicited information to support and oppose the survey findings. The richness of the focus group data exposed cultural considerations, which are needed when planning health education programs. For example, Egwu (1992) used these methods in Nigeria to understand rural primary health care needs. The information from the focus groups and the surveys were compared and found to generate similar and complimentary findings. Glik, Parker, Muligande, and Hategikamana (1987) implemented fifteen focus group interviews and a ninety-one question survey with Rwandan mothers to understand their health behaviors related to malaria and diarrhea in their children. These methods compliment each other by describing the survey information and cultural implications.

Other PRA advantages include the increased potential implementation of action plans or solutions developed by local people and organizations rather than "interventions for outside experts." People are empowered to be self-reliant. Information reflecting current social, cultural, economic, and political issues is collected.

Potential disadvantage of PRA are professionals or researchers who do not give ownership and trust to local people throughout the entire process. Development of facilitation techniques, listening skills, group dynamics, and adult education skills may be needed by subject matter professionals. Also, all professionals practicing in the field will benefit from analyzing their attitudes, beliefs, and values which may influence their working with people from other cultures or socio-economic classes (Fahlberg, et al., 1991; Heaver, 1992; Rappaport, 1987).

PRA techniques have been implemented throughout the world to examine issues in health, nutrition, agriculture, education, food security, forestry, and gender. For example, body mapping has been used to discern women's understanding of reproduction and use of contraceptives in Zimbabwe (Cornwall, 1992) and in India (Tolley & Bentley, 1992). Heaver (1992) has used group interviews, verbal autopsies, and village mapping to understand Indian people's perceptions of their health and nutrition issues. This information was used to develop effective family planning, maternal, and child health programs for Indian families. In Somalia, the Save the Children organization collaborated with the Ministry of Health to develop an immunization program (La Fond, 1992). Focus group interviews were held with women of different ages to understand their perceptions and beliefs related to immunizations, health services, and sources of health information. Local officials, ministry workers, and community members were also asked similar questions through key informant interviews. Lack of trust in health services was identified as an important factor in the development of an effective immunization program. The majority of PRA techniques have involved people to help understand their complex health problems to effectively develop appropriate solutions.

In the end, PAR, which uses traditional qualitative techniques and emerging PRA techniques, embraces Paulo Freire consciousness raising and empowerment of persons trusting that what they live and know is real. PAR and PRA also captures Achterberg's (1988, p.240)

definition of a nutrition educator in the 21st century--"a person who deliberately seeks to progressively empower learners to act on food and nutrition-related issues such that the learner is gradually freed from the intervention and the materials."

Research Related To Perceptions

Many nutrition educators overlook the significance of cultural perceptions of food and of eating habits when planning behavioral change nutrition interventions (Murcott, 1992). It is important for the 21st century nutrition and health educators to understand people's cultural perceptions of food because of the increased diversity of the American population and globalization of world problems. Appropriate PAR methodologies and PRA process techniques can assist educators in discovering people's perceptions of overall life concerns and felt needs and collaboratively develop workable community solutions (Cerqueira 1992a; de Colombani, Borrini, Meira de Melo, & Irshaid, 1992).

Quantitative surveys and qualitative interviews have been the primary methodologies used to understand people's perceptions about nutrition and health. PRA techniques have not been reported as methodologies in traditional dietetics journals. Nutrition-related research using PAR methodology are categorized below into three areas for comparison: (a) perceptions about body weight and dieting, (b) perceptions about health-related issues, and (c) perceptions about food (Table 1).

Perceptions of Body Weight and Dieting

Two research articles used similar methodologies to report perceptions of body weight and dieting in two distinct cultures. In the Storz and Greene (1983) study, 203 rural and urban adolescent girls in the Philadelphia, Pennsylvania area to discover their perceptions of body size and fad diets. The young girls were given: (a) a questionnaire with outline drawings of five female figures, (b) a questionnaire to list adjectives to describe their own body image and to rank their perceptions of ten weight reduction methods or fad diets using a five-point scale, and (c) personal measurements of body size with comparisons to desired body weight.

The study revealed that one underweight figure was overwhelmingly selected as the ideal body size. Twenty-seven girls' actual body sizes were in the overweight category (above 20% of average weight), but only five of these girls perceived themselves to be in the overweight category. Overall, a significant discrepancy in perception of actual and ideal body size was revealed. The adolescent girls perceived fad diets to be most desirable.

Table 1

Summary of Research Studies

	POP. #	SEX/AGE	PICTURE	RANK
BODY WEIGHT PERCEPTIONS				
1. Philadelphia	203	girls; young	yes	Qx
2. Southwestern Am. Indians and Hispanic	310	m/f; age 8-77	yes	Qx
HEALTH RELATED PERCEPTIONS				
3. Am. & Caribbean Blacks (NYC)	416	male; college		Qx
4. Am. Black	22	female; age 18-40		I
5. Australia	874	adults		Qx-mail
6. Canadian Indians & Metis	22	adults	yes	
FOOD PERCEPTIONS				
7. Australia #1	481	m/f; 10 yrs.		Qx
8. Australia #2	580	m/f; 10 yrs.		Qx
9. Dieting Foods	374	m/f; college		Qx
10. Fiber Foods	635	adults		I
11. Dairy Foods	51	adults		Qx

Notes. Qx = Questionnaire administered directly to the subjects;

Qx-mail = Questionnaire mailed to subjects; I = Interview

Harris and Harris (1992) examined American Indians' and Hispanics' perceptions of body weight who lived in the Southwestern United States. Similar silhouette drawings used by Storz and Greene (1983) were enhanced to reflect cultural details such as hair, facial features, and traditional Indian clothing. A questionnaire asked five questions about the male and female drawings: (a) Who looks like most of the women or men you know, (b) Who is the best looking, (c) Who looks the healthiest, (d) Who would you like to look like (ideal body weight), and (e) Who looks the most like you? The data were collected in classrooms and at community health fairs from 310 men and women who ranged in ages from 8 to 77 years. Most men and women selected the heavier picture for the question, "Who looks like most of the women and men you know?" Older women choose heavier figures and children choose thinner figures for "the most like you" question. Both men and women scored "best looking," "healthier," and "ideal body weight" with thinner figures than the how "most men and women look like" and "most like you" questions.

Conclusions for both studies emphasized the importance of identifying people's perceptions about weight when developing an effective weight management program. Cultural adaptations of traditional clothing and cultural facial features were used in the pictures by Harris and Harris (1992).

<u>Perceptions of Health-Related Issues</u>

Health-related perceptions have been a focus of the Health Belief Model and the Protection Motivation Theory since their development (Prentice-Dunn & Rogers, 1986). Perceived risks and fears are examined with health practices or health threats from a slightly different perspective. Consequently, numerous articles have used this model and theory to look at nutrition and health related issues. For example, Simon and Das (1984) used a questionnaire with 416 American black and Caribbean black college students in New York City. A five-point Likert-type scale was used for 100 questions on venereal disease and sexual practices. The participants' cultural perceptions of risk of contacting venereal diseases helped educators develop an effective sex education program for the college.

Keller and Hargrove (1992) examined the factors that contributed to perception of health among 22 young black women. Open-ended questions were used in a taped interview session. Line-by-line transcription and analysis of the tape revealed that obesity was considered a cultural norm for these women. "Being overweight" was acceptable and pleasing to the opposite sex. Worrying was considered a negative aspect to good health.

Perceptions of external and internal influences and barriers impacting the fat and fiber in diets of Australians were examined by Smith and Owen (1992). Eight hundred seventy-four Australians responded to a 24-page mailed questionnaire. The questionnaire included four internal factors: (a) a food frequency checklist of 172 foods, (b) qualitative questions on food choices, (c) food preparation methods, and (d) health beliefs and expectations. Five external factors related to their perceived effects of health were examined: (a) smoking and alcohol, (b)

diet, weight, and exercise, (c) stress, (d) occupational and environmental exposure, and (e) not having a good doctor and family history of disease. Five barriers to eating a healthy diet were also examined. They were these: (a) food eaten by family and friends, (b) lack of money, (c) lack of time to cook, (d) lack of transportation or healthy food at the store, and (e) lack of label information and cooking skills. Results showed that people with positive personal beliefs about diet and health, fewer perceptions of external influences on food choices, and higher social status were found to have lower fat and higher fiber densities in their diets.

Another study of health beliefs examined 22 native and store bought foods used by northern native Canadian Indians and Metis (Wein, Sabry, & Evers, 1989). The Native Canadian study by Wein et al. (1989) was a good example of adopting a methodology to fit a culture with a high illiteracy rate or a different language from the interviewer. A pictorial format was used with this population because since many did not read or speak English. Participants placed each food picture on a Likert board scale. Two boards had boxes representing "very good for health" to "not at all good for health" or "dislike very much" to "like very much." Both the young and the old Indians and Metis preferred native foods over store bought foods. However, the young people were more skeptical than the older people about the health value of all foods.

Perceptions of Foods

Young people's perceptions of food were investigated by several groups of researchers, using different research methods. Worsley, Coohan, Baghurst, Peters, and Worsley (1984) conducted two exploratory studies of perceptions of foods with 10 year old Australian male and female students. The first study examined 481 children's beliefs and attitudes toward common foods and investigated possible gender differences. Two food belief instruments were developed after (a) observing children's eating behaviors, (b) talking to children about food, and (c) holding small group discussions. Both studies used a similar form which listed eleven food attributes such as: "it tastes nice," "it looks horrible," "it smells nice," "it gives you energy," "it's fattening," and "it's good for me." Each child used a response scale (0 = No, it isn't; 1 = Yes, a little; 2 = Yes, a lot) to express their perceptions of 14 foods.

Conclusions from the first study indicated that boys and girls reported different perceptions for certain foods especially related to the goodness of food and the taste preference of foods. For example, boys perceived fruits and vegetables to be more fattening than the girls did.

A second study, one year later by Worsley et al. (1984) used a similar, expanded questionnaire to examine 580 children's perceptions of foods and the effects related to social status of ten year old children. General conclusions showed major differences in perceptions of low, middle, and high social status groups. For example, low social status children misapplied the concept of "energy rich" foods as compared to the high social status children.

Both studies recommended that further research be carried out to examine perceptions of food relative to gender, social status, and other cultural factors. These findings emphasized the need to identify people's perceptions before developing effective nutrition education programs. Again, these studies reconfirmed the need to incorporate people's perceptions into the research process.

Sobal and Cassidy (1987 & 1991) conducted two studies on perceptions of dieting foods and of fiber in foods. Three hundred seventy-four male and female college students completed an open-ended questionnaire after participating in unstructured interviews answering these questions:

If you have to name some dieting (weight loss) foods, what would they be?

Are there any foods you regularly consume because you consider them dieting foods?

What makes a food a dieting food?

Results indicated that fruits and vegetables were the most frequently named diet food with grapefruit ranking highest. Grain products were not mentioned as a dieting food. Yogurt was the only dairy product mentioned as a dieting food. These perceptions substantiated the concern about low calcium intake and other nutrient deficiencies. They also indicated specific needs for educational information and beliefs dieters have about food.

Sobal and Cassidy's (1991) study looked at the public's perceptions of fiber in foods. This study was a part of a larger project which used triangulating methods of open-ended interviews; short, focused interviews; and mailed questionnaires. This research project reported on the short, focused interviews with 635 adults from the Washington, D.C. and Baltimore areas. A trained interviewer asked three questions in a face-to-face interview:

(1) Please name four foods that are high in fiber?

(2) Please name four foods that are low in fiber?

(3) What makes a food a high-fiber food?

In interviews 90% of people could name one high-fiber food with lower percentages of people naming additional high-fiber foods. The researchers reported that it was easier for respondents to name high-fiber foods than low-fiber foods. Many responses about fiber appeared to be related to advertisements in the mass media.

Research on consumer perceptions of dairy foods was conducted by Bruhn and Schutz (1986). They used a questionnaire to examine 46 foods related to 45 uses or attributes. Fifty-one people used a rating scale for each food and uses from 1 (never appropriate) to 7 (always

appropriate). Men and women had similar perceptions of dairy products and their nutritive content. There were some misconceptions about nutrition labels such as imitation and low-fat.

<u>Summary and Evaluation</u>

The research studies focusing on perceptions in the literature review are summarized in Table 1. The table contains information from the studies on: (a) culture, topic and population references, (b) number of subjects in the study, (c) age and gender of the subjects, and (d) research methodology used which were limited to pictures or visuals, questionnaires, and interviews. Reevaluation of this information in the form of a comparison table guided the clarification of various methodologies available for developing this research project.

All of these research studies were conducted in the United States, Canada, or Australia. The research methodologies were limited to questionnaires, interviews, and a participatory technique using pictures. A Likert scale or a five-point Likert-type scale was used in all of the methods. Five-point scales are a good method to help people rank their perceptions. Open-ended questions were the second most frequent method used in questionnaires and interviews to elicit people's perceptions.

The three studies that used cultural adaptations to identify the cultural and external influences and barriers were recent studies from 1989 and 1992. Cultural awareness and sensitivity has become an important consideration in education and in our global society. Therefore, more emphasis on people's perceptions is required for appropriate interventions and appreciation of cultural diversity.

CHAPTER III
METHODS

       This chapter establishes the framework and methods for the research and includes the following sections: (a) island collaboration for empowerment, (b) site selection, (c) sample description and sample selection process, (d) data collection procedures (key informant interviews and the Empowerment Process Model), and (e) data analysis process.

Island Collaboration for Empowerment

       Collaboration with Dominicans for the empowerment of women was the cornerstone of the design and implementation of this research. Multiple collaborative stages were essential in the execution of this participatory action research. To accomplish collaboration, I interacted with many government, non-government organizations, and community leaders throughout Dominica to identify the appropriate citizens for the research coalition and to select the two locations to conduct the research project. Meeting and talking with Dominicans throughout the island was time consuming. Professional and grassroots key informants participated in discussions during my initial trips to Dominica in 1992 and 1994. Between November 1995 and May 1996 I spent seven months collecting the research data.

       Reinharz (1992) acknowledged that researchers in participatory projects need to invite local people to design the study. Three principal leaders with the Ministry of Health, Ministry of Community Development and Women's Affairs, and Small Projects Assistance Team (SPAT) were invited to participate in the research project during the summer of 1994. They were Jacqueline Prevost, Head Nutritionist with the Ministry of Health, who manages all nutrition assessments and interventions on the island; Augustus Austrie, northern District Community Development Officer with the Ministry of Community Development and Women's Affairs, who develops and implements community projects; and Jacinta Bannis, Assistant Program Director with SPAT, who initiates and implements programs to empower female headed households.

       A research coalition was created during the key informant interviews described below. These interviews, especially those with the Ministers and directors within the Ministry of Health, the Ministry of Community Development and Women's Affairs, and non-government organizations (SPAT), ensured that these leaders endorsed the research project and the participation of their employees. Also, the leaders gave suggestions on which locations would be good research sites and made other valuable suggestions. All interviewees requested a final copy of the research report to inform their work.

       The research coalition consisted of government and non-government representatives, nutrition professional, community development officers, village leaders, participants, recorders, and co-facilitators for the participatory activities. Collaborators were Jacqueline Prevost, the Head Nutritionist; Augustus Austrie, District Community Development Officer in the Carib

Territory; Nalda Jubenot, Community Development Officer for Dublanc and Bioche; Jacinta Bannis, Assistant Program Director with SPAT; Rosette Lewis, community leader from Dublanc-Bioche; and Connie Williams, Garnette Joseph, and Regina Joseph, community leaders from the Carib Territory. Only the community leaders were directly involved in their village research activities; these subgroups were referred to as the "village research coalition."

The research coalition met throughout all stages of the project and provided the following assistance (Chesler, 1991; McTaggart, 1991): (a) refined the focus group and interview questions; (b) finalized the participatory activities; and (c) identified and recruited village participants, key informants, recorders, artists, and co-facilitators for the research study. Problems with transportation and schedules limited the participation of many coalition members in group meetings. However, the village research coalitions met throughout the implementation of the Empowerment Process Model (EPM) in their locations.

The facilitators, Augustus Austrie and Jacinta Bannis, and recorders, Garnette Joseph and Nalda Jubenot, for the EPM (focus groups, participatory activities and structured brainstorming sessions) received individual training from me on: focus group facilitation, moderating skills, discussion leader's tips, the role of participants, and recording comments. I had received training in focus group facilitation from Virginia Cooperative Extension and in group facilitation through the Family Community Leadership program, which was developed by the Kellogg Foundation. I used resources developed by the National Issues Forum (1995) and Topsfield Foundation, Inc. and distributed them to the facilitators.

Site Selection

Dominica is the northern most Windward Island in the Lesser Antilles of the Eastern Caribbean region. It is considered a large island relative to the other islands, with an area of 751 square miles (45 miles by 15 miles); and has 81,600 inhabitants who populate the coastal regions. All of Dominica is considered rural with Roseau, the capital city (8,279), and Portsmouth (2,200) the only large towns (The Europa World Year Book, 1992).

Dominica is one of the most rugged islands of the West Indies. Volcanic activity produced a central mountain range running the entire length of the island from north to south. Rainfall patterns vary from 300 inches per annum in the center of the island to 50 inches per annum along the western coast. The central rain forest and the rugged mountains have created many rivers and, as a result, many isolated villages. It is estimated that there are 365 rivers--one for every day of the year (The Europa World Year Book, 1992).

Dominica's terrain, weather conditions, limited infrastructure, and poor economic bases affect the availability of local agricultural products, seafood, and imported foods. Observations and discussions with key informants within the government and local villages indicated that

these factors influence diverse concerns and solutions for individuals, families, and communities living in their unique villages throughout the island.

Two dominant cultures inhabit the island, Carib Indians and African West Indians. English is the official national language. However, both the Caribs and African West Indians living on Dominica each use their spoken traditional dialects, which are not written. Therefore, visual participatory assessment tools and group communications were central to the effective involvement of these villagers.

The research coalition identified the research sites--the Carib Territory (east) and Dublanc-Bioche (west)--and the participants. Selection of the locations was based on diversity of weather conditions, food production and availability, ethnic groups, and terrain. The research coalition stated that both locations had similar poverty levels with state and community leaders who were interested in implementing the research results within their communities. The per capita income in Dominica was $2,760 in 1993 and $ 2,830 in 1994 (The World Bank, 1996).

The leading causes of deaths during 1983 to 1994 were heart disease, hypertension, malignant neoplasms, diabetes mellitus, circulatory system diseases, and respiratory system diseases (Health Statistics Department, Dominica Ministry of Health, 1995). The increase of deaths due to malignant neoplasms in women by over 30% in the early 1990s was identified as a major concern by the Dominican National Council of Women (The Dominican National Council of Women, 1994). Limited nutrition and health statistics exist at the village level. A recent survey conducted during the second quarter of 1994 in the village of Mahaut River in the Carib Territory revealed that 6.5% of children under the age of 5 years were mildly or moderately malnourished. Also, 17% of pregnant women between the ages of 15-44 years had anemia (Dominica Ministry of Health, 1997).

Sample Description and Sample Selection Process

The research study included adult women who were the primary food purchasers for their families or households. The women participants were purposefully sampled by the village research coalition (Gilgun, Daly, & Handel, 1992). The criteria used to select the EPM and VVS women participants were these: (a) principal food purchasers for their family's meals, (b) represented the target clients of SPAT and the Ministries, and (c) encompassed a variety of ages, occupations, and geographic locations within the research site. Also, the participants were women who wanted to share their stories and contribute to the research project (Reinharz, 1992).

A total of 24 women from the two research locations participated in the EPM. These women were selected by village research coalition using the above criteria. Sixty-eight women participated in the VVS interviews within the Carib Territory and Dublanc-Bioche. These women were selected by EPM women using the above criteria. Appropriate coverage in the VVS was achieved in the Territory by purposefully sampling approximately four to six interviewees

from each hamlet (8) for a total of 34 women. Also, appropriate coverage was achieved by selecting seventeen women in each village of Dublanc and Bioche. Participants' ages ranged from late teens to mid-fifties.

Data Collection Procedure

The participatory action research design in this study had two phases: Phase One: key informant interviews with agency representatives, and Phase Two: an EPM for implementing participatory strategies with village women (Appendix A). The EPM had the following five steps: (1) focus groups, (2) visual participatory strategies, (3) structured brainstorming with pictorial mapping, (4) Visual Verification Survey, and (5) community meeting.

Data were collected using personal interviews, focus groups, participatory ranking activities, a structured brainstorming technique, and community action meetings. A tape recorder was used for all key informant interviews, VVS interviews, and the group EPM sessions when appropriate. All EPM activities were hand recorded by a Dominican to appropriately translate and interpret Dominican words and cultural expressions. Field notes were prepared for the key informant interviews, EPM sessions, and VVS interviews.

Implementation of the two phases (key informant interviews and EPM) of the participatory action research design and the five levels of the EPM are now discussed. The protocols for the EPM were revised during the Carib Territory's sessions and changes are noted in this section. Refinement of the protocol questions and process was a part of participatory action or empowerment research, and the participants directed the focus of the information or questions (Reinharz, 1992). Also, cultural clarifications are illustrated to enable readers to appreciate some of the parameters of international participatory action research.

Phase One: Key Informant Interviews

Key informant interviews were conducted with eleven government and non-government organizational leaders before the EPM was conducted. Also, completing the key informant interviews before the village research ensured that the Ministers and directors within the Ministry of Health, the Ministry of Community Development and Women's Affairs, and non-government organizations (SPAT) endorsed the research project and the participation of their employees.

The protocol (Appendix B) was piloted and modified by the research coalition. Open-ended questions from the EPM were used. These questions focused on: (a) top life problems of Dominican families, (b) root causes of the life problems, (c) agencies responses to families' problems, and (d) how agencies ensured implementation of successful solutions.

Phase Two: Empowerment Process Model

The EPM was used to guide the five participatory steps to elicit and visually illustrate the women's perception of villagers' problems, root causes of their problems, and possible solutions. The first three steps of the EPM (focus groups, visual participatory ranking strategies, and structured brainstorming with pictorial mapping) were conducted with the same group of 12 women before implementing the VVS with 34 other village women and a community meeting session for all women participants and interested citizens.

Each step's agenda included a participatory activity to help prioritize participants' perceptions of their overall life concerns, root causes, and solutions. The participatory activities included the following: (a) a focus group (Appendix C) guided by the method of Richard Krueger (1994), (b) visual participatory ranking strategies (Appendix D) adapted from Lyra Srinivasan's methods (1992), and (c) structured brainstorming (Appendix E) informed by Michael Appleby's protocol (1991) and pictorial mapping technique from Lyra Srinivasan's methods (1992). These participatory methods or tools used qualitative techniques (e.g.,interviews, pictures, and open-ended questions) to encourage community participation, to stimulate responses and listening skills, and to use visual information rather than verbal or written communications (Rifkin, 1992).

The twelve women in each location, the Carib Territory and Dublanc-Bioche, participated in a weekly group session for three weeks that used the first three steps of the EPM to guide the weekly group participatory activities. Each two to three hour group session was held in a convenient location within the village. At each group session, the facilitator reviewed the EPM and the purpose of the meetings, conducted an ice-breaker activity, reviewed the previous session, and completed the participatory activities for that session. At the beginning of each session there was time to review and validate the themes and information generated from the past group session (Chesler, 1991). Members of the research coalition involved in any data collection session shared their feelings, observations, and overall results and implementation of the activities at the end of each session. This information was recorded as field notes and used in the analysis. Sessions concluded with local juices (guava, passionfruit or grapefruit) and cakes. Recipes for the cakes, which used local ingredients, were given to participants, along with extra cake intentionally provided to take home to their families. Small gifts rewarded those persons who were punctual for each meeting.

The information gathered at each step or session was transcribed and analyzed before the next step. Between Step One and Step Two visual illustrations or pictures were drawn to be used as visual depictions of problems and root causes.

Step One of the EPM: Focus Group

Twelve women identified the current overall life problems of village families and the root causes of those problems through a focus group discussion in Step One. The focus group

session (Appendix C), formulated according to Archer's (1991) criteria, started with a question about participants' overall life concerns. Open-ended questions and probes enabled participants to generate overall life problems for villagers, root causes of these problems, and feasible solutions. Step one's protocol (Appendix C) underwent modifications by changing two questions into probes for other questions.

Step Two of the EPM: Visual Participatory Rankings

Step Two (Appendix D) of the EPM, utilized visual participatory strategies to identify and rank the village families' primary concerns and root causes. At this step, the EPM process helped the women identify their top life problems and root causes. Thus, the visual format of an upside down pyramid (Appendix A) was used in the EPM to illustrate the process of refining concerns from general to specific.

Visual illustrations or pictures were developed for all life problems and root causes identified in Step One. Mervin Thomas, a Carib teenager, sketched all the pictures in seven days between the first and second steps. The ranking technique involved using three different colored disks for prioritizing the drawings of the village families' problems and root causes in a picture pocket format. Envelopes were attached to the pictures so that the women could rank the top three most important problems or root causes by dropping a colored disk into the envelopes. The most important concern was a red disk and received three points; a very important concern was a blue disk and received two points; and a important concern was a green disk and received one point. After each ranking session, the women collectively counted the points for each picture to determine the top ranked pictures related to life problems and root causes. At the end, all the top ranked pictures for the problems and root causes were reviewed and discussed.

Rather than ranking the pictures separately for individual, family, and village perspectives, the women used typical village families as their reference. After ranking the pictures for families within their village, the women ranked the pictures as they thought government leaders or agency personnel would rank the same problems for their location. Next, the overall root causes were identified using the same ranking activity.

Step Three of the EPM: Structured Brainstorming and Mapping

Step Three involved structured brainstorming and pictorial mapping techniques to identify and illustrate short- and long-term community development solutions (Appendix E) related to the identified top ranked problems and root causes. Appleby's (1991) structured brainstorming methods and Srinivasan's (1992) mapping methods were used. After brainstorming short- and long-term solutions, the women ranked their top three solutions with colored dots; three to four top solutions emerged. The women divided into groups to visually map or pictorially depict using crayon drawings how they envisioned the short- and long-term solutions. After the crayon drawings were completed, a group spokesperson explained their drawings.

<u>Step Four of the EPM: Visual Verification Survey</u>

A Visual Verification Survey (Appendix G) was conducted with 34 purposefully sampled females in each research location who had not participated in the group sessions of the EPM. The purpose of the VVS was to test the EPM results and its usefulness with similar participants. VVS women were purposefully selected by the EPM women by using the same criteria as the EPM participants: (a) food purchasers who are willing to share their stories; (b) a variety of ages, occupations, and geographic locations; and (c) represented the clients of SPAT and the Ministries. Women who participated in the EPM identified and introduced the interviewees to me.

Individual, taped interviews using the VVS protocol took approximately one hour to complete. The interviews were conducted with individual women villagers in their homes or at a location convenient to them. I took a Polaroid picture after the interview of the woman or members of her family as a means of thanking them. These pictures also publicized my research and allowed me to explain my research project to many other villagers.

All VVS participants were asked the same questions as the EPM women, but the visuals created for that participant's village were used. The VVS protocol was modified (Appendix G) by eliminating probes for the questions on solutions. The probes assumed that women had tried the solutions that were generated by the group. Instead, participants were asked to brainstorm solutions for their top ranked problems. Then, they ranked the mapped solutions according to those they would participate in or felt were most needed by the majority of villagers.

I used question five, "How would you rate the current conditions of Dominican families using this visual rating scale?", and stressed to the participants that they use the time-frame from 1991 to 1996 before the hurricanes hit. However, the devastating effects of the hurricanes continued to influence answers to this question. The majority of women said that it was better before the hurricanes.

<u>Step Five of the EPM: Community Meeting</u>

A community meeting was the last level of the research project, or Step Five of the EPM (Appendix F). One meeting was conducted in each research location to present the results of the analyzed data, discuss and identify future community action plans, and form planning committees. Interested citizens--local "power brokers," political representatives, and people who needed or could help to "raise consciousness" and embrace social change--were invited to the community meeting. All the EPM and VVS women participants were verbally invited and received a personal letter of invitation. The majority of the participants at the community meeting were women who had participated in the EPM and VVS.

The EPM women participants presented the top ranked pictorial life problems, root causes of the problems, and the mapped solutions. At the community meeting, further

discussions about solutions and action plans were encouraged by the facilitators, Augustus Austrie and Jacinta Bannis. Community working groups consisting of women from the EPM and VVS who were interested in developing and operationalizing one specific, feasible short-term community action plan in cooperation with community development workers were established. At the end of the meeting I presented certificates to the women who participated in the EPM.

Data Analysis Process

The data analyzed consisted of field notes, transcripts of in-depth responses to open-ended questions, semi-structured interviews, and results from participatory ranking activities. On-going, collaborative data analysis was conducted by the village research coalition involved in implementing the empowerment process. After each session, the village research coalition stated their overall results, feelings, and observations about the participatory activities and participants involvement, which I recorded. The total research coalition met as needed and at the end of each village process (Reinharz, 1992). This analysis was validated by presenting the information to the village participants before each session. The information was also shared with village participants and others interested in developing an action plan.

Transcriptions of each EPM session and VVS interviews, especially the focus groups, were thematic and not verbatim (Krueger, 1994). It was my intent to involve as many Dominicans in the research coalition as possible. Efficiency and clarity of data analysis procedures were an important part of keeping people involved throughout the participatory action research. Line-by-line transcriptions and multiple readings which takes time might decrease participation. The key informant interviews were transcribed verbatim.

The thematic content analysis outlined in Tesch (1990) and Krueger (1994) and further described by Allen (Gilgun, Daly, & Handel, 1992, p. 205) was used as the data analysis process. Thematic content analysis incorporates the following steps: (a) reading all the field notes and transcripts twice to get a sense of themes and topics discussed, (b) identifying topics in the margins of the transcript and other working documents, (c) developing a coding scheme by choosing names for clusters of similar topics, and (d) discussing activities and information with the research team to come to consensus on major themes and emerging information.

I assigned each problem, root cause, and solution to one of five thematic categories. I used these categories to compare and analyze the findings. Using thematic categories, a qualitative analysis technique, helped to develop a better understanding of transcribed information. Thematic analysis provided government, non-government, and village leaders with another form of information for understanding the perceptions of the women and to inform their programming decisions.

The synthesized findings were presented in a narrative form and visual illustrations by comparing and contrasting prioritized thematic concerns, root causes of problems, and solutions.

Quotations from participants were used to "give voice" to individual perceptions and to provide a detailed description of opinions based on their complex lives and rich cultural heritage (Bertrand, Brown, & Ward, 1992).

Chapter IV
RESULTS

The participatory action research design had three phases: (a) key informant interviews with agency leaders, (b) Empowerment Process Model (EPM) for implementing participatory strategies with village women, and (c) Visual Verification Survey (VVS) with additional village women. The results and discussion of the three phases of research are addressed in this chapter. First, the results of the Carib Territory followed by the villages of Dublanc-Bioche are examined and discussed. Then the "voices" of the Dominican women are compared between the locations and with the key informant interviews.

For this study, I defined the themes that emerged from the transcript as (a) family well-being factors, (b) social well-being factors, (c) economic well-being factors, (d) infrastructure factors, and (e) environmental factors. "Well-being" is defined as the state of being well, happy or prosperous and is central to the quality of life of people (Peterson, et al, 1990).

Family well-being factors included themes related to roles, relationships, and priorities within families. Parenting skills, fathers maintaining children, teenage pregnancy, or daughters exchanging sex for money and possessions are examples of family well-being factors. Social well-being factors are themes that influence and permeate the Dominican culture or society. These factors included drug and alcohol abuse, child neglect or abuse, lack of community unity, peer pressure, or health and nutrition status. Economic well-being factors are themes that related to lack of jobs or employment, underemployment, growing more cash crops rather than food for the kitchen, lack of markets for produce, developing cottage industries, and learning skills to be employable. Infrastructure factors are related to the availability of services and resources such as water, electricity, roads, housing, schools, health centers, and garbage disposal. Environmental factors are those related to weather, topography, deforestation, rivers, and pollution. Some environmental factors such as hurricanes and topography are determined by nature, and man-made determinants include deforestation and pollution of rivers.

The Carib Territory

<u>Village Collaboration for Empowerment</u>

Embracing the research and wanting the results to inform his community development efforts in Territory, the research coalition was influenced by Augustus Austrie's enthusiastic and proactive actions and selected the Carib Territory as the first research site. I have known Augustus since the early 1980s when I was a Peace Corps volunteer in Calibishie, which is where Augustus resides. He was dedicated to involving people, introducing me to people, providing transportation when needed, and following up on details during the project.

Augustus Austrie and I spent five days collaborating with community leaders, mostly women, to identify participants and locations for group sessions in the Carib Territory. The consensus of the village research coalition and territorial women was to invite women from the Committee of Concerned Women to participate. Eight members from Bataka and Crayfish River, and four other women from Salybia and St. Cyr agreed to participate.

The most central location for the women to meet was the Crayfish River preschool building. Because the building had no electricity, the twelve member group met in the Crayfish River preschool from 3:30 p.m. until 5:30 p.m.

Access to free or paid transportation in the Carib Territory was always a problem. Therefore, all women walked to the group meetings. Attendance was excellent during the three-week group sessions; Regina Joseph, who lived the farthest from the meeting site (approximately three miles), was always the first to arrive at the meeting site. Only two women missed a meeting because of conflicting schedules.

Background

It is important to understand two issues, geography and weather, that influenced the data collection and results within the Carib Territory. The Carib Territory, approximately seven miles in length, is located in the northeastern area and on the Atlantic Ocean side of Dominica. Within the Territory are eight hamlets: Atkinson, Bataka, Crayfish River, Salybia, St. Cyr, Gaulette River, Mahaut River, and Sineku. These eight hamlets compromise approximately 3,000 people and function as very small villages, each with their own unique concerns or problems characterized by different services, infrastructure, and terrain. The citizens were very proud of their individual hamlets and sought acknowledgment of their uniqueness. The distinctions among the hamlets were constantly pointed out to me throughout the research and are noted where they are pertinent.

In the hamlets, the majority of Caribs earn their living from growing and harvesting bananas, root crops (dasheen, tania, or sweet potatoes), passionfruit, or copra (dried coconut meat). These crops and Carib homes were destroyed by Hurricanes Marilyn and Luis several months before implementing the research. The replanted fig or banana trees had begun to bear fruit as I started the VVS. The effects of the hurricanes permeated all interviews within the Carib Territory and are noted in the results.

Empowerment Process Model and Visual Verification Survey

The findings generated from the EPM and VVS are divided into four sections: life problems, root causes of life problems, solutions, and community meeting. Within each section the top rankings from the total sample are identified by showing the visual aids or summary

statements and are described by "giving voice" to women's pictures through their own descriptive words. Next, the top rankings from the EPM and VVS are analyzed for similarities and differences. Finally, a summary of the findings is presented.

The combined results from the EPM and VVS rankings are the primary focus in this chapter because the total results were central to the community meeting, which was the final level of the EPM. The total rankings were used to facilitate a collaborative decision making process to identify a feasible short-term solution or action plan. The differences between the two methodologies--EPM and VVS--are examined after the total sample results.

Life Problems of Village Families in the Carib Territory

Thirteen life problems were generated by the total sample of 46 Carib women through the EPM participatory activities and VVS interviews. The seven top ranked life problems that received more than 20 points, or 8% of the total 263 points, were prioritized by all the women as the most significant life problems. The Carib women reported and described these seven life problems by using their words and the visual aids during the final level within the EPM--the community meeting. Presented below are the visual aids developed as a result of the first meeting of the EPM. The "voices" of the Carib women are used to describe and define each priority life problem of typical village families: (a) unemployment, (b) alcohol and drug abuse, (c) lack of water, (d) educational programs, (e) health care facilities, (f) teenage pregnancy, and (g) child neglect. Educational programs and health care facilities each received 25 points and both were ranked as the fourth problem. Similarly, both teenage pregnancy and child neglect were ranked as the fifth problem with 24 points each.

Unemployment

Figure 1. **People sitting on the roadside because they have no jobs.**

Lack of employment was the number one life problem reported by the women throughout the Carib Territory. The majority of women described three main themes: (a) the need for steady employment or income to feed and educate their children and families, (b) the employment and underemployment of young people, and (c) the effects of unemployment and limited income on other problems; especially education, child neglect, and alcohol.

The first theme focused on lack of employment opportunities and unstable incomes of families who had to provide basic needs for their children. This theme permeated all discussions and was incorporated into many other problems. One woman's words illustrated how many women viewed trying to support and educate their children:

> Sometimes we make children...we don't have employment. We can't afford what the children want...sending them to school. We don't have employment to make the money so that we can support them...grow them the way we want and give them what they need. Send them to school, you know, or even though they don't learn at school. I could have money to pay to learn a skill.

Women regarded employment as agricultural positions and non-agricultural positions such as being employed by the government or businesses. Women expressed the fears of all families and young people who depended on the banana industry for their livelihood. All women said that the "Scene is dread" or "Times are hard" because of low banana prices or that they had nothing to sell because of the hurricanes.

The women's second theme in unemployment was specifically focused on the future of young people to support themselves and their children. Women said that their children and all young people could not rely on growing bananas for their future income. Also, women expressed

their concern for young people's ability to find a non-agriculture job or a job that coincided with their education and skills. The women viewed the issues of unemployment and underemployment as island problems and the reason why many young people had to migrate.

> The country as a whole itself, it's hard to get jobs here. That's why sometimes people have to go out to other countries for jobs. Even the young people will go out and search for jobs and they would not find. Yet some of our people like...the jobs they would want, that is not the job they will get.

The banana industry, the main cash crop for Dominican farmers at the time of the field research, was in a serious decline due to changes in the European markets and declining prices. The banana industry's problems were a constant topic of discussion by (a) women in the EPM and VVS interviews, (b) reporters in the Dominican media, and (c) all Dominicans in any social setting. Also, a protest rally was organized by Dominican farmers on May 3, 1996, against the United States and Chiquita Corporation for monopolizing the banana industry and controlling prices.

The fall of 1995 was especially problematic for farmers because the hurricanes had destroyed their banana crops. Mentioned earlier, the majority of Caribs, young and old, were self-employed farmers who primarily grew bananas for their main source of income. It was estimated in 1993 that 70% of the Carib's 3,000 population were under the age of 30 (Henderson & Joseph, 1993). Thus, women's top problem reflected a current overall island issue. These unemployment themes are discussed in greater detail and are associated with other problems such as education, child neglect, and alcohol abuse.

Alcohol and Drug Abuse
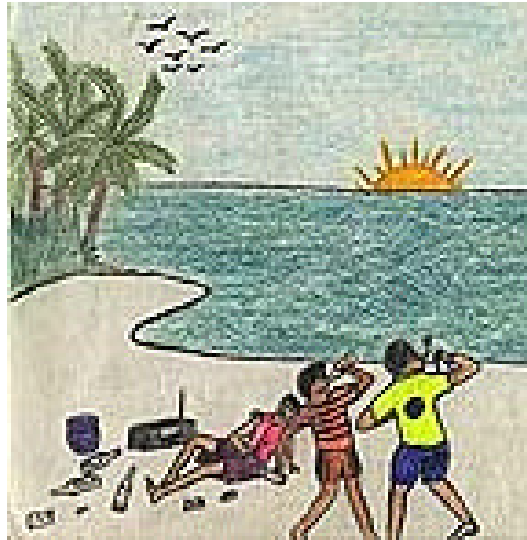
Figure 2. **Young people drinking rum and smoking ganja or marijuana.**

Alcohol abuse followed by drug abuse were identified by the women as the second major problems facing families. Women said that over-consumption of rum by men who had limited employment or no jobs was the main problem. A secondary theme expressed by women was the effects of excessive use of rum on the person's health and family well-being.

The majority of women discussed the abuse of alcohol and its connection with the lack of employment, especially for men. For example, all five women interviewed in St. Cyr ranked alcohol as the first or second problem for families. Here is how one women explained the connection:

> They [men] don't have nothing to do. They just sit by the road. Some others might have certain finances and cause them [to drink]...let's go for a drink. They drink and sit down and don't have anything to do.

"Going for a drink" meant going to the local rum shops, where rum was bought and consumed. Rum shops were vital businesses in every village and a place used to socialize with friends, play dominoes, and buy groceries. These shops not only sold rum (EC $1.00), beer (EC $3.50), and other cold drinks (EC $1.00), but usually sold freshly baked bread, frozen food, and canned food products. Several women suggested that rum shop owners should not be allowed to sell rum. They felt that such action would decrease drinking problems.

A second theme centered on the long term use of alcohol and its effect on a person's body and mind. Women recognized this effect by saying, "The mind is confused, and they don't have anything [to do]." Several women told lengthy stories about their husbands' long-term use of rum and how it negatively affected the family's basic needs. They were left with no money for

food and the family's well-being--physical and mental abuse. Many women felt that alcohol was more harmful and induced more violence in the family and community than the use of marijuana. One woman explained:

> The older self maybe they accustom themselves too much to alcohol, to drugs. Most of the older people use alcohol. But most of the young ones go to the other drugs. Marijuana, cocaine...those kind of things. There is a lot of alcohol. [It] reacts more on them than a marijuana. Not to say that I'm not against drugs. What I'm saying is, I find alcohol works more into them then marijuana.

Lack of Water
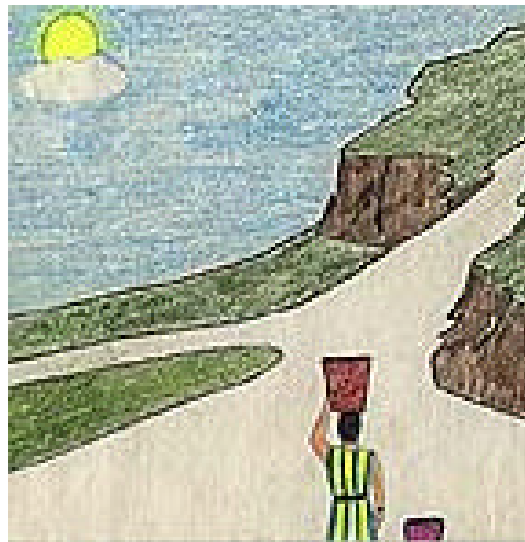
Figure 3. **A woman carrying water from the river.**

Three main themes were discussed by women when they talked about the lack of water problems in the Territory. Women's conversations focused on (a) access to clean water, (b) effects of fetching water from a long distance, and (c) health and nutrition concerns and solutions.

Close access to pipe-borne water or to clean river water was the main theme that women talked about when they saw the picture of a woman carrying water. For example, four out of five women interviewed in Sineku ranked water as their first or second problem because there were no pipe stands in Sineku or a river close to their homes. This is how one woman explained the water situation:

> Some people have to go very long distances for water. In some areas, especially in the Carib Reserve, they do not have streams, they do not have rivers, they do not

have piped borne water. They have to be getting it from a far distance. They must have transportation to get water from different areas.

Some hamlets such as St. Cyr, Gaulette River, and Mahaut River were fortunate to have pipe-borne water near their homes. Still, the majority of hamlets, especially Salybia, Bataka, and Sineku did not have access to a good water source close to their homes.

Also, women talked about deforestation's effects on the number of rivers and the development of pipe-borne water systems. Deforestation was a lower-ranked problem that was directly linked with the drying up of rivers or less water in the rivers. Lack of water in the rivers directly affected the operations and development of pipe borne water. One woman conveyed how deforestation was affecting the water supply:

The cutting down of the trees keeps the water low in the rivers. For instance, those who have gardens higher up. They would cut down the trees and cause the water to get smaller, dry up [rivers]. Not enough pressure [for piped water].

Young single mothers expressed the negative effects on their families when fetching water. Not only did women say that it took an average of an hour or longer to get water, but they also mentioned leaving young children home alone. One young woman explained her situation, which was mentioned by other women. She had a young preschooler and lived far away from other houses. She explained how she had to lock her child in the house while she quickly ran to the river on a treacherous path to get one bucket of water for the day's use. All the time she was praying that her child was not in danger. She said that she did not like leaving her child alone, but she had no other alternative.

Women associated the lack of clean water and poor sanitation with health and nutrition concerns and solutions. Polluted water from human and animal wastes or chemical run off was a concern that women connected to sanitation and illness. Many women verbalized this concern by saying "We go and drink the bad water. Always you will find in the community diarrhea. People would not boil the water." Women were not just referring to contaminated river water, but they also felt that the intake tanks for the piped water were not properly maintained. They also said that "nasty people" contaminated the intake area with human and animal feces. Therefore, they even said that pipe-borne water should be boiled. Many women remarked that most people never boil their water, even though family members may be sick or have diarrhea.

Women talked about health problems such tuberculosis and hookworms as they related to poor sanitation and polluted water. One woman explained, "Sanitation, walking with no shoes [children] get hookworms." Also, women said that the lack of toilet facilities was directly associated with sanitation concerns.

Finally, women regarded access to water as a major obstacle to a nutrition solution of growing backyard vegetable gardens for household consumption and promoting healthy children.

As mentioned earlier, it was a struggle just to get water for cooking and drinking. Therefore, carrying water especially during the dry season was labor intensive. The women understood the need for backyard gardens for a healthy diet, but they constantly verbalized the need for a closer water source. Here is how one woman expressed this concern:

> Lack of water. We don't have water. Water is a problem. Like some time ago we had a malnutrition day...high rate up here. It gets back to not enough facilities when it comes to water. If you have your stand pipes, at least one in your yard then [you can] do your back yard gardening. Plant a little vegetables...that would keep it [growing] done. All that goes to health problems.

Educational Programs
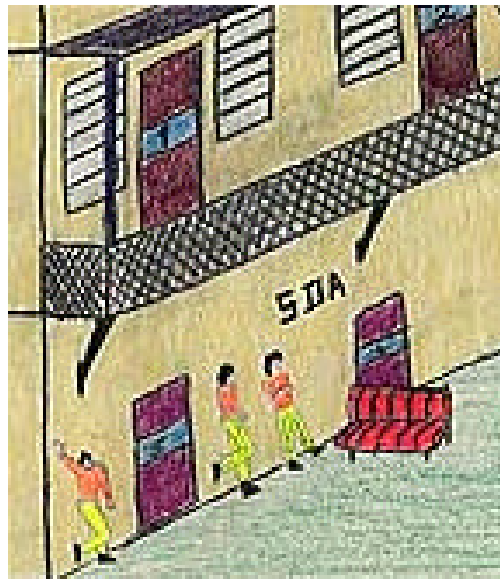
Figure 4. School closed with young school leavers standing around with nothing to do.

Lack of secondary and adult education programs within the Territory were considered the main themes for this problem. Women said that limited educational programs, skills training, and facilities were main problems and root causes that were associated with unemployment, alcohol and drug abuse, teenage pregnancy, and child neglect. The women expressed a variety of concerns such as the quality of education, training of teachers, low ratio of teachers to students, distance for small children to walk to school, transportation of children to schools outside the Territory, and lack of programs for adults and school leavers. Quotes connecting education with other problems and root causes are illustrated in later sections.

Currently, formal education programs located in the Territory included three preschools in Crayfish River, Mahaut River, and Sineku; and three primary or elementary schools in Atkinson, Salybia, and Sineku. There were no secondary schools in the Carib Territory. The law

requires that children ages five to fifteen attend primary school. Admission to secondary school is conditional to passing the national Common Entrance Examination (CEE). Limited adult education programs are available in the Carib Territory.

Health Care Facilities
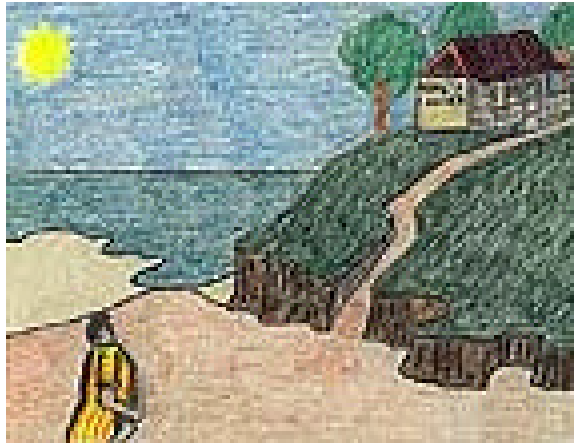
Figure 5. Pregnant woman walking a long distance to the health centre to deliver her baby.

Three health care centres staffed with one nurse each are located in Atkinson, Salybia, and Mahaut River. Limited transportation for patients and nurses influenced the women's concerns. The women expressed three main themes related to health care problems: (a) distance to walk to the health centre, (b) the need for more nurses who have transportation, and (c) medical help for the elderly in the Carib Territory. In the EPM a woman told the story of a pregnant women who had to walk miles to the health centre so that she could deliver her baby. This story was used to illustrate the health care picture, which is shown above. All women related to this picture and described these themes:

The health centres are far.

Not enough nurses in our area. Transportation, the centers are very far apart. The nurses have to be walking, walking. They are a long distance from your home. Especially emergencies, really a problem for transportation.

We seem to forget our aged people. Something needs to be in place to help them. Sometimes they have medications to take and they don't know how to take them. They cannot read, they cannot write and no one is there to give it [medicine] to them. We need to have more health workers.

Teenage Pregnancy
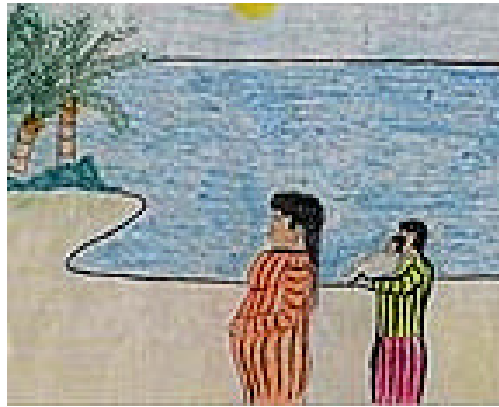
Figure 6. Young pregnant woman with her boyfriend and father of her children.

Women said that males, females, and parents were all responsible for teenage pregnancy. Most women concluded that parents were ultimately responsible for teaching their children about having babies and sexual relationships. One woman captured the essence of all parties involved in this problem:

> We parents too, not talking to our children. Because you having children in your home, you must teach them home education so that you must teach them at home. So they don't go in the road and ask another one. You should teach them everything at home. The boys, the girls, all of them have their problems. You just can't put on the girls alone and you can't put on the boys alone. All have problems.

Also, women expressed the burdens that teenage pregnancy of their daughters placed on the family, especially the problems of a daughter trying to continue her education and the mother raising her grandchild. They conveyed how pregnant school-age girls had to leave school, which eliminated their ability to attend secondary school. Therefore, the women expressed the need for other forms of adult education for these young women so that they could continue their education or learn a skill to become employable.
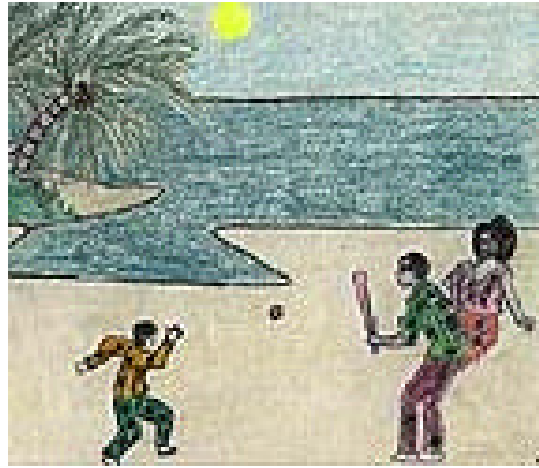
Figure 7. Kids playing and not going to school.

The majority of comments about neglect of children focused on young and older fathers who did not support their children, inside and outside of marriage. Many men and women have children with more than one partner. The lack of money, number of children, and parental stresses were linked to neglect of children from the mother, father, or both parents. One women explained the pressure on parents:

> The parents...whenever the father does not take good care of his children, they do not have time for their children. And the parents, they have to fight for their living for the children's sake. Most times the children too have to suffer because of one partner's silence.

Food and Nutrition Problems

Overall, basic family needs such as water, education, health care, and government representation surfaced during the community-based research approach rather than using a nutrient based approach. One food and nutrition problem, growing only cash crops, directly emerged as a major life problem for the Carib women. The EPM women said that there was too much focus on cash crops (bananas, copra, and ground provisions) rather than growing a variety of foods for home consumption. Traditional high starch foods--tannia, dasheen, sweet potatoes, and green bananas were locally grown and consumed daily. According to one woman, "We try to plant to help yourself with food. People get enough food, but they are not really healthy," meaning that people are not starving but are not eating a variety of food to be healthy.

Although few nutrition and health issues were explicitly expressed as life problems, many nutrition and health related issues were implicitly associated with the problems of

unemployment, alcohol abuse, lack of water, education, and health care. For example, lack of income from jobs was directly associated with limited resources for buying food, which was also connected to feeling good. A woman said, "We have a lot of people who cannot afford [food] and really don't have [enough food]. [It is] hard to really take care of their families [with no or limited money]."

Many woman took responsibility for their problems and said, "We are the cause of our sickness. We have a lot of children. Children are suffering from malnourishment and worms." Solutions from women ranged from eating more vegetables and growing a backyard garden to educational programs. One woman connected her health problems to the type of foods that she ate; she knew the solution for her problem: "[I have] lack of energy. [I have] lack of vegetables to eat. Not planting enough vegetables." The women constantly mentioned the problem of getting fresh water and associated it with solutions of growing and eating vegetables for health:

> Especially when it comes to the health part. We haven't got enough of planting your own back yard gardening. You hardly get vegetables to buy especially up here. They are more focused in planting their bananas or other crops to bring money. If you had a little backyard garden just for your family. That would help. Maybe because of water. You have to go miles to get water.

Also, women suggested educational programs as a solution for the sanitation and health problems, such programs would assist Caribs to become healthy citizens.

> Educational sessions for young and elderly to have proper hygiene, sanitation with water. More health education talks for people in the different hamlets in the area. And help them to understand sources of health, like personal hygiene, burning and burying our solid waste disposal.

> You need to have a healthy community. Then, comes in nutrition, educate the families to grow their own back yard gardens. You need to have a healthy body, a healthy family because we are lacking a lot of those things here.

Analysis of Differences

The summary of the findings for the EPM and VVS related to the women's perceptions of village families' life problems are presented in Table 1. The women in the EPM and VVS prioritized the same four out of five life problems. Each method identified unemployment, alcohol abuse, lack of water, and lack of health care facilities as their major problems.

Differences between the methods were revealed in teenage pregnancy, child neglect, and education programs. Teenage pregnancy, as mentioned earlier, was considered more of a prioritized problem with the VVS women than the EPM women. Almost half of the VVS women

ranked teenage pregnancy (Rank #4) as a problem. The EPM women viewed the neglect of

Table 1

Results of EPM & VVS for Carib Territory's Ranked Life Problems

Current Life Problems:	EPM Points n=12	EPM Rank n=12	VVS Points n=34	VVS Rank n=34	Total Points n=46	Total Rank n=46
Unemployment	13	1	41	1	54 or 21%	1
Alcohol & drug abuse	9	2	38	2	47 or 18%	2
Lack of water	8	3	30	3	38 or 14%	3
Educational programs	9	2	16	7	25 or 10%	4
Health care facilities	6	5	19	5	25 or 10%	4
Teenage pregnancy	1	8	23	4	24 or 9%	5
Neglect of children	7	4	17	6	24 or 9%	5
Land dispute	4	6	2	10	6 or 2%	6
Deforestation and rivers	4	6	2	10	6 or 2%	6
Farm roads	1	8	5	8	6 or 2%	6
Community unity	2	7	2	10	4 or 1%	7
Family food	0	0	3	9	3 or 1%	8
Craft materials	0	0	1	11	1 or 0%	9

Note. EPM = Empowerment Process Model; VVS = Visual Verification Survey.

children (Rank #4) as a more important problem than teenage pregnancy (Rank #8). Educational programs were considered a higher priority by the EPM women (Rank #2) as compared with the VVS women's lower ranking (Rank #7).

This may suggest that the EPM women were more educated or involved in continuous adult education experiences. Therefore, they recognized the importance of a good education. Also, eight of the EPM women were involved in the Committee of Concerned Women, and the other women were involved with other community organizations and leadership roles, which may have exposed them to more child neglect cases within the Territory. Child neglect could be viewed by these women as a larger problem that encompasses teenage pregnancy.

Root Causes of Carib Territory

The Carib women reported and described the following top root causes at the community meeting. Presented below are the pictures and "voices" of the Carib women reflecting their descriptions of the root causes and their association to life problems. The top five root causes of life problems that received at least 20 points or 8% of the total 264 points are these: (a) education, skills training, and facilities; (b) representation in government; (c) family priorities; (d) no jobs; and (e) sex for money. After the top ranked root causes from the total sample are discussed, the two data collection methods, EPM and VVS, are compared and the total findings for each root cause and method are shown.

Education, Skills Training, and Facilities
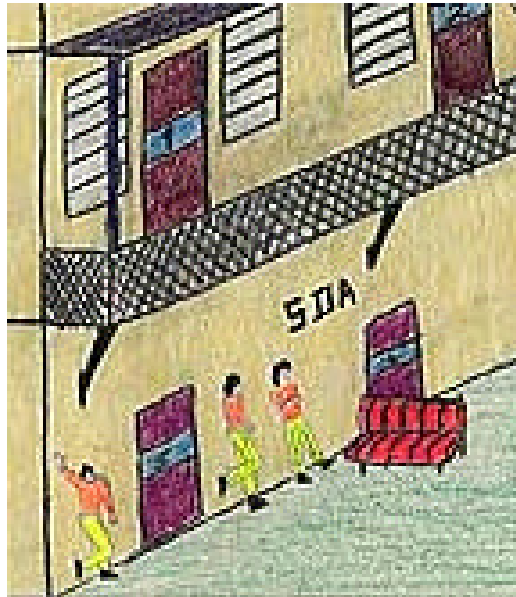
Figure 8. **School closed with young school leavers standing around with nothing to do.**

Lack of educational programs, skills training, and facilities were the number one root causes associated with the number one life problem--unemployment. Mentioned earlier, there are no secondary schools or junior secondary schools in the Territory. Women repeatedly expressed how post-primary education was important for young people to get a job. Because there are no post-primary facilities in the Territory, transportation expenses were a staggering financial burden for most parents. Many Carib women described the situation:

> You must pay transportation. You must pay recess, school books. I have to pay
> EC $150.00 (US $60.00) a month [for transportation]. I see it as a problem.
> Transportation to Portsmouth Secondary School. I can't afford it because of the
> hurricane. Children will stay down if you can't pay the chauffeur.

For instance, women said Carib students who successfully passed the Common Entrance Exam must attend a secondary school located out of the Territory from St. Andrew's High School at Londonderry (25 minutes drive) to Portsmouth Secondary School (1 1/2 hour drive). A 1993 Carib Territory report corroborated how transportation to post-primary schools affected young Caribs as evident by their prematurely quitting school, high rates of teenage pregnancy, low educational levels, low self-esteem, and high unemployment (Henderson & Joseph, 1993).

Also, lack of adult education programs and skills training for early school leavers and adults negatively affected their ability to obtain a job, which was also linked with the problems of alcohol abuse, teenage pregnancy, and child neglect. Women said that better education was

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needed to help young people feel good about themselves and occupy their time, which would in turn decrease the alcohol and pregnancy problems.

As women mentioned earlier, men needed education or skills training to get a job to support their children inside and outside of marriage. The cost of transportation, books, uniforms, and food for post-primary education were paid by the parents.

Representation in Government
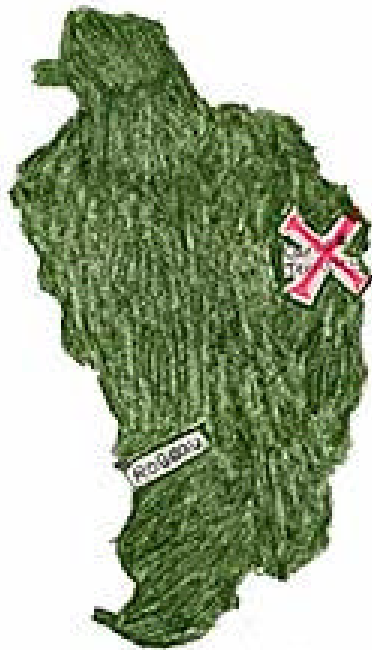
Figure 9. Carib Territory not properly represented in the government located in Roseau.

Women linked the lack of representation in the government to their lack of pipe borne water, health facilities, educational programs and facilities, and unemployment. History and limited infrastructure within the Carib Territory influenced the women's perceptions and root causes of their problems. Women said this about the government:

> We in the Carib Reserve are left back. In education, electricity, health centers and our schools.

> Government can make it much easier by giving water and [having] schools feasible.

Historically, the Caribs are the last decedents of the Caribbean people who have endured ruthless extermination and relocation by the French and English colonial governments. The

Carib Chief, leader of the Carib Council, does not hold a government position in Parliament. Only one elected person represents the Territory in Parliament.

<u>Family Priorities</u>
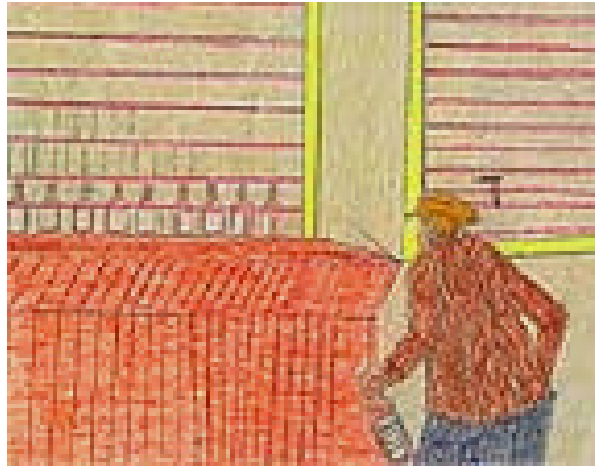
<u>Figure 10.</u> Man at the rum shop spending his money on rum instead of food for the family.

Recent statistics revealed that 61% of households were headed by males; approximately 47% of the households were married, 20% single, and 18% lived in common law relationships (Henderson & Joseph, 1993). Women explained family priorities as men spending money on rum rather than buying food at the rum shop as was illustrated in the above picture. Women said that the wrong family priorities affected the problems of unemployment, alcohol abuse, nutrition issues, and the neglect of children. The voice of this woman eloquently spoke to all these issues:

> Sometimes the husband in the home, he will not...he will get up and don't think of anything to do for the day. As he wake up he will go to the rum shop. But (having) some rum with some friends and he don't buy anything for the home. But later when he comes he makes some trouble. Where is my lunch? Where is my breakfast? And those things there. So there he causes troubles. Sometimes the wife, there will be children. She don't have a job. She don't have anything to do to cook for them for the day. The husband take the money and go buy the rum. Later on he comes and makes trouble. This a problem too.
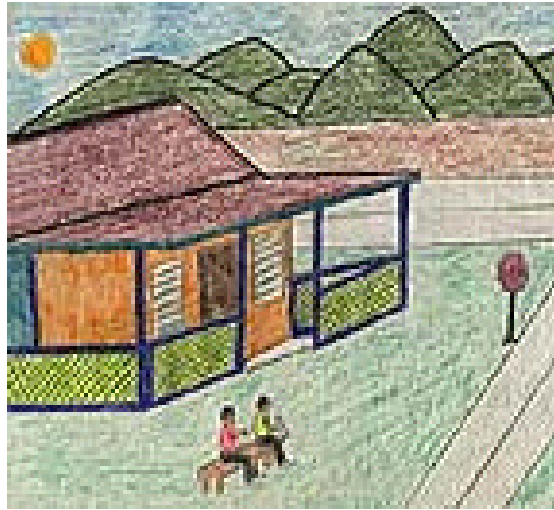
Figure 11. **Young people sitting on the roadside drinking and smoking because they do not have jobs.**

Unemployment was a root cause connected to neglect of children, alcohol abuse, and teenage pregnancy. Women said that if the father was not employed, he could not support his children or family. Most women worked as farmers and craftspersons, but they did not have a steady income generating occupation. Women with young children at home were responsible for care of the children and therefore could not be employed outside the home. This is how one woman described the situation:

>Maybe the father doesn't take care of the child. The mother is not working. The mother cannot do it. Child always have to have clothes, shoes, and food. It's the working and the money.

Mentioned earlier, lack of a job is a root cause of alcohol and drug abuse. Women over and over again said statements such as this one: "That one [alcohol and drugs] is taking over self. All because of lack of employment." The next section discusses the relationship of unemployment with teenage pregnancy.

<u>Girls Exchanging Sex for Money or Possessions</u>

<u>Figure 12.</u> A girl and boy talking on the road.

Women directly linked the problem of teenage pregnancy to girls exchanging sexual favors for money or possessions. Many times it was because their unemployed families or absent fathers did not provide them with the basic needs or material possessions that they wanted. A few women said that peer pressure for nice clothes was to blame. However, most women shared the following types of stories that center around money for basic needs:

> Some of them make children before time. They find themselves with boyfriend, certain things he give them. Their mother, their parents can't give to them. They find themselves with children and boyfriend before time.

> Its the same thing. I have that child I cannot take care of that child. She have to be on the street. She may meet somebody, somebody that could give a little finance, you know. And then she would accept it. That man would have to use her to give her that money. Pregnancy comes and she get's pregnant.

Some women recognized the need for educating young people in birth control options. As this women said, "You know how it is. You send them to the nurses first to get protection and ting [thing] to prevent children." Birth control is free at the health centres. The majority of Caribs are Catholics, which may influence the acceptance of birth control methods. AIDS was not voiced as a concern during the VVS, even though there was a recent death from AIDS in the Carib Territory.

<u>Analysis of Differences</u>

A summary of the findings of the EPM and VVS related to the Carib women's ten root causes for their problems are presented in Table 2. The women in the EPM and VVS prioritized the same three out of five root causes. Each method identified lack of education, skills training, and facilities; unemployment; and representation in the government as the main root causes linked to a variety of the top life problems.

Differences between the method were revealed in areas of sex for money and family priorities. Many VVS women considered girls exchanging sexual favors for possessions as a top root cause, which supported their high ranking of teenage pregnancy. No EPM women voted for this root cause. The VVS women perceived misplaced family priorities (Rank #2) as the cause of many of their identified problems. Alternately, the EPM women perceived the government (Rank #1 and #3) as the cause of many of their identified problems. Stated earlier, EPM women's involvement in community activities may provide them with more of an understanding of the government and inequities that the Caribs and Carib Territory have endured.

<u>Ranked Solutions of the Carib Territory</u>

The women in the EPM and VVS offered a variety of solutions ranging from "All that depends on government." to "We must help ourselves." The rankings of the four solutions for the total sample are these: (a) skills training and adult education, (b) health volunteers, (c) income generation projects, and (d) resource centre. During the third level of the EPM, the women created four visual aids by mapping or drawing one short- and one-long term solution, which illustrated how they saw these solutions. Not all solution maps had both short- and long-term solutions. These visual aids were shown to the VVS women after they suggested their own solutions. They were asked to select the top three solutions that were most important or needed by the villagers or themselves.

Skills training and adult education were identified as the top prioritized solutions for the total sample. The women's pictorial map depicted the short-term solution of offering programs at Bionics, a small building where a few adult education programs were held before the hurricanes' destruction. The long- term solution was having a variety of on-going programs in a permanent building that was only for adult education and skills training. This long-term solution was similar to the fourth solution, "Resource Centre."

Women suggested adult education solutions that were focused on young school leavers and older adults. One woman proposed, "Give the children [early school leavers] extra lessons" or "Offer a night school so people [older adults] who can't read and write like myself can go to school to read and write."

Table 2

Carib Territory's Ranked Root Causes

Root Causes:	EPM Points n=12	EPM Rank n=12	VVS Pointsn =34	VVS Rank n=34	Total Points n=46	Total Rank n=46
Education, skills training and facilities	13	2	48	1	61 or 23%	1
Representation in government	16	1	33	3	49 or 19%	2
Family priorities	4	6	40	2	44 or 17%	3
Unemployment	9	4	26	4	35 or 13%	4
Sex for money	0	0	24	5	24 or 9%	5
Poor plans by government	12	3	6	8	18 or 7%	6
Hurricane	0	0	16	6	16 or 6%	7
Deforestation	6	5	9	7	15 or 6%	8
Lack of facilities	0	0	1	9	1 or 0%	9
Peer pressure	0	0	1	0	1 or 0%	10

Note. EPM = Empowerment Process Model; VVS = Visual Verification Survey.

The majority of suggestions revolved around people learning a skill so that they would be more employable or self-employed. Also, women spoke about capitalizing on the increased number of tourists in the Territory. Women's suggestions for skills training were these:

> Maybe adult education...little things to turn their hands so that they can get a little money. It might not be right away but they could do something. A little sewing class or something. They could do little things to sell on the side of the road for when the tourists are coming. Could sell and get a $10.00 or whatever money they get so they won't have to go beg little boys. Same to the boys, get a little money to help themselves and no going into drugs or into alcohol.

Many specific skills were suggested by the women: crafts; sewing; baking; cooking; computer skills; technical training in television, refrigerators, and radio; furniture making; business management; and upholstery. Women saw this solution directly associated with the problems of education, unemployment, teenage pregnancy, and alcohol and drug abuse.

The second solution was focused on training health volunteers (short-term solution) and building more well-equipped health centres in the Carib Territory or better equipping the present centres. The women's pictorial map envisioned training volunteers to administer simple first aid within their hamlets or to help the health nurses so that people did not have a long wait at the health centres. As women voiced earlier, they were concerned with the long journey to see the health nurse. They said that people waited to make the journey to see the nurse when they were sick or had an accident. Therefore, this solution would also decrease infections and serious illnesses.

A third solution focused on income generation projects throughout the Territory to encourage participation in a variety of projects. Many times women visualized this solution as a cooperative project that could be completed or implemented in the family homes, but with long-term marketing as a group. For example, growing hot peppers at their homes and making hot sauce together to sell locally comprised the sequential map that the EPM women drew. A EPM woman explained their picture:

> Starting off by having a group. And then you think of doing something like if you decide to plant vegetables in a little group. Some kind of cooperative thing. You could do the starting in small and going big. And then people could really, later while doing it...go then on their own. More like a cooperative.

A fourth solution from the Carib women was to develop a resource centre that would house different educational trainings and resources such as a library, recreation center, wood working room, sewing room, and kitchen. They saw this adult education building as a long-term solution; it would be central building for permanent educational resources such as books, sewing machines, and training equipment.

Analysis of Differences

Developing a resource centre was ranked as the lowest priority solution for both the EPM and VVS women. This was a long-term solution, which may have influenced their rankings. Most of the long-term solutions -- resource centre and health centre -- would need support by the government or an outside agency. Therefore, the women's high rankings related to the Carib Territory needing properly representation in the government and poor plans by the government may have strongly influenced them to choose short-term solutions with fast, tangible results rather than long-term solutions.

Notable differences included that the EPM ranked income generation projects as a slightly higher priority than skills training and adult education. This may suggest that the EPM women thought money would solve some of their problems, even though they ranked education as a top problem and root cause. Alternately, the VVS women saw skills training and education as the highest priority to solving their problems. They were more consistent in associating education and skills training solutions with their top life problems of unemployment and alcohol abuse and top root cause of limited educational resources.

Community Meeting

A community meeting was held to share the final results generated from the women's total responses from the EPM and VVS. Its purpose was to encourage participants to take ownership of their community project's results by identifying, designing, and implementing their solutions into an action plan.

The majority of the 45 attendees at the meeting were women who had participated in the EPM and VVS. After the EPM women reported the top ranked problems, root causes, and solutions, more discussion was initiated to identify specific solutions in the adult education and skills development area. The consensus from the meeting was to organize classes in sewing, catering, and starting a small business. A majority of women expressed hope in capitalizing on the increased number of tourists visiting Dominica and the Carib Territory through the development of these types of classes. Women said that they could use these skills to generate money, and to learn something to help with their family's basic needs.

The tourism industry has increased in recent years, which positively affects the sale of locally made Carib crafts and the need for overnight lodging and food for tourists. It is estimated that 80 to 100% of Caribs were engaged in the production of baskets (Henderson & Joseph, 1993). The majority of VVS women made local crafts, to generate extra money for their households.

Table 3

Carib Territory's Ranked Solutions

Solutions	EPM Points n=12	EPM Rank n=12	VVS Points n=34	VVS Rank n=34	Total Points n=46	Total Rank n=46
Skills training & adult education	14	2	53	1	67 or 34%	1
Health volunteers	11	3	49	2	60 or 30%	2
Income generation projects	16	1	27	3	43 or 22%	3
Resource centre	10	4	18	4	28 or 14%	4

Note. EPM = Empowerment Process Model; VVS = Visual Verification Survey.

Several women volunteered to be on a planning committee with Augustus Austrie to develop and implement these workshops. Interested woman preregistered for the classes at the community meeting. Several months later, the sewing and starting a business classes began with an overwhelming response. The sewing class was taught by a local Carib woman and met twice a week. The instructor wanted eight participants, but twice the number of women attended. A member of the committee volunteered to assist the instructor and to make sure the building was open and ready for the class.

An instructor from the Ministry of Education traveled to the Carib Territory once a week to work with ten women interested in starting their own small business. Another class, traditional Carib boat making, was offered and targeted to men. Boat making was advertised, but it did not have enough participants to hold the workshop. This skill was not identified by the women nor were community men asked if they needed this skills training workshop. This may have influenced its low number of participants.

I wrote a $5,000.00 grant to the American Association for Family and Consumer Sciences in February 1996 to fund a catering training program. The Dominica Home Economics Association and the Ministry of Community Development and Women's Affairs were the main collaborators to deliver food catering programs that capitalized on the increased tourists. Unfortunately, the grant was not funded.

Summary of the Carib Territory

In summary, a wide variety of economic, family well-being, social well-being, infrastructure, and environmental themes were expressed by the women related to their problems, root causes, and solutions. In summary, the majority of top life problems centered around infrastructure factors (water and health care facilities) and social well-being factors (alcohol abuse, education, teenage pregnancy, and child neglect). Similarly, the root causes for these problems focused on infrastructure factors (government representation and education facilities) and economic factors (unemployment and teens having sex for money).

Responses within the hamlets revealed differences in the areas of water, land disputes, and health care facilities. For example, a land dispute in Sineku area was taking place during the research project. The government's decision on the land affected local families and was making national news. Therefore, many people from this area voted for this problem, whereas hamlets not affected by this problem did not vote for it. The same was true for hamlets that had facilities such was pipe-borne water and a health centre in their hamlets.

The solutions that emerged had similar economic and infrastructure themes. Short-term feasible solutions were chosen by the women for their first community action plan comprised of skill training in sewing and developing a business. Long-term development of sewing skills by Carib participants could lead to income generating businesses that capitalize on the tourist industry and basic needs of villagers. For example, sewn items could be incorporated into local

Carib baskets and crafts designs that are already being sold to tourists. Also, sewn items are needed by children such as school uniforms and sports outfits. Continued adult education and skills training programs are needed on a long term basis, especially with the success involvement of the women in the first workshops. Men need to be involved in the planning of appropriate programs that would meet their needs as well as those of the women.

The effects of the hurricanes were directly and indirectly associated with problems and root causes related to economic and infrastructure themes. Concerns of employment and income for basic living expenses were primary to all discussions. Women said that it was a man's primary responsibly to provide basic needs for the family. In reality, the ultimate responsibility for the home and children was the mother or women of the household. The women identified problems and root causes associated with men that negatively affected the family such as unemployment, alcohol abuse, and inappropriate family priorities. Few solutions were directed to men by the women. The women saw "having to do for themselves" as their solutions. Therefore, they suggested solutions that would empower themselves and an action plan that directly helped them to learn a skill for generating income.

Overall, the broader life problems and root causes were related to the nutritional determinants of health conditions, food security, and nutritional status. Health and food problems were specifically expressed by woman when specifically asked about food and nutrition problems. All women were asked "Are people getting enough food and the right food to eat?" One hundred percent of the Carib women considered these issues a problem. Most women said that people were getting enough to eat, but they emphasized the need for the "right foods" or a variety of foods, especially vegetables, fish, and peas, for health. Women described choosing the "right foods" in the following way:

> We haven't got enough things (food) to give our children. We need more
> vegetables like carrots, cabbage, cucumber, more callaloos [spinach, sweet potato
> or dasheen leaves] and peas. We had pawpaws [papaya] too, but the hurricane.

Empowerment Process Model and Visual Verification Survey

The majority of the EPM women and VVS women perceived the same top life problems (4 of 5) and root causes (3 of 5). A few differences were revealed in top problems and root causes. The EPM women perceived child neglect (Rank #4) as a major problem and the government (Rank #1 & #3) as a root cause of life problems in the Territory. The VVS women perceived teenage pregnancy (Rank #4) as a major life problem connected with the root cause of girls giving sexual favors to boys for money. Another root cause identified by the VVS women was family priorities.

Mentioned earlier, the majority of the EPM women were involved in community organizations such as the Committee of Concerned Women and other community activities or

leadership roles. The majority of these women were in stable relationships and had obtained primary or secondary education. Conversely, the VVS women's conversations alluded to more unstable relationships, less educational attainment, and continuous struggles to maintain their families. Many VVS women said that they were not involved in many village activities. Therefore, the differences in perceived problems and root causes may have been influenced by the stability of a woman's relationships, education, and involvement within the village.

Villages of Dublanc-Bioche

Village Collaboration for Empowerment

       The research project collaborators in Dublanc-Bioche were Jacinta Bannis, Programme Officer from SPAT; Nalda Jubenot, Community Development Officer from the Ministry of Community Development and Women's Affairs; and Rosetta Lewis, community leader. Jacinta was the facilitator, and Nalda was the recorder for the Empowerment Process Model (EPM). Rosetta, participant in the EPM, introduced women participants to me during the VVS while she collected data for the department of fisheries in both villages.

       The EPM was held in Dublanc's primary school, which was a traditional classroom setting of desks and chalkboards. Sessions were held after school from 3:30 p.m. to 5:30 p.m. The modified protocols from the pilot study were implemented. Field notes indicated that the EPM proceeded well, although it was more difficult to secure the commitment of all Dublanc-Bioche participants to attend all the sessions than with the Carib participants. An average of three to four women were missing at each session for a variety of reasons. They were updated on the process and activities before the next EPM session. The participation in the Visual Verification Survey (VVS) and at the attendance in the community meeting was very positive.

       Overall, the location permitted easier implementation of the VVS and the EPM because of better meeting facilities, water, electricity, transportation, local collaborators, and close proximity of the houses. The collaborators were very involved and interested in using the research for their work. It was especially helpful to have one person, Rosette, who coordinated the VVS interviews.

Background

       The geographic features of the research location influenced the data collection and results of Dublanc-Bioche. Dublanc and Bioche are two distinct villages with a total population of 680. Both villages are located on the shores of the Caribbean Sea and the northwestern area of Dominica. Governmental services and recreational areas are consolidated, including the primary school, preschool, health center, cricket field, and council offices. The majority of these services are located in Dublanc. Therefore, most Bioche residences, preschoolers, and primary students walk the two miles to Dublanc to access services. Pipe-borne water is located on the road sides and in some homes in Dublanc and Bioche. Public convenience facilities are available to villagers who do not have toilets and showers in their homes. A striking feature of each village is the close proximity of the houses.

The main economic activities for villagers are agriculture and fishing. Most of Bioche's families are self-employed fisherman, whereas the majority of Dublanc's families are self-employed farmers. Both industries were dramatically affected by the hurricanes.

Empowerment Process Model and Visual Verification Survey

The findings generated from the EPM and VVS are divided into four sections: life problems, root causes of life problems, solutions, and community meeting. Within each section the top rankings from the total sample are identified by showing the visual aids or summary statements and are described by "giving voice" to the women's pictures through their descriptive words. Next, the top rankings from the EPM and VVS are analyzed for similarities and differences. Finally, the summary of the findings is presented.

Life Problems of Village Families in Dublanc-Bioche

Twelve life problems were generated by the total sample of 46 women through the EPM participatory activities and VVS interviews. The five top-ranked problems that received more than 20 points, or 7% of the total 271 points, were prioritized by all the women as the most significant life problems. The Dublanc-Bioche women reported and described their five top life problems by using their words and the visual aids during the community meeting. Presented below are the visual aids developed as a result of the first meeting of the EPM. The "voices" of the Dublanc-Bioche women described and defined the priority life problems of typical families living in Dublanc-Bioche: (a) unemployment, (b) land and housing, (c) drug and alcohol abuse, (d) education, and (e) teenage pregnancy.

Unemployment
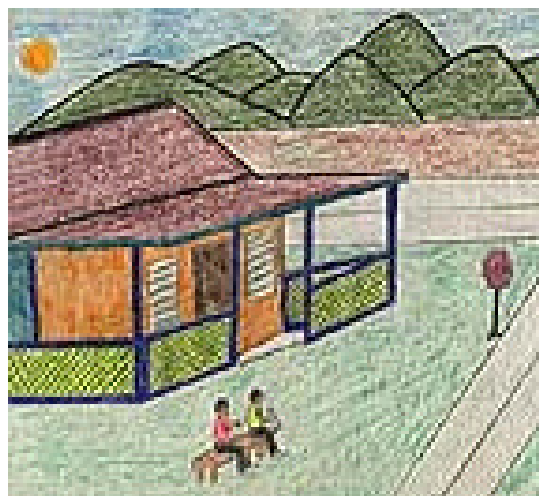
Figure 13. **People sitting on the roadside because they have no jobs.**

Unemployment issues were the number one life problem identified by women throughout Dublanc and Bioche. Women explained two aspects of unemployment faced by families: (a) availability of jobs and (b) jobs that match educational training or unemployment. Women said that it did not matter where they completed primary, secondary, or post-secondary education, finding any type of job was difficult and a main concern for everyone. A woman articulated how people felt:

> There's no way or means of getting any jobs at the present moment. Like when they leave school, there is nothing to be done. And now they just sit at the road side and just, I mean, just not doing anything.

Underemployment, especially for educated young people who could not find appropriate jobs relevant to their educational or skills training, was the other main concern. The women stressed that migration was a way to find good jobs for young people. Because she could not get a job as a teacher, a young educated woman worked in a clerical position and was not hopeful about employment possibilities.

> The type of work they want, they wouldn't get it. They feel to themselves they went to high school...the job they really want is an office job. You have to start from scratch.

Unemployment and self-employment directly influenced the amount of cash flow that was spent at local businesses. As one women said about buying small amounts of food in her village, "Same thing, no money, no work. If I'm not working, I have no money in my hands." Another woman discussed why there is limited income in Bioche:

> The village, the income itself is from fishing. The fishing is not as its suppose to be. As a small village, most of men, the people here, they depend on this fishing. And the fishing is not [as it used to be]. They are not having a fish that they could really say, you can have a business.

Village businesses, especially small income generating projects managed by single mothers, depended on villagers' cash flow as their primary source of income. One single mother explained her struggle to support her family by selling street foods on the weekends. She commented about the viability of her business in a village with high unemployment:

> [In my] Bamboo hut. It's a little bakes [fried bread] and a little chicken [that] I'm frying. If I buy a box of chicken, I sell two [pieces] from that and the balance...we [her family] eat it. So I'm not able to pay back the money.

As I arranged the VVS interviews, it was obvious that unemployment was prevalent. The majority of women in Bioche who participated in the VVS were interviewed in the mornings or

throughout the day because they were not formally or informally employed. In Dublanc, interviews were conducted in the afternoons because women either worked in their gardens or had part-time employment at the medical school or hotel industry in the Portsmouth area.

Lack of Land and Houses

Figure 14. **Houses very close to each other, which resembles Dublanc or Bioche.**

Mentioned earlier, both villages are located on the shores of the Caribbean Sea. The houses are built in close proximity to one another, with some houses as close as three feet. Women cited three reasons why close housing and limited access to land are the second top problem for families: (a) non-sale of land from government or major land owners, (b) approval of a bank loan for self-employed or seasonal workers, and (c) negative well-being effects on independence and privacy.

The first issue that women repeatedly expressed was that "A few people have a lot of land." Historically, several families and the government own a large area of land surrounding the seaside villages. Women felt that the government could sell some of their land at a reasonable price using easy loan qualifications. As one woman said, "We could get help from government and bank to buy lots and build." Recently, the government sold a few lots to families for a housing development.

A second issue mentioned was that of getting a loan without a full-time job. One woman remarked on the difficulty of buying land or getting a loan when most families are self-employed in fishing and farming:

A lot of people don't have land on their own. Some people have the money to build the house, but then the land is so expensive that they really don't have a proper job, a permanent job.

A third issue related to mental and social well-being concerns, in particular, was independence and privacy. One young educated women talked about the frustration of employed adult children living with their parents. This woman remarked, "Some people want a place to rent. They cannot get a house to rent. Living together with their parents, they don't like it."

Also, women alluded to the effects of the close proximity of houses on the mental and social well-being of individuals and their interaction with other villagers. Women spoke to this issue by saying, "The houses are too close to each other. You don't have enough privacy," and "Living in a small place you get frustrated." These frustrations were connected with lower ranked problems such as social relationships, abusive language, and community unity.

<u>Drug and Alcohol Abuse</u>
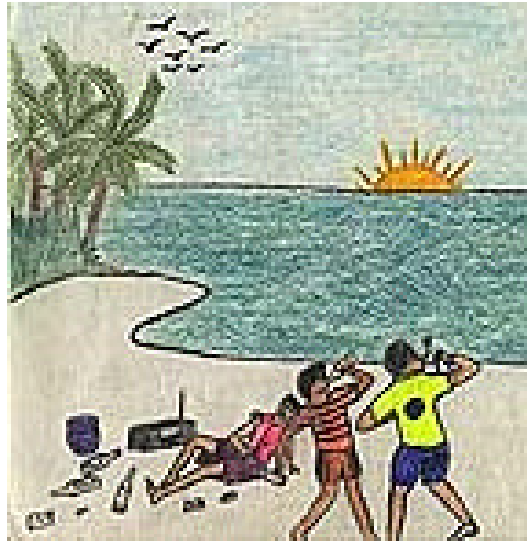
Figure 15. **Young people drinking rum and smoking ganja or marijuana.**

A third problem identified by women was drug and alcohol abuse. Women said that both drugs and alcohol were used by people, but unemployed young people trafficked and sold drugs in order to generate an income. Many women said, "They [young men] don't want to go and work. They just want the fast money." Women further commented that young people drank alcohol because they were unemployed. "Frustration" with nothing to do was continuously mentioned by women:

> The person again is unemployed. You get frustrated, there is a problem so you use drugs, you use alcohol as a way to ease problems. You drink, you are drunk, you forget the problem. It don't solve it.

Bioche has three discos, which the women felt influenced young men to drink more. A woman said, "The shops like discos and stuff, like as long as they sell, you find the young boys going around it. Taking in their little thing."

Education

Figure 16. **Children walking to school and adults learning a skill.**

The majority of women emphasized the value of a good education for younger people and the provision of adult education for older people. They stated, "The more you learn, the more you get." The main educational concerns reported by the majority of women were the cost of education and the frustration of educating their children when there were limited opportunities to find meaningful employment. A woman said, "A lot of people don't have money to send their children to education, to further their education. Other ones [children] have to stay home, take care of the smaller ones [while parent(s) work]." Another woman described the situation of educated young people finding a good job:

> Say if there's about 600 or 700 children going to school it depends according to their education or whatever. They are doing...whatever and it depends according to the type of schooling, whatever they do. So sometimes you find they [employers] choose. Out of the 600 whatever, they can choose 5 or 4 or 8 [for a job]. Then the balance goes job less. They got no jobs.

Other educational concerns were identified as root causes of life problems, such as management of school, well trained teachers, and family support for education. These educational root causes are mentioned in later sections.

Figure 17. **Young pregnant woman with the boyfriend and father of her children.**

Many women said that teenage pregnancy was a problem, which was caused by home situations, lack of resources, and unemployment. One woman said, "Unemployment. They look for the attention, the love, and they still don't work. They just have children." This woman captured the essence of what many women said regarding why young girls are attracted to young men:

Teenagers, sometimes when the parents use bad languages to them, they get frustrated. They have to leave--go. They need something the mother will not give it to them. Then they have to go out with a boy to give it to them. Then they get pregnant. Because most men now adays will not tell you, "Look something", and they don't want to have sex with you. They will always want to have sex.

Although teenage pregnancy was expressed as a problem by many women, some women who viewed this picture emphatically said that teenage pregnancy was not a problem anymore or involved very few girls.

Food and Nutrition Problems

Food and nutrition related problems were not identified in the community-based approach. Broader life problems and root causes were linked to the nutritional determinants of health conditions, food security, and nutritional status. Health and nutrition concerns were directly expressed by women when they were specifically asked, "Are people getting enough food and the right foods to eat?" Seventy-five percent of the Dublanc-Bioche women considered these issues a problem. Women discussed three reasons why getting enough food and the right food to eat was a problem: (a) generally high prices of food on limited incomes, (b) limited

access to a variety of foods in the village, and (c) health concerns related diseases and eating the same foods.

Most women said that families are getting enough food to eat, but they were eating the same foods with limited variety. One woman said, "It could be better, [eating a] proper diet. I mean peas, meat, eggs, [eating] different things everyday. Nearly every time it is one thing of food." When the women were asked what they usually ate for most meals, they typically said that "Sometimes you eat too much of one thing [like] ground provisions" and "They eat so much fish." High carbohydrate foods were common in Dominican's diet. Also, fresh fish was readily available in these fishing villages.

The majority of women said that they needed a mixed diet or a variety of foods to stay healthy. Some women also said that the diets and eating habits of families, especially children, were moving away from traditional food:

> It's a mixed diet. And most people eat the same food. It's lack of money. They mostly eat provision. Fish is not a problem in the community. Some peas. If you want to change your food, you have a lot of money to change the food because its expensive.

> Right types of food is a problem. Before people used to eat more ground provisions. But now people eat Irish potatoes. They don't eat a big plate of food like how they used to do. They would fry chicken,[and] chips. You know fast foods. They are not really into the fig and dasheen like before.

Many women said that "Lots of diabetes and high blood pressure [are] very common in our village." Some women stated that many Dominicans with diabetes or hypertension need certain foods or cooking methods to maintain their health or manage the diseases:

> Especially with the young, seeing that diabetes and hypertension are...very common diseases in Dominica. I think I have to know what to cook. Because when you have this problem you have to eat in the right way. I don't think some of us are educated enough.

The majority of women's conversations were focused on the issues of limited money to buy food and limited access to a variety of food when families lived in a small village with no markets or large shops. Three woman gave their perspectives on the situation:

> If you go by the bay, they have fish. But at the time you don't have money to buy fish. You want to cook a nice meal like green fig, meat, and greens. You want to buy greens. No money to buy greens because they are so expensive.

> Maybe at that time [5 years ago] maybe you could have a better meal. Take a $20 or $50, you go to Portsmouth and do a little shopping. Now you can't even do that.

You cannot take a $40.00. You can't do shopping Portsmouth with that. You cannot do that...things get so expensive. I don't have passage [transportation] to pay.

Because most times things you like to eat, vegetables, whatever, you can't afford to buy it. Expensive things that you like to protect yourself, can't afford it, takes so much a money to buy. Maybe once in awhile. You can't afford to buy so much. You need it. You leave the ting. You can't afford to buy it.

Most women said that "[You are] satisfied with what you have and get." But other women said that they managed families meals by not buying expensive foods. Many tried to use locally grown foods to stretch their food dollars and still maintain their family's health. This woman explained how she stretched her food dollars:

I am not taking my money to buy meat [mostly imported chicken]. I more give them peas and fish. When I have the money to buy the greens and vegetables. I buy it. When I don't have the money, we have callaloo leaf and then maybe grate coconut and put with peas with it.

Analysis of Differences

The findings of the EPM and VVS related to women's perceptions of village families' life problems in Dublanc-Bioche are presented in Table 4. The women in the EPM and VVS prioritized the same three out of five problems. Each methodology identified unemployment, lack of land and housing, and education as their main life problems.

The majority of women who participated in the EPM had previous experiences in taking part in village groups and attending village meetings. Therefore, it is not surprising that these women would view lack of community unity (Rank # 5) as a problem, because they were involved in mobilizing people to get involved in village activities.

Overall, the EPM women regarded teenage pregnancy (Rank #6) and drug and alcohol abuse (Rank #6) as a lower problem. They did not rank social relationships, abusive language, and family priorities as problems, which was contrary to the VVS women's perception of these problems.

The VVS women identified with family and social well-being problems such as drug and alcohol abuse (Rank #2), teenage pregnancy (Rank #3), and social relationships (Rank #6). Unemployment and close housing may have influenced the limited interactions that VVS women had with villagers and other people. Women said that gossip, jealousy, and disagreements with neighbors were constant issues in their lives because of the close proximity of housing. Women conveyed these feelings by saying, "They know my business." Restricted interactions with people

Table 4

Results of EPM and VVS for Dublanc-Bioche's Ranked Life Problems

Current Life Problems:	EPM Points n=12	EPM Rank n=12	VVS Points n=34	VVS Rank n=34	Total Points n=46	Total Rank n=46
Unemployment	23	1	58	1	81 or 30%	1
Land and houses	18	2	23	3	41 or 15%	2
Drug and alcohol abuse	2	6	32	2	34 or 13%	3
Education	8	3	22	4	30 or 11%	4
Teenage pregnancy	2	6	23	3	25 or 9%	5
Financing projects	7	4	11	5	18 or 7%	6
Community unity	4	5	7	8	11 or 4%	7
Parenting skills	2	6	8	7	10 or 4%	8
Social relationships	0	0	9	6	9 or 3%	9
Abusive Language	0	0	6	9	6 or 2%	10
Recreation	1	7	4	10	5 or 2%	11
Family priorities	0	0	1	11	1 or 0%	12

Note. EPM = Empowerment Process Model; VVS = Visual Verification Survey.

in and out of their villages may have affected their well-being. Also, limited personal and financial powers or control over personal relationships may negatively influence their lives. Most of the VVS women's energy was spent in finding and caring for families' basic needs with limited involvement in community activities and adult education.

Many of VVS women had limited writing and reading skills. For example, village women told Rosette Lewis, who invited women to participate in the VVS interviews, that they would not talk to me if they had to read or write during the interview. Many times it was a struggle for women to sign the consent form. Also, women repeatedly remarked that "no one has ever asked my opinions and my concerns." This suggests that women were empowered by using the visual aids and the personal interviews to give their opinions.

Root Causes of Dublanc-Bioche

The Dublanc-Bioche women reported and described the following top root causes of the total sample at the community meeting. Presented below are the pictures and "voices" of the Dublanc-Bioche women reflecting their descriptions of the root causes and their association to life problems. The top eight ranked root causes of life problems that received at least 20 points, or 7% of the total 268 points, are these: (a) lack of education and skills training, (b) lack of commitment of partners, (c) marketing of products, (d) management of school and teachers, (e) television, (f) lack of motivation, and (g) lack of family support for education. After the top root causes are discussed, the two data collection methods, EPM and VVS, are compared and the total findings for each root cause and methodology are shown.

Education Programs and Skills Training

Figure 18. An adult learning a skill.

The number one root cause--lack of education programs and skills training--was strongly associated with the number one problem unemployment and underemployment. Women said

that lack of education or job skills for adults limited their ability to obtain a job, which in turn affected the children's ability to go to school and get a good education themselves.

> Most parents cannot help to send their children to school. So if there is work and then the parents could get work. Then parents could send their children to school then they could get better education.

It is difficult for many families to break the cycle of the lack of skills or education to get a job to pay for children's education. Otherwise, the cycle repeats with their children. Other root causes of getting a good education were identified by women such as a lack of commitment of partners and family support of education, both of which affected a child's educational attainment.

Lack of Commitment of Partners

Figure 19. **Man walking on the road with another woman when his wife or partner is pregnant with his second child.**

Lack of commitment of partners was ranked as the second root cause and was associated with many life problems, especially economic, family, and social well-being problems. Many women related to the above picture in a very personal sense. For example, one woman told her story of the father of her two children who was seeing another woman. She said, "I wait for him to see the children and give them a little money for food and school. It wears on me." She told how it affected the parental and financial support of her children, especially for women like herself who are unemployed and with limited education. Another woman described the lives of women and their children:

> Most parents are single parents. Most times the mother alone is the parent with the child. You don't have a father living in or a father that is even responsible for the child. So that is part of the problem. Some of these women are not employed. So you have a problem that you as a single parent having to provide for a child when you are not even employed.

Marketing of Products

Figure 20. Selling products on the roadside because no other markets.

Mentioned earlier, Bioche and Dublanc depend on fish and agricultural products for their income. Women said that an unstable market for their products was the root cause for their self-employment and fluctuating income problems. Women expressed frustration with low banana prices and low seasonal vegetable and fish prices. One woman from Bioche talked about buying vegetables for her family and how the prices fluctuated:

> The most important thing to eat, basically greens on a whole is very good. Like carrots, lettuce, tomato and these things. There's a season, a time when you have it and another time when it is gone. So when it's gone, it's completely gone. Then the season is back again, when you have it abundantly. When it's plentiful. When it's not plentiful who can afford to buy it? Because when it is scarce, you find a pound of carrots is 4, 5 or 6 dollars. When it is plentiful carrots are 2, 3, or 4 dollars. So that's how it is.

Buyers are frustrated with the increased prices, and farmers are frustrated with low prices when production is high. The same situation is true within the fishing industry. Certain good seasons for fish reduce the selling price.

Management of School and Training of Teachers
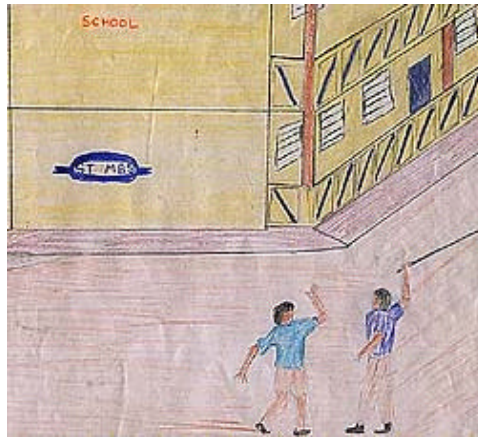
Figure 21. **Teacher hitting a child at school.**

Management of the school and training of teachers were root causes directly connected with the problems of getting a good education. Women expressed their concerns related to the training of teachers in primary education and adult education. One older woman who used to attend adult education to learn to read and write said, "I didn't go to [primary] school, and that kept me back. I used to be ashamed [attending the literacy classes]. I am not going again [to adult education classes]." She felt uncomfortable with the professionalism and training of the teachers.

Other women reported that "The rates of children that go to secondary school is very low in Dublanc." Women were concerned with training of teachers and how it influenced the quality of education for primary children. Women also mentioned that one teacher sent her children to a different school, which reinforced to villagers the lack of quality of the local teachers.

Influenced by the poor management of the school, women said that the quality of education is negatively affected. Specifically, women were frustrated when the children were sent home many times because the school was closed without notice or explanation. Also, women said that teachers hit the children who did not understand or complete their lessons. Corporal punishment reinforced a child's lack of motivation to attend school and increased women's concern about the training and management of the educators.

Television

Figure 22. **A child watching TV and not completing their homework.**

Television or cable is a relatively new luxury available in 1990 to residents in Dublanc and Bioche. Woman said that television negatively affected community participation and children completing their studies. They stressed, "They have their own TV so they will stay at home." Also, if late afternoon meetings were held, women said that adults gave the excuse, "You mean I'm going to miss the Young and the Restless?" The "Young and the Restless" was the most popular television program on the island that aired at 5:00 p.m., when most village meetings were held.

Women expressed concern for children who watched television instead of completing their homework, especially if parents did not support the children's education. Lack of family support or encouragement was another root cause of educational problems for children, which is mentioned in greater detail later.

Lack of Motivation

Figure 23. **Men playing cards and drinking by the roadside during the day.**

Lack of motivation of people was a root cause primarily connected to getting a job and trafficking drugs for easy money. One woman captured what many said.

Some people are not educated enough to go out and seek jobs therefore they
remain unemployed. Some people are just lazy.

Women said that people lacked motivation because of their continuous or excessive use
of drugs and alcohol, and they were frustrated:

Frustration causes that sometimes. Because if you are not working, then you're at
home...nothing to do. You might get a cigarette, you might want to smoke it. You
get rum. You want to drink it. Just to forget, you know.

Women emphasized that they needed someone to talk to and help motivate them to do
something with their lives. One woman stressed, "Like you are doing now. Going into the
houses, talking."

Lack of Family Support for Education

Figure 24. **Children working on their homework with no parent helping them.**

Lack of family support was a root cause that women said directly connected with the
problems of education for children. Women identified three aspects of family support in order
for children to succeed in school: (a) financial support from absent fathers for basic needs, (b)
encouragement from parents to stay in school, and (c) help with school work.

The financial burden of educating children was voiced by many women and is connected
to commitment of partners, which was mentioned earlier by this woman's statement:

Most parents are single parents. Most times the mother alone is the parent with
the child. You don't have a father living in or a father that is even responsible for
the child. So that is part of the problem. Some of these women are not employed.
So you have a problem that you as a single parent having to provide for a child
when you are not even employed.

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Also, women associated limited financial support with the ability of mothers to buy food for their children, which helped them focus on their studies. A woman explained the connection:

> Sometimes maybe their family don't have enough money to give them breakfast or lunch and then when they go school they cannot focus on whatever they have to do because they are hungry. I can't really say so much about it. But the main fact is the money and help, that they really don't have to push them to it so that they can gain education.

"Parents need to get more involved. And take it more seriously," was expressed by many women. Parental involvement was needed to help children excel in their homework and staying in school. Another woman said, "There is not enough incentive to go to school from the parents. When you reach 15, you get out of school (primary school). The rate of children that go to secondary school is very low in Dublanc."

Lack of Unity and Commitment

Figure 25. **Two people at a village meeting who are waiting for other people to attend while the other people are fishing or at the rum shop.**

Education and motivation was related to community unity and commitment to community projects. A variety of reasons were associated with these aspects. "Family structure is one. Relationship between the families cause the lack of unity" was one reason expressed by women. Other women said:

> I would say envy. Maybe some might think they are a little higher.

> Lack of love. You must be loving to be together.

> We fail to forgive each other inspite of hating. We hold hatred too long in our hearts for each other.

Women said that villagers were not committed to community projects or problems because "They don't see the importance of it." Women said that leaders need to "Tell them the importance of coming together."

Analysis of Differences

The total sample of Bioche-Dublanc women generated fourteen root causes for their life problems as presented in Table 5. The women in the EPM and VVS prioritized the same five out of eight root causes. Each group of women identified lack of education and skills training, marketing fish and agriculture products, management of school and training of teachers, television, and lack of community unity and commitment as the main root causes linked to a variety of life problems.

The VVS women prioritized more family well-being themes, specifically lack of commitment of partners (Rank #1) and lack of family support for education (Rank #3) as top root causes. EPM women did not vote for either of these root causes. In contrast, lack of role models was considered as important root cause for the EPM women (Rank #4), but not for VVS women (Rank #10).

Ranked Solutions of Dublanc-Bioche

Women suggested a variety of solutions ranging from "Provide employment, sports, and different sessions for adults" to "Give the children extra or private lessons." The majority of VVS women used a brainstorming technique to arrive at solutions related to skills training, education, community participation events, and cooperative income generating projects before seeing the EPM mapped solutions. The final rankings of the three solutions for the total sample are shown in Table 6: (a) skills training and adult education, (b) community participation on housing and land issues, and (c) cottage industries. The majority of the solutions tied into many of the top life problems: housing, unemployment, substance abuse, education, and teen pregnancy.

Skills training and adult education were identified as the top prioritized solutions for the total sample. The women's pictorial map focused on non-traditional skills such as plumbing and carpentry for women or men. Also, traditional adult education classes or learning such subjects as calculus from cable television were illustrated in the pictorial map. Women suggested that people needed these types of skills trainings:

Teaching them on how to work in a hotel.

Table 5

Dublanc-Bioche's Ranked Root Causes

Root Causes	EPM Points n=12	EPM Rank n=12	VVS Points n=34	VVS Rank n=34	Total Points n=46	Total Rank = 46
Lack of education and skills	23	1	24	2	47 or 18%	1
Commitment of partners	0	0	34	1	34 or 13%	2
Marketing of products	5	5	24	2	29 or 11%	3
Management of school & teachers	9	2	15	5	24 or 9%	4
Television	6	4	17	4	23 or 8%	5
Lack of motivation	8	3	14	6	22 or 8%	6
Family support for education	0	0	21	3	21 or 8%	7
Lack of unity and commitment	5	5	15	5	20 or 7%	8
Hurricanes	0	0	13	7	13 or 5%	9
Lack of role models	6	4	5	10	11 or 4%	10
Girls exchanging sex for resources	2	7	9	8	11 or 4%	11
Recreational support	4	6	3	12	7 or 2%	12
Confidentiality with professionals	0	0	6	9	6 or 2%	13
Social relationship in community	0	0	4	11	4 or 1%	14

Note. EPM = Empowerment Process Model; VVS = Visual Verification Survey.

Table 6

Dublanc-Bioche's Ranked Solutions

Solutions	EPM Points n=12	EPM Rank n=12	VVS Points n=34	VVS Rank n=34	Total Points n=46	Total Rank n=46
Skills training & adult education	31	1	78	1	109 or 39%	1
Community participation on housing and land issues	25	2	71	2	103 or 36%	2
Cottage industries	13	3	55	3	68 or 24%	3

Note. EPM = Empowerment Process Model; VVS = Visual Verification Survey.

Some different skills. Different kinda things for people to do. Like wood work, masonry, handicrafts, or things you can do with your hands.

Try to get skills training for the young people. After their training, help them find jobs or maybe organize them in groups to do some fund raising on their own.

In addition, women suggested the need for more adult education classes and night school so that they could learn to read and write. Educational discussion groups on family life topics were suggested by women to bring people together to talk. Other education classes were suggested such as computer workshops, business management, and home study courses.

The second solution was to develop community participation strategies that focused on the issues of limited land and housing. The pictorial map by the EPM showed a step-by-step plan for developing a community participation action plan. The ultimate goal of the community participation action plan was to build housing on government land, which was mentioned as a solution by many women. The plan would start with villagers networking with agencies and banks on issues and concerns related to developing a housing scheme and getting loans for self-employed people. Next, the villages would work together and form committees to develop strategies to access land from the government. The committees would work with the local parliamentary representative who would work with government headquarters to help villagers buy government land for housing. Throughout this process, the villagers and committee members would hold sports days (cricket or rounders) for community unity and enjoyment.

In addition, women suggested social events, recreation programs, cleaning campaigns, and general discussion groups to bring people together. One woman said, "Social events educate people to come together and help each other."

Cottage industries or income generating projects were a third solution. The women's pictorial map showed traditional skills such as crocheting, sewing, and basket making to generate income at home. Also, vegetable gardening was illustrated as another cottage industry.

Analysis of Differences

The EPM and VVS women had exactly the same order of rankings for the solutions. Also, there were no village differences in rankings between Dublanc and Bioche. This may have indicated that the villages were very similar in their problems and solutions. Thus, planning and implementing solutions together was mutually inclusive and beneficial.

Community Meeting

A community meeting was held at the school to share the final results generated from the combined responses of the EPM and VVS women. The main purpose of the meeting was to encourage participants to take ownership of their project by identifying, designing, and implementing their own solutions into one feasible action plan.

The attendance of women at the community meeting was overwhelming with over 55 participants. The majority of the attendees were participants of the research project. After the EPM women reported the top ranked problems, root causes, and solutions, more discussion was conducted to identify a specific solution or what to do next. The consensus of the women was to organize a women's group to further discuss the implementation of these solutions into an action plan.

Currently, the women's group has been meeting regularly to identify a collaborative action plan with SPAT and community development officer. Recently, they have implemented an action plan focused on developing a coffee house named Syndicate. The coffee house would be located in an attractive location where tourists can stop to see coffee being processed, purchase and drink coffee, and enjoy the Dominican scenery. Coffee is a traditional crop of the area. This project embraces all three of the women's solutions by developing new skills for employment, community participation around an issue, and a cottage industry that can be grown by individual families, but processed and marketed together. A concept paper has been developed by Jacinta Bannis of SPAT, and funding is now being sought.

Summary of Dublanc-Bioche

In summary, a wide variety of economic, family well-being, social well-being, infrastructure, and environmental themes were expressed by the women of Dublanc-Bioche related to their problems, root causes, and solutions. The solutions that emerged concerned economic and infrastructure factors, even though more social well-being factors were identified as problems and root causes, especially by the VVS women. The community action plans developed by the women incorporated an immediate short-term solution for forming a women's group. Because community participation and commitment were identified as problems and root causes of problems for this community, the development of a women's group is very appropriate. Their long-term action plan, Syndicate Coffee House, embraced all three of the women's solutions new skills for employment, community participation and an income generating industry. Continued short-term adult education and skills development workshops may also be needed for both men and women, especially to show continued commitment to women's needs.

In summary, the majority of top life problems centered around infrastructure factors (housing and land) and social well-being factors(drug and alcohol abuse, education, and teenage pregnancy). Still, the number one problem, unemployment, was related to an economic factor.

The majority of root causes for these problems focused on social well-being factors (commitment of partners, management of school, training of teachers, lack of motivation, television, and lack of village unity and commitment). One economic factor (marketing of products) and one family well-being factor (family support of education) were also mentioned.

Overall, basic family needs such as housing, education, and employment surfaced during the community-based research approach rather than using an nutrient-based approach. Implicit food and nutrition problems were getting a variety of foods to maintain health and become productive and educated citizens.

<u>Empowerment Process Model and Visual Verification Survey</u>

The majority of the EPM women and VVS women perceived the same top life problems (3 of 5) and root causes (5 of 8). A few differences in top problems and root causes were revealed. The EPM women perceived community unity as a major social problem and lack of role models as a root cause of life problems in the villages. Alternately, the VVS women perceived family and social well-being problems such as drug and alcohol abuse, teenage pregnancy, and social relationships as major life problems connected with the root causes of lack of commitment of partners and lack of family support for education.

Mentioned earlier, the majority of the EPM women were involved in community organizations or activities or in leadership roles. The majority of the women were in stable relationships and had obtained primary or secondary education, whereas the VVS women's conversations alluded to more unstable relationships, less educational attainment, and a continuous struggle to maintain their families. Many VVS women said that they were not involved in many village activities. Therefore, the differences in perceived problems and root causes may have been influenced by the stability of woman's relationships, education, and involvement within the village.

Key Informant Interviews

   Eleven key informant interviews were conducted with six government leaders and five non-government organizational (NGO's) leaders, seven women and five men. Nine open-end questions (Appendix B), similar to the women's questions, were used in the interviews. Interviews ranged from 15 minutes to over an hour depending on the person's schedule. Mentioned earlier, the interviews were completed before the village research to ensure collaboration and participation with their employees. All key informants expressed their appreciation of being included in the research and the knowledge that it was being implemented on the island. Most leaders requested a copy of the final report. Constantly, I encountered these leaders, and they would ask about the status of the research.

   The top life problems and root causes of these problems for typical Dominican families are identified and described in this section by using the key informants descriptive words. The key informants did not have visual aids to guide their top problems and roots causes. Instead, they used a brainstorming technique to list problems and root causes and then named their top three rankings. For solutions, key informants were asked to explain how their organization has responded to families problems. Also, they explained how their organization influenced the implementation of successful solutions for families. This information is included in the summary.

Life Problems of Dominican Families

   Fifteen life problems were generated by the eleven organizational leaders. The top life problems are discussed and described by using the key informants' descriptive words. The top life problems ranked by the organizational leaders were these: (a) unemployment and economy, (b) family and interpersonal relationships, (c) health and chronic diseases, and (d) well-being of children.

   Unemployment and Economy

   Organizational leaders focused on three aspects of the island's economy that affected typical Dominican families: lack of jobs, an agriculturally based economy, and a changing global economy. All key informants consistently identified with, "the inability of adults to secure for their families resources for living or what they need. So employment or underemployment" or "I think they have problems of generating income that allows them to take care of their full and complete needs."

   After emphasizing the Dominicans' struggle to find jobs and support their families, all key informants mentioned Dominica's economic agricultural base, specifically the current crisis in the banana industry. Key informants acknowledged that "The majority of Dominicans are farmers, [the island] has an agricultural base. And people work much harder." However, farmers'

hard work was not adequate for an unstable banana industry operating in global market. Two key informants explained the current crisis in the banana market and how it affected families:

> The stresses of daily life and economic situation right now. We don't know where we are going to turn tomorrow with the whole banana issue. Geest [former buyer of bananas] is selling out...We depend on bananas, many of directly and others indirectly. And if bananas go out right now. We are without any form of livelihood right now. We have a serious unemployment problem. Hurricanes have taken toll on our agriculture. So for the next probably year it is going to be worse than what we have experienced so far. So we have all those economic stresses and they are going to manifest themselves in all sorts of abuse in families.

> The rural is more exclusively farming or high percentage farming. And in farming families the income levels would be very low. Because they depend on bananas for the most part, in banana sections of the country. We have a differential between the heavy banana producing sections and non-banana producing section where they are more dependent on root crops that have irregular marketing structure. So the problems vary from the rural bananas to rural non-banana to urban poor and to urban white collar worker. And so that would influence a whole range of things, food on the table, ability to support children at school in terms of school books, you know.

Because of the banana situation and general unemployment, key informants expressed specific concerns for the young people of the island. In particular, migration was mentioned by many people as a employment alternative used by young people to support their family members. A key informant explained a main reason for migration:

> It is hard. Because they are not many jobs available and what I find is that the young people...a lot of our youth are unemployed and because the situation with agriculture or particularity in bananas is not a stable economy in agriculture. You find the youth do not want to go into agriculture. And therefore what we find happening is migration among our young people and our able body person particularly ages 16 to 35. People migrate to the neighboring Caribbean countries with low employment. I put this all under the issue of poverty because people are not able to buy the little things that they want for survival. They have to migrate. Everything stems around finance and money.

Key informants acknowledged that the changing global economy and markets had a direct influence on Dominica's economy and the banana industry. Also, key informants voiced their concerns on accessing limited international funds for the Caribbean region, which they used with vulnerable families who were experiencing structural adjustment with limited safety nets. One key informant explained the situation:

And remember money now with the Cold War seemingly at a end, it is not that easy to get grants for programs coming our way. Everything seems to be going to the eastern block. So it makes the job of NGO's more difficult because they would normally pick up the slack where the government can't do. And if they cannot get funding then it means that it's going to be left up [to the families]. Because many of them were the support for the families that are in distress. They have no money and there is going to be no support. Very few safety nets are for families outside of the little education programs that you can continue to hold.

Family and Interpersonal Relationships

The second ranked problem was related to family and interpersonal relationships issues. A variety of family well-being themes were discussed by the key informants. The majority of discussions focused on some aspect of family's coping skills and relationships, types of families, and interpersonal relationships related to economic and migration issues. This key informant captured the ideas of many others:

Number one is their inability to cope as a family...as parents. You haven't got those coping skills so everything becomes a problem to you. It is true the economy is tight but if you cannot cope then it is tighter.

Key informants reported that both men and women would cope with financial problems by migrating or multiple interpersonal relationship. The children of absent parents became the responsibility of other family members. Key informants explained the positive and negative aspects of the various types of families in which grandparents, single parents, godparents, older siblings, or other extended family members took care of the children. One key informant eloquently described the situation of siblings taking care of siblings when the parents migrate and its affect on the Dominican society:

A growing type of family [is] sibling families. Where children are taking care of children. Older brothers and sisters [are] taking care of younger children in the home. Where they themselves, the older siblings, are even in school or out of school. Recent school leavers I would call them. That [family] has arisen as a result of parents migrating in large numbers. So that is a growing problem in Dominica. So that is affecting the maturing of children...the care and nurturing of children in the home.

In particular, women coped with financial difficulties by engaging in many interpersonal relationships for security. Non-commitment of partners and unstable relationships between young men and women influenced the well-being of all family members and the overall society. Key informants explained various aspects of interpersonal relationships and the role of women in supporting their families:

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People are getting married more. For example, by the third child you find that, by then they would have made up their minds...But some of the problems in families is that some father don't care for their children.

In terms of relationships, now I want to focus on the male/female relationships. We are still like other Caribbean islands, [we] run into situations where all men dominate even in the home...But financially the woman still bears the brunt of the household.

Women play an active role. In fact, women head the households in Dominica. At this present time the women, apart from doing the home chores, they are the ones staying out to work and bringing in the money to the home...And even though they are married you find that they really work to support the families. I see now that some of the men, the married men, have forgotten their role...So the women have quite a lot on their account. In spite of what I have said, there are some families where the head of the family is the male. He and the wife work in collaboration.

Unstable interpersonal and family relationships are associated with other social problems such as health, stress, violence, drug abuse, and teenage pregnancy. Below are how comments from two key informants on how they explained this connection.

Yes, in relationships, women are in more stress if she is not supported emotionally. Especially where the partner is absent. You have more physically exertion on her part, to be working, earning a living, and then caring for children at the same.

...And once there is domestic violence , it really spoils everything. You cannot have supper with the family. The children in the home cannot live well. They cannot be strong and health. They cannot study.

Well, they [young people] had problems of disintegration of families with migration which is an important one. That is related to drug abuse and we have a situation, how do we say that, marginalization of the males in the society. I think we do have problems between young women and teenage pregnancy and so on. But you also have major problems with the young men. And these are manifested with their responsibilities in the home and socialization and education.

Health and Chronic Diseases

The third top-ranked problem was the issue of health and the development of chronic diseases. The majority of health and chronic disease issues were associated with unemployment, unstable relationships, and changes in traditional family and eating patterns. Unstable

relationships were previously identified as being stressful and unhealthy for family members. Two key informants explained the complexity of eating healthy in today's Dominica in this manner.

> To compound the [economic] problem, you are going to get a lot of spouse abuse. Not only domestic violence, physical abuse of women, but you will also get abuse of men as well. Because many women will feel cornered or trapped and they will lash out. They can hit...they can...if it is verbal abuse or what have you. So you are going to have that type of problem. And of course the children are caught in real life and they're going to suffer deprivation if parents have no money and if their priorities are not right. The children are going to suffer food wise. You find a lot of children getting many carbohydrates and no protein. Because protein is expensive. A pound of fish now is $6.00. And you have no income and low income parents have lots of kids. It is a matter of stretching the dollar that already has no scope to go further. We have an upsurge in sexual assault and abuse of children. And you expect that to increase. So you have that kinda situation. On the other end of it. When the economy is being squeezed, the government will obviously cut back and social services are going to suffer.

> Certainly, I see mothers staying at home less often. Mothers are involved more into economic generating activities. Mothers have less time to plan and prepare meals. We are seeing a lot of fast food entering [the island]. Parents, instead of being able to prepare a good breakfast for kids, they would just give them cornflakes. Instead of being able to prepare good snacks, they would just pick up some corn curls and a box drink. Also, I think the whole TV thing too has introduced us to ads, but also the availability of those things have also lead us to changing significantly our dietary habits. To a certain degree, our children, most children, don't like ground provisions[dasheen, tania, and yams] which is what we produce. They want Irish potatoes and rice and macaroni. And those are much easier to prepare. So for the mother who is working and wants something fast to prepare. We have also changed on how we eat our fruits. Now we make juice and we add lots of sugar. We are exercising much less than we did before. We wait for a bus, because they are more available than before. And the family has a little more disposable income to pay for the bus. So our kids don't walk to school any more. Everyone is driven or they wait for the bus to go to school. Also, I think the pressure at school to perform well on exams that we see even at school that their exercise program at school is being curtailed as well. So generally we don't get much exercise. Even the exercise was the part of the work situation that is gone because lots of people are being drawn away from that [agricultural] sector. A lot of that is contributing to a lot of the health problems that we see which are nutrition based. We are seeing heart disease, obesity, diabetes, hypertension. In fact, those are our major conditions and cancer is our number two cause of death. Heart disease is number one.

The fourth problem was raising children to become productive adults. Key informants voiced their concerns of poor parenting skills and other limitations related to the well-being of children that may influence their abilities to be healthy, educated children and ultimately productive Dominicans. A key informant talked about problems of parents and their affects on children:

> Families here are in crisis. We have many young parents and many of them are not in a position to shoulder the responsibility of parenting...We hardly [have] any parenting training done here. Parenting [is] caused by accident. So you have a lot of parents by default. Biologically they are parents but they can not really [parent]. They do their best but their best is far from good. Because of that...the majority of their children are growing up in a crisis situation. Nurturing and love and development and self-esteem is not as yet. To no fault of theirs. Parents themselves don't have it. And you cannot give what you haven't got. It is like a viscous cycle.

Root Causes of Dominican Families

Nineteen root causes related to the life problems for Dominican families were generated by the key informants. The top root causes of life problems for Dominican families are now identified and discussed. The top root causes include three issues: (1) poverty and limited human resources, (2) education and training, and (3) changes in traditions and culture.

Poverty and Limited Human Resources

The main root cause for a variety of life problems of Dominicans was associated with poverty and limited human resources. Poverty and the economies of Dominica and the world have influenced people to migrate. This negatively affects Dominica's human capital, especially educated and trained adults. Several key informants discussed the essence of these causes that influenced a majority of life problems:

> One of the major problems of Dominica families right now is the real question of dealing with the issue of poverty. Practically, no income. What we also find happening that most families...are facing financial difficulties so that they are able to buy food and pay bills. That is our major problem. When I talk about some of that I talk about unemployment common to that as well.

> One of the root causes is poverty. The lack of resources for the family itself to enable to face the outside world. The struggle to break out of that poverty cycle. It manifests itself in various ways. For example a young woman who is out of the

house there for might have relations with someone who is not her age or a steady relationship to provide an opportunity to leave the family where she to have better life. Or have the young man go into drug for a faster income. The reason for migration is economics. People generally will say young people don't care because they generally want to travel. There is opportunity then most people will travel instead of staying here. But we have had a decline in our population from 1970 until now. Particularly with the young people and in fact especially the leaders. We find that the leaders, those that are empowered are those that leave. If I can do all that, what am I doing here? Soon as they are trained and equipped, the person well, then they leave.

Reliable labor productivity is another problem linked to that [limited human resources]. We have for example in spite of the unemployment situation we have a shortage of agriculture labor in Dominica. For example, when that crisis in Haiti, if it was up to the farmers in Dominica Haitian would be allowed to enter here. Because of the agriculture labor. And it is not cheap, agriculture labor. Farmers are willing to pay a minimum of $25.00 a day, living in a house and food. So it is not cheap labor. Reliable agriculture labor is scare.

Education and Training

The second root cause of life problems, specifically unemployment and the economy, was the lack of education and training for Dominicans. Limited educational and training opportunities focused on the lack of facilities that have equipment and qualified teachers so that quality programs are offered to the undereducated or unskilled labor force. A key informant related implicitly the criteria needed for employment:

Lack of training [for quality of jobs]. [We need] training facilities [that] are equipped for the jobs that are available.

Changes in Traditions and Culture

The third root cause of problems was the change in traditions and culture. Key informants said that various Dominican traditions and cultural patterns were changing, which positively and negatively influences families and society. Key informants reported three main cultural changes: (a) more women are working outside the home, (b) eating patterns and health of families, and (c) general lifestyle. Key informants associated these changes to development and influences from outside cultures:

Chronic disease, I think our lifestyle was always changing but it has shifted drastically in the 1979 when Hurricane David came...Now our people are accustomed to doing this [imported] food. Right after, television came on strong and right after that some how, although we had come through hurricanes, people

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just suddenly tried to go away from every tradition so their eating habits really changed. Eating habits changed and more people had money, to buy things like cars or so. So less people exercise and walk. All those things, I don't know why but right after hurricane David things start to change. I don't know if it was the new government or whatever...Maapin [cable] came in 1982 and suddenly they wanted to identify with things they saw on Maapin. Just after that the medical school opened. Merchants wanted to import things that would appeal to the American students. Again, after Hurricane David a lot of expatriates [were] coming to work as consultants and all kind of things like that. And merchants going away and people pressuring [them and saying], "How come you don't have x or y." A lot of things just happen.

In the past we used to grow a lot of things in our yards. If you don't have chicken to put in the pot, you soak pigeon peas the night before and that is the protein substitute. We don't have that any more. Our lifestyles has become so artificial or so busy that we do not have time to prepare a proper breakfast for our children in the morning. And economically you cannot afford it so the child leaves without a meal.

Summary

Many Ministers and NGO leaders took a very general approach to the questions, but most people addressed the questions from their organization's objectives and goals. For example, the chief medical office for the Ministry of Health did not mention health and nutrition issues as the top problems and root causes for Dominicans. She stated that economic and family issues were more important and influenced nutritional status and goals of their department.

Generally, economic issues (unemployment and economy), family well-being issues (family and interpersonal relationships), and social well-being (health and chronic diseases and well-being of children) were expressed by organizational leaders as the main life problems of typical Dominicans. Similarly, economic issues (poverty and limited human resources; education and training) were the number one root causes for the majority of life problems. Social well-being issues (changes in traditions and culture) were the second causes of problems over family well-being issues. A majority of key informants emphasized that some aspects of health and nutrition in their discussion of the life problems of Dominicans and it was also ranked as the third problem.

Questions on life problems and root causes typically elicited negative aspects of families and their struggles. Key informants were asked if any of these life problems and root causes of these problems of families made conditions better for families or easier for them. Here is one example of the positive influences on families:

Families have been able to survive successfully because of the extended family in this country. You can afford to have your kids and go to work because mother is home [or] your older aunt. They can take care of those children for you. You have the support of extended families...not just a matter of your sister. You have that adaptivity. You adopt a godchild...that kind of thing. However it is more than comradery...it is kinda of a bonding, family bonding that causes lot of persons to survive. You live in that [poor] area and today things are bad and you haven't gotten anything to cook. But we eat. Because your neighbor has something cooking. You will survive. You will survive. People really look out for other people even in their misery. We may **all** be hungry. But if I have one grain of fig [banana], you will get to eat. I won't die today but die tomorrow.

Key informants were asked how their organization ensured successful solutions for families. Many key informants said that they cooperated with other agencies, properly trained their staff before implementing a program, monitored and evaluated the projects, and provided transportation and incentives. A majority of key informants mentioned the importance of collaboration and empowerment at the community level to ensure success:

Looking in the community and getting people involved in determining their own solutions and their own problems. Defining their problems and determining their solutions. I think that that is the most important area.

In conclusion, key informants expressed the challenges and the diverse needs of Dominican families. Many were similar to the women's rankings. Table 7 and Table 8 presented the key informants' ranked life problems and root causes for Dominican families. The future of Dominican families and the challenges for government and NGO leaders was eloquently expressed by this key informant's words:

We understand the challenges that are there with children and communities. It is our job to develop independence...a point to accept certain responsibilities for their own life development, for their own programs and solutions.

Table 7

Key Informants' Ranked Life Problems

	Family Well-Being	Social Well-Being	Economic Well-Being	Infrastructure
Unemployment & Economy			19	
Family & Interpersonal Relationships	13			
Health & chronic diseases		6		
Well- being of children		6		
Resources: Human & Education		5		
Family Violence		4		
Roads				3
Housing				3
Water				2
Lack of services				1
Garbage				1
Migration		1		
Cultural Identify		1		
Totals	13 or 20%	23 or 36%	19 or 29%	10 or 15%

Table 8

<u>Key Informants' Ranked Root Causes</u>

	Family Well-Being	Social Well-Being	Economic Well-Being	Infra-structure	Environ-ment
Poverty, Economic & Human Resources			32		
Education & Training		7			
Culture & Tradition		7			
Family Life skills	3				
Marriage life	3				
Lack of Infrastructure & decentralization of services				4	
Topography & weather					2
Structural Adjustment		2			
Psychological Factors		1			
Gender issues & role models		2			
TV & Peer Pressure		1			
Community Support		1			
Totals:	6 or 10%	21 or 32%	32 or 49%	4 or 6%	2 or 3%

CHAPTER V

SUMMARY AND CONCLUSIONS

The purpose of participatory action research was to test an Empowerment Process Model for women food preparers to develop feasible action plans that addressed participants' priority concerns within their current socio-economic and political context. An Empowerment Process Model (EPM) with village women, and a Visual Verification Survey (VVS) with village women not selected for participation in the group process were employed to describe and compare participants' perceptions of villagers' life concerns, priorities, the root causes of their problems, and solutions. The VVS was used to test the results of the EPM and its usefulness with similar participants. Key informant interviews also described agency representatives' perceptions of Dominicans' life concerns, priorities, and the root causes of the problems, which were compared to the women's responses

Thematic content analysis was used to identify the themes and "give voice" to the participants perceptions of village families' problems, root causes of their problems, and solutions. The voices of Dominican women from the Carib Territory and the villages of Dublanc and Bioche informed the development of the visual aids, which were fundamental in empowering these women to develop feasible solutions and ultimately implement an action plan.

The women identified a variety of problems, root causes, and solutions that incorporated all family and community members: men, women, children, young adults, professionals, and other extended family members. The final action plans engaged women to achieve solutions in which they received direct benefits. Benefits included improving skills for income generation, enhancing their self-esteem, fostering community commitment, and, ultimately, altering their family situations. The women from the different Dominican locations identified feasible, self-sufficient action plans--development of skills training, women's groups, and a coffee house--that addressed site-specific life problems and root causes. Also, these action plans fit into the collaborating organizations' goals and objectives for each location.

The key informants and the women from each location identified and prioritized a variety of problems and root causes of typical village families. Thematically, problems and root causes were based on economic, family and social well-being, infrastructure, and environmental concerns. Generally, the key informants generated top priority problems and root causes similar to the Dominican women's top priorities. The main similarities and differences between the women of each location and the key informants are summarized next, followed by conclusions, implications, and recommendations.

Similarities of Life Problems

Unemployment and economic issues were the number one prioritized life problems for women in both locations and for the key informants. Subthemes addressed included the banana crisis, monocrop economy, limited jobs, migration to find jobs, and general lack of income for families to meet their basic needs. These factors affected the economy and development of island infrastructure such as roads, water, and other government services.

The second most significant life problem in both locations was alcohol and drug abuse, which carried over into employment problems. Some key informants alluded to the problems of over-consumption of alcohol being related to physical abuse and unemployment. Also, key informants and Dublanc-Bioche women mentioned young people's involvement in drug trafficking as a way to earn a living.

A third similarity was the lack of educational services for children, young people, school leavers, and adults. The majority of the women and the key informants recognized the value of a good education, especially to secure a good job.

Teenage pregnancy was a fourth problem in both locations and was always framed around unemployment or parenting issues. Other similarities between the two locations included the lack of community unity and the lack of parenting skills. Key informants included teenage pregnancy and parenting skills with broader life problems related to well-being of children and family and to interpersonal relationships, the top two problems. Women in both locations as well as the key informants defined the top categories of problems as being social well-being, economic, and infrastructure issues.

Differences in Life Problems

Significant thematic differences in the perception of life problems emerged between the Carib women, the Dublanc-Bioche women, and the key informants. Both locations had site-specific infrastructure problems such as limited access to water facilities and health care services in the Carib Territory and lack of housing and land for Dublanc-Bioche's families. Also, child neglect was identified as a top problem in the Carib Territory.

Key informants identified health and chronic diseases as a top problem in Dominica. Surprisingly, the women did not explicitly mention health, food, or nutrition issues as major life problems, but when women were directly asked about nutrition problems, they unanimously acknowledged that health, food or nutrition were problems and primarily associated with lack of jobs, limited money, and unstable family and interpersonal relationships.

Similarities in Root Causes

Women from both locations prioritized lack of educational services, facilities, and qualified teachers; girls exchanging sexual favors for money or possessions; and the effects of hurricanes as the root causes of life problems. Lack of educational services and facilities affected the overall cost of education--buying books, uniforms, meals, snacks for recess, and transportation--were issues uniformly mentioned by the majority of women and key informants as a root cause for people getting little or no education and, consequently poor employment prospects. Many times families had limited options and had to have older children stay home with younger children so that parents could go to work or find employment in other countries.

Girls exchanging sexual favors for money and other items was mentioned by all participants as the root cause for teenage pregnancy. Again, the key informants associated this root cause with larger social and economic issues. The effect of the weather, especially hurricanes, was mentioned by everyone and was linked to unemployment, economy, and monocropping problems.

Differences in Root Causes

More differences than similarities for root causes were generated by the women in both locations and key informants. Thematic comparisons revealed that the Carib Territory's top root causes focused on infrastructure (government representation) and economic or unemployment themes. Alternately, the majority of Bioche-Dublanc's root causes were related to various social well-being themes, very specifically, commitment of partners.

Key informants' primary root causes focused on the economic issues of poverty and limited human resources. A variety of social well being themes, such as changes in culture and traditions, gender issues, peer pressure, psychological factors, structural adjustment, and community support were the second most often mentioned issues.

Solutions

Each location developed and implemented site-specific action plans using the identified solutions. Generally, each research location had similar solutions categories, but had site-specific differences. Skills training and adult education were identified as the number one solution for both locations, with a coffee enterprise, a sewing workshop, and starting your own business workshop incorporated into an action plan. The second solution for each location centered on infrastructure and social well-being themes, but was linked to specific community life problems. For example, the training of health volunteers was important in the Carib Territory; however, women of Dublanc-Bioche wanted community participation in order to develop a housing scheme.

The third solution focused on income generating projects or cottage industries for each location. Many times women envisioned this as a cooperative project. Site-specific agricultural projects included hot pepper sauce for the Carib Territory and coffee production for the Dublanc-Bioche region. Key informants were asked what their organizations were doing in order to respond to families' problems. They gave a variety of programs that were specific to their organization's goals, such as building roads, decentralizing health care, training teachers, and community empowerment projects. All the government ministers were new to their positions since a new government took office in June 1996. Most ministers had not implemented specific solutions during their short term in office.

Conclusions

A community-based approach employing participatory methods with individuals and group participants effectively engaged women to identify, develop, and implement their own solutions for feasible action plans based on their general life situations. Site-specific plans were implemented in each location after completing the EPM and VVS. The results of the research revealed divergent and convergent problems and root causes, within their unique local economies, weather conditions, infrastructures, and terrains, were identified for each location. Even hamlets in the Carib Territory had very specific differences because of limited infrastructure, water, and health care facilities.

The community-based approach in this study elicited basic infrastructure, social well being, and economic issues such as education, employment, housing, and water. Few health, food and nutrition problems were explicitly identified as life problems, unless directly asked. Still, the majority of women said that health, food, and nutrition were problems and were embedded in many of the overall life problems and root causes, especially economic and social well-being issues.

The results of the research indicated that EPM and VVS women had considerable differences in their rankings of life problems and root causes. Generally, VVS women identified more family and social well-being problems and root causes such as commitment of partners, family priorities, and teenage pregnancy. Alternately, the EPM women identified government, education, and community unity as problems and root causes. The difference may be influenced by the women's educational levels, family situations, previous involvement in community activities, and leadership roles.

The majority of the EPM women were active in organizations or in leadership roles within the villages, engaged in stable family and interpersonal relationships, and had completed primary school or additional education. The EPM women in the Carib Territory were especially committed to attending and participating in each session.

The majority of VVS women had limited involvement in village organizations or had few encounters with a variety of people inside and outside their villages. Many women said they had limited reading and writing skills. They described their personal struggles with partners or marital relationships. Relationship conflicts focused on financial and emotional support from men for women and their children. Woman in the VVS with limited experience in community events said that they had never or seldom been asked for their opinions on issues. Overall, their responses had a different focus from EPM women.

The research design utilized a variety of participatory activities in the EPM and VVS processes that enabled the women to identify and prioritize their perceptions of village families' life problems. Women's comments suggested that the visual aids were effective in empowering all women to "give voice" to their perceptions, especially during the VVS. Visual aids were well accepted especially by the VVS women. Most women identified a limited number of problems, root causes, and solutions during the brainstorming procedure. Limited responses may have occurred because the researcher was an outsider with an American accent, or women's inexperience with being interviewed. When the participants saw the pictures they would relax, their faces would light up, and they would explain situations related to the pictures.

The research also demonstrated the need for site-specific visual aids and validity of problems by other participants similar to themselves. The majority of VVS said that they appreciated having the visual aids to help them to think and answer the questions. The women remarked, "All the pictures I see there, we have all those problems, all those problems." Also, the VVS women liked the fact that other women identified more problems, root causes, and solutions than they had identified. Many times women said "Oh yes, that is a problem," or "There are many problems, but I just can't remember many of them." A challenge for the participants was to narrow their choices to three.

The research design incorporated key informant interviews that legitimized collaboration and local participation in the research project. The government and non-government organizational leaders had similar priority problems and root causes for Dominican families as the women participants. Many of the new government ministers were professionals who worked directly with villagers as teachers and field workers. This may account for their close understanding of villagers problems.

Overall, implementation of participatory action research entails months of preparation and collaboration before implementing the field work. Both methodologies took approximately three months to implement in one research location. Factors such as electricity, facilities, and transportation limited how much time could be spend on the participatory activities. More time would have been helpful, but these limitations did not seem to affect the women's participation and, therefore, the results.

Implications

    This qualitative participatory action research was designed to give site-specific information rather than generalizations for larger populations. However, the findings of the study have implications for nutrition and community development professionals empowering local client groups to design and implement programs and researchers involved in participatory action research.

(1) Nutrition and community development professionals should give local people prominent roles in the planning and implementation procedures. Education and prevention programs should be conducted with a variety of local people to develop site-specific programs that meet their particular situations. This study pinpoints the necessity of including women with different educational levels and experiences in community planning activities.

(2) A variety of visual participatory strategies are needed to be inclusive of all people and to elicit a variety of perceptions for action plans. Visual aids are effective in eliciting information from women with limited reading, writing, language skills, and little contact with strangers. Also, professionals can better understand the context of people's problems and situations.

(3) Nutrition educators are encouraged to use community-based approaches rather than nutrient-based approaches when implementing nutrition assessments and nutrition education programs with local people. The community-based approach encourages people and communities to identify priority problems and root causes that influence their nutrition and health status.

(4) Professionals need to avoid leading questions or information that fits their views rather than the needs and perceptions of the people. Careful consideration is necessary when formulating closed and open-end questions or general and specific questions.

(5) Policy makers are encouraged to understand site-specific insights of local people by incorporating community-based approaches and participatory strategies before designing policies and funding projects.

(6) Further research should be conducted with other populations to determine the maximum number of participants to effectively and efficiently understand situations and develop action plans.

Recommendations

    Based upon the findings of this research, the following recommendations are suggested for the research sites, researchers, educators, and practitioners in nutrition education and community development.

(1) The first level of implementing women's action plans has occurred. Continue to implement more strategies that address their priority problems and solutions. Use facilitation techniques that help women to begin to address food and nutrition issues in the context of their priority problems.

(2) Complete the EPM and VVS with men and teenagers to understand their priorities, life problems, and root causes of their specific problems so that site-specific action plans are developed for this audience.

(3) Develop linkages with other organizations, churches, and agencies to develop and implement other identified solutions. For example, the Dominican Home Economics Association could team teach identified educational workshops.

(4) Capacity building strategies are recommended to improve the skills and continue the involvement of all collaborators--citizens, village leaders, organizational leaders, and policy makers.

(5) Organizational leaders and field officers need skills on how to access educational resources and funding information through the World Wide Web. Also, the World Wide Web could be used to market local crafts and products for income generating projects.

(6) Collaborate with Peace Corps and the Ministry of Health to develop a Peace Corps Volunteer position for the development of a peer health mentoring program. This program could train local women to help administer first aid and demonstrate nutrition skills to other local people.

(7) Integrate indigenous foods and healthy food preparation into social marketing programs for islanders and income generating projects focused on tourism, such as the coffee house project.

(8) Document the process villagers use to address priority problems and any secondary effects such as changes in the food and nutrition situations.

(9) Include more participatory assessment training in the formal preparation of nutrition and health educators.

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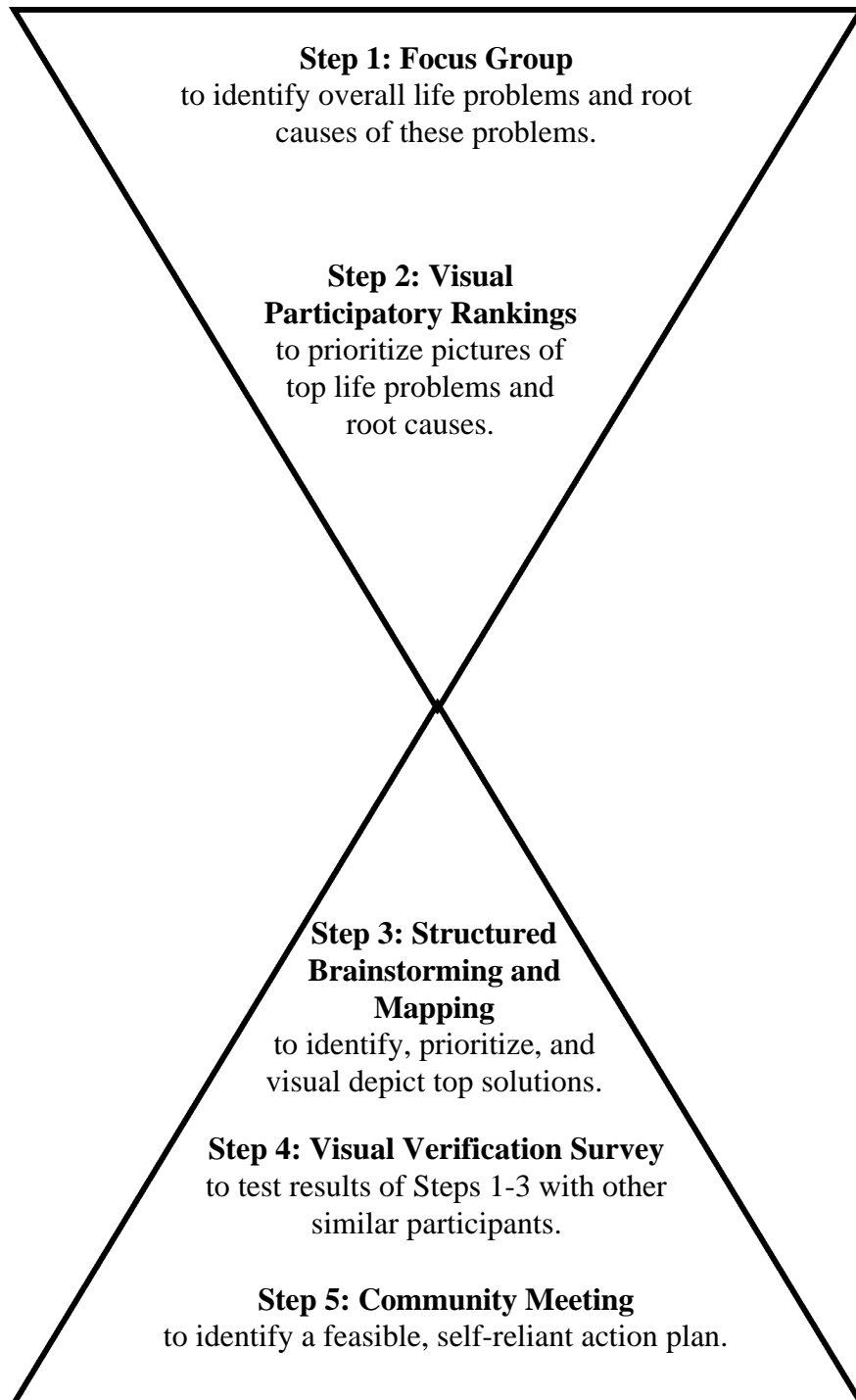
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Appendix A

Empowerment Process Model for Implementing
Participatory Strategies

Step 1: Focus Group
to identify overall life problems and root
causes of these problems.

Step 2: Visual
Participatory Rankings
to prioritize pictures of
top life problems and
root causes.

Step 3: Structured
Brainstorming and
Mapping
to identify, prioritize, and
visual depict top solutions.

Step 4: Visual Verification Survey
to test results of Steps 1-3 with other
similar participants.

Step 5: Community Meeting
to identify a feasible, self-reliant action plan.

Appendix B

Protocol for Key Informant Interviews

A.   Introductions and explanation of purpose of the survey, research, and audio taping.

B.   Interview questions:

Concerns/Problems:

1.   What does your organization or agency consider to be the current overall life problems for Dominican families?
       Probes: villages?

2.   From the list of problems that you mentioned, name the top life problems?

Root Causes:

3.   What event(s) or conditions have contributed to these issues or problems for Dominican family?
or villages?

       Probe: Please describe how these issues/problems have made these conditions better for your families or villages.

4.   From the list of events that you mentioned, name the top events/causes?

Concerns/Problems (Deleted if listed in Question #1):

5.   Please describe how you think these issues relate to the health of family or villages?

Feasible Solutions:

6.   What changes have you seen families make to better their situation(s) or to make things easier for them? Villages?

7.   What has your organization done (solutions) to respond to problems or concerns for families? For villages?

8.   How does your organization ensure or influence successful solutions or implementation of solutions for families or villages?

9.   How would you rate the current conditions of Dominican families using this visual rating scale? Are families better or worse as compared to five years ago? Why?
1=much worse (face picture with a big frown)
2=worse (face picture with a little frown)
3=no difference (face picture with no expression)
4=better (face picture with a little smile)
5=much better (face picture with a big smile)

C.   Thank you. Before I leave, is there anything else you would like to share or add to our discussion on problems, priorities and solutions for Dominican families?

Resources needed: Tape recorder, tapes, batteries, & camera

Appendix C

EMPOWERMENT MODEL FOR IMPLEMENTING PARTICIPATORY STRATEGIES
Identification-Elaboration-Problem Solving

Protocol for Implementing the Empowerment Process Model

Step One: Focus group (3 hours)

1.   Welcome and purpose of overall meetings (5 minutes)
                Problem identification, elaboration, and problem solving process

2.   Introduction and "Who Am I" ice breaker activity (15 minutes)

        Each woman will choose a animal or bird that is like their personality. They will describe
        the animal and say why it is like her personality.

3.   Purpose of this session and agreement of ground rules (15 minutes)
                See "Role of the participant" sheet from the Topsfield Foundation, Inc.

Interview Guide for Focus Groups

Good afternoon and welcome to our session. Thank you for taking the time to participate in
these sessions for the next three weeks. My name is _____ and I represent
_____. Assisting me today is Kathy Stadler and _____. Kathy lived in
Calibishie for three years as a Peace Corps volunteer. She is now working on this women's
project to understand the problems, priorities, and potential solutions of Dominican families. For
the next three weeks we will all be working together. We will be using a three step process to
help us understand your everyday concerns and needs. Each week we will use different activities
to help us to do this. Our ultimate goal is identify feasible short or long term solution that
villagers can do in their communities.

You were invited to participate in these sessions because we think you are a person that could
help us gain some valuable insights into Dominican women's life concerns, priorities, and
solutions for their families and villages. We believe that each of you have opinions that are very
important for us to know. Therefore, we would like to encourage each of you to please speak and
tell us what thoughts you have as we discuss these topics. There are no right or wrong answers to
the questions or activities that we will be using. We hope that you will enjoy these group
activities. If at any time you need a break or have questions or opinions about the process, please
feel free to tell any one of us.

For our first meeting we will be having a discussion on the life concerns you are having right now. But first we would like to explain your role in these activities and the ground rules that will be used for all the sessions. Here are a list of ground rules we want everyone to follow:

Is there any rule that you would like to add or take away from the list? Do we have agreement with the list of ground rules?

Also, while we are together, _____ is going to be taking notes and the sessions will be tape recorded. This is to help us remember what is being talked about. Your names will not be given with the comments that you make. What you say in all discussions will be kept confidential. Now let us get started with the first question.

4.   Discussion Questions 1-3 (1 hour)

Concerns/Problems:

For the first question, let us go around and each person tell:

    1.   What are your current overall life problems for:
            Probes: your family?
                        your village?

Root Causes:

    2.   What do you think causes these problems for Dominican families?

            Probe: Give me your reasons as to why you think these problems have appeared or continue.

    3.   What event(s) or condition(s) have contributed to these issues or problems for you, your family or your village? Please describe.

            Probe: Please describe how these issues or problems have made these conditions worse for you, your families or village.

                Has it made conditions better? Please describe.

    5.   Break (15 minutes)

    6.   Discussion questions 4-5 (1 hour)

Concerns/Problems (Deleted if listed in Question #1):

4. Please describe how you think these issues and problems relate to your health? your family; your village?

Feasible Solutions:

5. What changes have you, your family, or village made to make these situation(s) easier for you to cope with?

Probe: What successes have you had with making these changes?

Probe: What failures have you had with making these changes?

Closing statement: Is there anything else you would like to share or add to our discussion on problems, priorities and solutions for Dominican families? This concludes our first session. We appreciate you sharing your ideas and feelings so freely with us. Thank you for your help.

7. Next meeting information, picture taking of participants, and more refreshments

8. After each session discuss with research coalition members concerning feelings and observations relative to the participation, process and information that was generated.

Resources to bring:

Newsprint, tape, makers, name tags, crayons, refreshments, tape recorder, tapes, batteries, and camera.

Gift to be presented at the end of all sessions--Framed group and single pictures and individual certificates in a plastic sleeve

Appendix D

EMPOWERMENT MODEL FOR IMPLEMENTING PARTICIPATORY STRATEGIES
Identification-Elaboration-Problem Solving

Protocol for Implementing the Empowerment Process Model

Step Two: Visual Participatory Rankings Protocol
(2 1/2 hours)

1. Welcome. Review process and purpose of meetings (5 minutes)

2. Introductions and ground rules (5 minutes)

3. Ice breaker activity (10 minutes)
   Standing Rating that uses large visual faces to place on the floor:

   How would you rate the current conditions of Dominican families? Are families better or worse as compared to five years ago? Why?
   > 1=much worse (face picture with a big frown)
   > 2=worse (face picture with a little frown)
   > 3=no difference (face picture with no expression)
   > 4=better (face picture with a little smile)
   > 5=much better (face picture with a big smile)

4. Review pictures of the **problems and root causes** from last meeting and add to them. (15 minutes)

5. Picture Pocket Ranking Questions (1 hour)

Participants will place colored disks into the envelope under a picture that depicts their top concerns or issues. Different colors indicate different points.

Concerns/problems:

   1. **Overall** how would you rank the top problems of families in your village?

   2. In your opinion-- rank what you think government and agency people would consider to be the most important concerns/issues for Dominican families and villages. The group will rank the issues from generated from the villagers?

6.   Break (15 minutes) Participants tally the results.

7.   Discussion questions (30 minutes) Report the results of the concern/problems

<u>Root Causes:</u>

3.   How would you rank the **reasons/events (root causes) for the top priority problems**?

Tally with the group.

8.   Next meeting's information and more refreshments.

9.   After each session discuss with research coalition members concerning feelings and observations relative to the participation, process and information that was generated.

Resources to bring: pictures, envelopes, tape, tacks, numbered colored disks, and camera.

Appendix E

<u>EMPOWERMENT MODEL FOR IMPLEMENTING PARTICIPATORY STRATEGIES</u>
<u>Identification-Elaboration-Problem Solving</u>

<u>Protocol for Implementing the Empowerment Model</u>

Step Three: Structured Brainstorming and Mapping:
Feasible Short and Long Term Community Development Solutions (2 1/2 hours)

1.   Welcome and Review purpose of meetings (5 minutes)

2.   Introduction and ground rules (5 minutes)

3.   Ice breaker activity (10 minutes)

        Lyra activity: Creative survivors!!! their problem/ solution--Challenges of problems:cup
        half empty/full

4.   Review top identified problems and root causes through pictures (10 minutes)

5.   Structured Brainstorming on feasible short or long term solutions related to problems and
        root causes
        (25 minutes)

                A.   Brainstorm each problem with their matched root causes and draw
                        pictures of ideas

                B.   Rank with dots during break

6.   Break (15 minutes)

7.   Review top rankings

8.   Dyads or triads discussion/mapping of priority solutions related to concerns & events (1
        hour)

9.   Group reports (20 minutes)

10.   Designing the community meeting to report information. Identify concerned groups and
        citizen, time, place, and volunteer reporters.

11. After each session discuss with research coalition member as to feelings and observation relative to the participation, process and information that was generated.

Resources to bring: pictures, envelopes, tape, tacks, numbered colored disks, and camera.

Appendix F

EMPOWERMENT MODEL FOR IMPLEMENTING PARTICIPATORY STRATEGIES
Identification-Elaboration-Problem Solving

Protocol for Implementing the Empowerment Process Model

Step Five: Community Meeting

1. Report on the process and introduction to some of the participatory activities. For example, a standing rating will used at this meeting. Large visual faces will be place on the floor and people will be asked to stand beside their preference:

   How would you rate the current conditions of Dominican families? Are families better or worse as compared to five years ago? Why?
   >1=much worse (face picture with a big frown)
   >2=worse (face picture with a little frown)
   >3=no difference (face picture with no expression)
   >4=better (face picture with a little smile)
   >5=much better (face picture with a big smile)

2. Review pictures of problems and root causes, and group report on solutions.

3. Community brainstorming and ranking of problems, root causes and solutions.

4. Facilitate the identification of working groups and the general goals and objectives for these groups.

5. After each session discuss with research coalition member as to feelings and observation relative to the participation, process and information that was generated.

Resources to bring: pictures, envelopes, tape, tacks, numbered colored disks, and camera.

Appendix G

Step Four: Visual Verification Survey Protocol

1.   Introduction and reason for the survey, research, and audio taping.

Causes/Problems:
2.   Brainstorm problems, review pictures of problems, and rank the top problems.

Root Causes:
3.   Brainstorm more problems, review root causes of problems, and rank the pictures for root
        causes.

Solutions:
4.   Brainstorm her solution by asking these questions:

                "What solutions would you suggest for your problems."

                "What would help this situation?"

        Review group solutions.

        Rank top solutions by using pictures by asking:

                "Which solution is the most needed by families in your village?"

                "Which solution would you participate in or need?"

5.   How would you rate the current conditions of Dominican families using this visual rating
        scale? Are families better or worse as compared to five years ago? Why?

                1=much worse (face picture with a big frown)
                2=worse (face picture with a little frown)
                3=no difference (face picture with no expression)
                4=better (face picture with a little smile)
                5=much better (face picture with a big smile)

6.   Thank you and invitation to community meeting.

7.   Take her picture.

Resources to bring: Tape recorder, tapes, batteries, camera and Gift--certificate and Polaroid
picture.

KATHLEEN M. STADLER

Kathleen M. Stadler is the daughter of Richard and Evelyn Stadler of Kulm, North Dakota. She was educated in the Kulm Public School system and graduated in 1975. She received her Bachelor of Science degree from North Dakota State University in Fargo, ND in 1980 with degrees in Home Economics Education and General Foods and Nutrition.

Upon completion of her B.S. degree she worked as a Peace Corps Volunteer in Dominica, West Indies from 1980 to 1983. She taught home economics subject matter to all ages of children and young adults in the villages of Calibishie, Bense, and Woodford Hills. In 1984 she became the Frederick County Extension Home Economist with Virginia Cooperative Extension. During this time she also pursued a Master of Science degree in Human Nutrition and Foods from the northern campus of VA Tech, which she completed in 1989. In 1993 she started a full-time Ph. D. program in international nutrition. She also worked part-time as a Nutrition Extension Specialist while taking classes. Currently, she works full-time as a Nutrition Extension Specialist giving leadership to statewide nutrition programs.

She holds membership in the American Association of Family and Consumer Sciences, the Virginia Association of Family and Consumer Sciences, Society of Nutrition Education, International Federation of Home Economics, Epsilon Sigma Phi, Phi Upsilon Omicron and Kappa Omicron Nu.