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PROCEEDINGS AND PAPERS  
OF

THE INTERNATIONAL CONFERENCE ON  
WOMEN AND FOOD

VOLUME TWO

UNIVERSITY OF ARIZONA  
TUCSON, ARIZONA

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CONSORTIUM FOR INTERNATIONAL DEVELOPMENT

1978

VOLUME II

of

A Conference on

THE ROLE OF WOMEN  
IN MEETING BASIC FOOD AND WATER NEEDS IN  
DEVELOPING COUNTRIES

Focusing on the

United Nations World Food Conference Resolution on  
WOMEN AND FOOD

Supported by a Grant from the  
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## FOREWORD

When approximately 250 women and men from throughout the United States and 19 other countries registered for the Tucson Conference on the Role of Women in Meeting Basic Food/Nutrition Needs in the Developing Countries, those who had planned the Conference knew that the basic purpose of the Conference was indeed an idea "whose time had come." In May 1977, when the Consortium for International Development (CID) submitted the proposal for the Conference and the preparation of the illustrative strategy for meeting basic food/nutrition needs to AID, there were those in CID and AID who believed an attendance of no more than fifty could be expected!

Since the early 1970's, awareness has been growing that women are the major segment of the group left behind in the development process, partly because their roles in food production, distribution and consumption have been unknown, ignored or discounted. In many countries, women provide most of the agricultural labor, make many food production decisions, process and store food, and are important traders, especially at the local level. At the 1974 United Nations World Food Conference, the importance of women in these roles, as well as in combatting the twin problems of population growth and malnutrition, was recognized. On the final day of the Conference, a resolution was passed which outlined corrective measures. Relatively little has been done to implement the resolution.

Since 1974, leaders in the developing countries and the aid-granting organizations have been talking more and more about approaches to development which would enhance the opportunities for all people to meet their basic human needs. Adequate nutrition, including readily accessible, pure drinking water, is a basic human need unavailable to very large numbers of people; in fact, some authorities call it the "most basic" need. The new approaches are of special importance to women because in so many places, while women make strategic consumption decisions in the family and, as indicated above, are integral parts of local food production/distribution systems, they suffer proportionately more when food is scarce or safe water not readily accessible. They either deprive themselves for the sake of their families, or their needs are met last because their societies place a lesser value on them.

By early 1978, making women full and equal partners in the process of development had finally received the commitment needed from aid agency leaders. The Honorable John Gilligan took a bold step forward when he proclaimed, "--it may well be women, not men, who will be the decisive force in seeing to it that the world's poor have enough to eat,

drink clean water, eat nourishing food, live to adulthood and become literate.... development planning in the Third World must give an equal place to the women...."

The Tucson Conference was a small step toward equalizing women's place in planning and benefitting from Third World development. The participants were an extremely diverse group, and in every sense of the word it was an "uncommon" Conference. It is one of few in which women have had a major role at every level--initiating, planning, implementing and evaluating. The papers and reports assembled herein form an equally "uncommon" book; very useful because it is based on extensive field observation, experience and research, and conveys strong opinions about what is and is not sound policy. It is a product of talent, dedication to purpose, and zeal--a powerful combination.

A successful conference is always the product of many people, each of whom participates in her/his own way. Appreciation is due to all the participants, especially the approximately fifty from developing countries who came armed with ideas, and ready to speak. Ms. Arvonne Fraser, Coordinator, Women in Development (WiD), Agency for International Development, is entitled to special mention for the courage she displayed in arranging financing for so bold and risky a venture. Ms. Frances Brigham Johnson, the AID Project Manager, was responsible for much of the conceptual underpinning of the Conference, and was in many ways the key driving force. Mrs. Evelyn Jorgensen and Ms. Trish Pettijohn, secretaries, went the "second mile" in their dedication to duty. And finally, many kudos are due Dr. John L. Fischer, Coordinator for Africa Programs, CID, whose concern for the poor and hungry of the world and whose interest in seeing women become full, active participants in the process of development, impelled him to prepare the Conference proposal. Without his tireless efforts in preparing, implementing and following up the proposal, with sponsorship by CID, neither the Conference nor this book would have materialized.

Kathleen Cloud  
Conference Manager

Ann Bunzel Cowan  
Editor, Proceedings

## CONFERENCE BACKGROUND

"Meeting basic human needs" is the central theme in the development strategies of a rapidly-increasing number of developing countries. All international aid agencies are encouraging the trend. Food and clean, readily accessible water for domestic uses are the most basic human needs in most developing countries.

Food is of strategic importance to women in developing countries:

As consumers: Women's roles include family consumption decisions, and of special relevance, "When food is scarce, they often experience more malnutrition than men, either because they deprive themselves for the sake of their families or because society places a lesser value on them." <sup>1</sup>

As producers, traders, and processors: Women provide most of the agricultural labor, manage a large proportion of the producing units, and are active in food trade and processing.

Women have finally been recognized as the key to development in the Third World. On November 19, 1977, Governor Gilligan said, "It may well be women who will be the decisive force in seeing to it that the world's poor have enough to eat, eat nourishing food, drink clean water, live to adulthood, and become literate...<sup>2</sup>, and on December 12, 1977, "Until women are given the education and technical training to increase food production, there is little hope of improving production levels of the whole society in developing countries."<sup>3</sup>

The World Food Conference Resolution on Women and Food points the direction developing countries and aid programs need to take, but progress has lagged because:

---there is disagreement about the extent and nature of the food "crisis," and the arguments have diverted attention away from the resolution.

---new programs are dependent upon momentum built up in the past, and past progress assumed that women are, or should be, dependent on men.

---aid programs have traditionally concentrated on increasing the food supply, ignoring that increasing supply per se may have

little impact on famine, hunger, or malnutrition.

---we have no readily-available proven strategy for getting the job done." 4

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1. U. N. World Plan of Action, Decade of Women.
  2. Gilligan, John J., Administrator, AID, Address to Partners of the Americas Conference, Santo Domingo, November 19, 1977.
  3. Ibid. Quoted from Washington Post, December 12, 1977
  4. CID proposal to WID, AID.

AGENDA

January 8, 1978

PRE-CONFERENCE ACTIVITIES

- 3:00      Registration, assignment to workshop groups, and meetings of group leaders and rapporteurs. Reception.
- 6:30      Dinner .  
            Moderator: MS. KATHLEEN CLOUD, Research Associate, College of Education, University of Arizona, and Conference Manager.  
  
            Welcome: MS. JULIETA GONZALEZ, Chairperson, Tucson Women's Commission.
- 8:30      Panels meet for planning.

January 9, 1978

- 7:45      Registration.

SESSION I

Objective: To Clarify Purposes and Set the Stage for a Productive Conference.

- 8:15      Conference called to order

Moderator: MS. KATHLEEN CLOUD

Welcome.

DR. RICHARD KASSANDER, Vice President for Research, University of Arizona.

DR. BRUCE ANDERSON, Executive Director, Consortium for International Development.

Keynote Address

MS. ARVONNE FRASER, Coordinator, Women in Development, Agency for International Development

SESSION II

Objective: To Clarify the Problems Developing Countries Face in Selecting Approaches to Meet the Basic Food/Water Needs of ALL People.

9:05

Call to order.

Moderator: DR. MYRA DINNERSTEIN, Chairperson, Women's Studies Committee, University of Arizona

Conference procedures and arrangements.

DR. JOHN L. FISCHER, Professor of Agricultural Economics, and Coordinator of the Conference for the Consortium for International Development.

An Overview. Food/Nutrition in the Third World.

DR. DORIS HOWES CALLOWAY, Professor and Chairman, Department of Nutritional Science, University of California, Berkeley.

- - -

Food/Nutrition Problems--Impact on Women and Women's Role in Interventions to Solve Them.

10:25

Panel:

Chairperson, MS. BARBARA SCHICK, Head and Professor, Department of Food and Nutrition, Clarke College.

DR. PATSY GRAVES, President, International Division, National Council of Negro Women.

DR. CARY FOWLER, Director, Agricultural Resources Center, Chapel Hill, North Carolina.

MS. MALLACA VAJATHRON, United Nations Development Program (UNDP) Fund for Population Activities.

DR. MILO COX, Adjunct Professor, School of Renewable Natural Resources, University of Arizona

Discussants:

DR. DONAL JOHNSON, Dean, College of Agriculture, Colorado State University, and Chairman of Trustees, Consortium for International Development.

DR. GAIL HARRISON, Anthropologist, Family and Community  
Medicine, Arizona Health Sciences Center.

12:00 Luncheon Address.

Women: Implications for Development --  
MS. GLORIA SCOTT, Adviser, International Bank for Recon-  
struction and Development.

Developing Country Women's Perceptions of Food/Nutrition  
Problems.

1:10 Panel:

Chairperson, DR. VIVIAN COX, Assistant Professor of Elemen-  
tary Education, University of Arizona.

DR. FILOMINA STEADY, Sierra Leone (Africa) Visiting Pro-  
fessor, Boston University\*

DR. ESTRELLA F. ALABASTRO, Philippines (Asia). Head, Food  
Science and Nutrition Department, University of Philippines.

LIC. IRMA LUZ TOLEDO DE IBARRA, Guatemala (Latin America).  
Vice President, Latin America Home Economics Association.

MS. SAADET SARICA, Turkey (Near East). General Directorate  
for Planning, Research, and Coordination, Ministry of Agri-  
culture, Turkey.

2:40 Workshops:

Topic: The Role of Women in Definir and Solving Developing  
Country Food and Nutrition Problems.

Each Conference participant will be assigned to a small dis-  
cussion workshop. Workshop groups will meet throughout the  
Conference to discuss panel presentations, to report conclu-  
sions and to generate action recommendations.

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\*Personal emergency prevented participation.

SESSION III

Objective: To Review Women's Involvement in Alternative Types of Current Aid Agency Food/Nutrition Projects

8:00

Call to Order and Announcements.

Moderator: SISTER CLARE DUNN, State Representative from Pima County to Arizona Legislature

Case Studies of Projects Which Utilize Alternative Approaches to Providing Basic Food and Other Needs.

1. A specialized "women in development" project (Upper Volta)  
DR. CAROLYN BARNES, Project Manager, USAID/Upper Volta.
2. A commodity-systems project to increase basic food production. (Costa Rica)  
MS. MARVIS KNOSPE, Nutrition, USAID/Costa Rica.
3. An integrated area development project. (Indonesia)  
MS. SARA JANE LITTLEFIELD, Deputy Director, USAID, Indonesia.
4. A youth-oriented food/nutrition project (Partners of the Americas, Oregon/Costa Rica 4-H Nutrition/Rabbit project)
5. CARE (Cooperative for American Relief Everywhere) water projects (Tunisia and Kenya)  
MR. RAY RIGNELL, CARE Program Officer for Near East and Africa, and  
MS MARTHA WHITING, CARE Field Representative, Kenya.
6. ACTION, Peace Corps.  
MS. IRENE TINKER, Director of Policy and Planning, ACTION.

January 10, 1978

SESSION IV

Objective: To Determine What Can Be Done to Make National Food Production/Distribution Systems Meet the Needs of ALL People.

8:15 Call to Order and Announcements

Moderator: MS. MARTHA LEWIS, National Farmer's Union

An Overview. The Production/Distribution System--How Women Contribute.

DR. DOUGLAS CATON, Agency for International Development

Women in the Food System--Constraints to Their Full Participation and How to Remove Them.

Panel:

Chairperson, MS. BARBARA HOWELL, Bread for the World

MR. DONALD LEEPER, International Food Systems Consultant

MS. JEANNE FOOTE NORTH, Editor, Development Assistance Program, Annex on Women, USAID/Ghana

DR. ESTRELLA F. ALABASTRO (Philippines)

MS. SAADET SARICA (Turkey)

DR. D. WOODS THOMAS, Director, Board for International Agriculture Development Staff (BIFAD--Title XII), Agency for International Development

SESSION V

Objective: To Identify Ways in Which Women Can 'Make a Difference' in the Food/Nutrition Situation in Developing Countries

10:25 Call to Order and Announcements

Moderator: MS. MARTHA LEWIS

How Can Women Make a Difference?

Panel:

Chairperson, DR. OLGA STAVRAKIS, Department of Agricultural and Applied Economics, University of Minnesota

MS. MARIANNE HUGGARD, United Nations Representative, International Association of University Women

DR. MARY BURKE, Center of Concern, Washington, D. C.

MR. STANTON DREYER, Overseas Educational Fund of the League of Women Voters

LIC. IRMA LUZ TOLEDO DE IBARRA, President, Guatemala Home Economics Association

SESSION VI

Objective: To Determine What Financial Institutions Can Do to Facilitate Full Participation of Women in Programs to Meet Food/Nutrition Needs

1:15

Lunch and Call to Order

Moderator: DR. HELEN STROW, American Home Economics Association

What Can International Development Banks Do?

MS. GRACE FINNE, Economist, International Bank for Reconstruction and Development

What Can Private Institutions Do?

MS. MARY JEAN McGRATH, Cooperative Education Specialist, University Center for Cooperatives, University of Wisconsin

2:30

Workshops

Themes for Sessions III-VI

7:30

Open Agenda

1. Possibly caucuses by women with similar interests, i.e., church-related, teaching/research, Third World, etc.--- These caucuses could establish communication networks and/or produce resolutions.

2. Workshop groups may want to continue to meet.
3. People may wish to go sightseeing.

January 11, 1978

SESSION VII

Objective: To Determine What Can be Done to Implement the World Food Conference Resolution on Women and Food and Improve Private and Governmental Programs.

8:15 Call to Order and Announcements

Moderator: MS. MARIANNE HUGGARD, International Federation of University Women, United Nations Representative

Reports from workshops

9:50 Discussion

10:45 Consideration of recommendations from workshops and caucuses.

12:15 Conference Summary

DR. JOHN L. FISCHER

1:00 Lunch and Farewell

Moderator: MS. FRANCES B. JOHNSON, AID Project Manager for the Conference, Women in Development, AID.

SUMMARY REPORT ON THE CONFERENCE ON WOMEN AND FOOD  
(The Role of Women in Meeting Basic Food Needs in Developing Countries)

John L. Fischer\*

I. Introduction:

The Conference was sponsored by the Consortium for International Development (CID) and partially funded by a grant from Women in Development, Agency for International Development (AID). Two hundred fifty participants met on the campus of the University of Arizona, Tucson, January 9-11, 1978.

Papers circulated prior to the Conference, and first-day presentations and panel discussions revealed that developing countries and the development organizations are placing increased emphasis on enhancing the opportunities for all people to meet basic human needs. A basic need too often unavailable to large numbers of developing country people is adequate food/nutrition, defined by the Conference to include readily accessible, pure drinking water.

The Conference directed its attention to the problems developing countries face as they attempt to provide greater opportunity for all their people to meet the basic needs--adequate daily diets, and how private and international development organizations can redesign technical assistance so that it is more directly keyed to helping interested countries make food available to hungry and malnourished people<sup>1</sup>; while asking two crucial questions: (1) Does meeting the basic food/nutrition needs of all people have special significance to women, and (2) Is more than an intensification of what is currently being done required?

The Conference answered both of the crucial questions "yes", very emphatically. Why?

First, women play a vital role in meeting food/nutrition needs everywhere in the world. They make strategic consumption decisions in the family, prepare and handle food, are integral parts of local food preparation and distribution systems, and wherever water must be carried, they carry it. In addition, in the developing countries

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\* The viewpoints and conclusions of this report are those of the author, and do not necessarily represent the position or policy of AID or CID. The author extends appreciation to Kathleen Cloud, Olga Stavrakis, Frances Brigham Johnson, Beryl Burt, Bonnie Stewart, Nancy Ferguson, Mary Jean McGrath, Ann Cowan, and R. Grant Seals for substantive assistance and suggestions.

women provide 40 to 60 percent of the agricultural labor, make many food production decisions which are vital to family and national welfare, process and store most of the food, and are important traders. Women are "where the action is."

Second, when basic food/nutrition needs are not being met, women suffer disproportionately. If food is scarce and expensive, women often deprive themselves for the sake of their families, or their societies place a lesser value on them and they have no choice but to make disproportionately higher sacrifices. In many countries, children, for whom women often assume greater responsibility than men, suffer disproportionately too because their rights to food are not equal to adults'.

Third, at the present time, very few of the strategies developing countries are following call for effective and rewarding participation of women in agricultural production, storage, marketing, and the processing of food. The strategies reflect inadequate understanding of the role women traditionally have played in the food cycle, and fail to take advantage of the contribution their full participation would make to the national development effort. In some developing countries, planners and policy makers, with encouragement from the aid agencies, have used Western World traditions as a model for agricultural development (e.g., giving land titles only to men, extension service, crop and livestock production programs and production credit systems primarily for men, etc.), and deliberately designed policies and projects to remove women from productive activities in the food cycle. They did so under the assumption it would increase the general welfare and lessen women's burdens. These well-intentioned policies have not been particularly successful. In some areas where women were traditionally responsible for their and their children's food supply, the cultural balance between male and female decision-making has been upset, with a tragic reduction in the availability of food in local markets and an increase in hunger and malnutrition. In several developing countries, women, especially among the agrarian poor, have lost much of the productive power they had in an earlier era, and with it went an element of control over their own destinies. In some cases the drudgery in their lives has actually increased.

Without major changes in the strategies developing countries are following, there is little hope for decreasing the drudgery to which so many poor women, especially in the rural areas, are subjected, lessening the total incidence of hunger/malnutrition, or reducing women's and children's disproportionate suffering. New policies and projects are needed.

## II. The Conference Environment:

The Conference brought together a group of 250 diverse and articulate individuals from all over the world. Forty-four women and five men from

nineteen developing countries attended, many holding very influential positions in their nations' ministries, private agencies, and the universities and international organizations such as the World Bank and the United Nations Development Program. Others were graduate students. The participants from the United States came from an even wider variety of backgrounds: from academia came nutritionists, home economists, agriculturalists, food processing experts, social scientists, health scientists, educators, engineers, business administration specialists, arid lands experts, systems analysts, planners, and others. The religious and private voluntary organizations were very well represented, and numerous women's organizations sent delegations. Professional staff from both the legislative and executive branches of the U.S. Government attended, with AID especially well represented. Six of the AID people were field personnel. Farm women, with membership in several farm organizations, participated; as did private business persons and several consultant groups. Many came as private individuals because of a deep personal interest in the topics on the Conference agenda.

Each Conference participant came with a particular understanding of the causes of hunger and poverty, hence, had special expertise to contribute in the search for solutions. Yet, amid the diversity there were underlying, shared perceptions which provided common ground and lent unity to the group and the resolutions emerging from it. At the risk of oversimplification, the key shared, unifying perceptions were:

(1) Each individual person has the right to adequate food and water, and each woman, man and child in the world has a stake in whether or not this right materializes.

(2) Women, as well as men and children, are individuals in their own right, and they must be provided the conditions and safeguards necessary to develop their own individuality; however, of equal importance is the fact women are integral members of families and of societies, and they must participate in development activities within the context of their families. Women must become equal, active partners with men in the process of development in accordance with the World Plan of Action for the Decade for Women.

The finding of common ground among the diversity of backgrounds and experience had a catalytic effect that produced the positive dynamics of the Conference. It made possible open, trusting, emphatic dialog between widely differing points of view--between American farm women and developing country women; anthropologists and production agriculturalists; home economists and development planners; nutritionists and food systems experts; political activists and technicians; researchers and practitioners. This open dialog, which was listed by many of the participants on the Conference evaluation as the single most important feature of the Conference, produced what one conferee aptly described as, "an encounter, not a confrontation."

Illustrations of the effect of the "encounter" on individuals include:

---For many participants, the Conference confirmed a sense of rightness of what they had often felt were lonely efforts to confront many food and hunger issues in their daily work. There was a sense of exhilaration on learning that a community of interest existed, and there were people with whom they could have dialogue. By the end of the conference, several groups had made firm plans to form networks of people with shared interests.

---Many teachers realized the content of many of the courses offered in the universities and colleges were narrow; often not confronting the "real" issues in food and nutrition. The quality of instruction is limited by the isolation of the instructors. Teachers learned people in governmental and private agencies are interested in what they (teachers) are doing, have much up-to-date information to offer, and are willing to share it. On the negative side, teachers learned many articles in the standard-brand journals they customarily read do not effectively reflect "where or what the action is."

---Women in governmental posts in the U.S. and developing countries learned they have public and international support for integrating women as active, equal partners in the food cycle. They explored the types of projects which might be carried out and the manner in which policy might be affected in their respective agencies and countries.

---Persons from private voluntary agencies came to better understand how their activities could fit into the overall pattern of social and economic development, and that people from government generally were very interested in their success, and would provide support whenever possible.

---Nutritionists, who have not always concerned themselves with the large-scale economic and human problems of food/nutrition, came to better realize that their research, already valuable to society, could be even more valuable if social, economic, and political problems were considered simultaneously with nutrition issues.

---Home economists from the departments and colleges of home economics (includes extension personnel) began to see additional ways in which their experiences in dealing with family and human problems within the framework of a traditionally male-oriented university system (often a college of agriculture) could be used and contribute significantly to policy and programs designed to help the poor everywhere.

---The significance of the schools of home economics and liberal arts as major social science resources within the Title XII system became clearer. Professors increased their determination to find ways to involve themselves and their colleagues more directly in cooperative ventures with other disciplines in their universities' Title XII programs.

---American farm women came to realize that their problems are not unlike those of women in developing countries, and that the causes of many rural problems are the same throughout the world. They became more aware that rural women in any part of the world have unique abilities to understand rural women elsewhere, and they are a resource development agencies have often missed.

---Agriculturalists had their conviction that ways must be found to increase food production reconfirmed, but learned that increasing food supply with little regard for who does the job or eats the food is not acceptable, and reorientation of research and education programs are needed. Agriculturalists need assistance from social scientists and others if their work is to make much of a dent in solving the world's food/nutrition problems.

---Business operators saw that inadequate incomes in general, and economic incentives to producers and local food industries in particular, restrict final demand, and that if food is to become more readily available to rapidly-increasing numbers of people, the resources of the private sector must be more effectively utilized. They noted that the women of the world who are involved in food production and distribution are almost entirely in the private sector, and if their lot in life is to be improved, it probably will be through private sector activities.

### III. The Sense of the Conference:

As the Conference unfolded and a sense of unity emerged, the Conference participants developed a working consensus<sup>2</sup> on numerous important issues. The major issues and some implications for each are:

(A) The world's major food/nutrition problems are of very great, special concern to women, and they are not within the domain of any single discipline or interest group.

The implications for individuals, developing country planners, and governmental and private development agencies include the following:

First, if all people in the developing countries are to have a reasonable opportunity to meet their daily dietary needs, there is a place, i.e., a role, for every discipline, interest group, and individual; and women must be involved as equal partners with men in the process of development.

Second, from diversity can come strength in terms of capability to properly analyze the food/nutrition situation and design national approaches leading to self-initiated, economically-viable projects and programs;

Third, when the common goal is adequate food for all people, general agreement is possible among people who view food and nutrition from very different vantage points; and

Fourth, the "ole boy" system, which has been such an important part of developing country and aid-agency planning, policy making and administration has produced inadequate results in the past, and it will produce no better results in the future. More people will be better fed when more women, people from developing countries, and clients of programs are involved in the planning, policy making, and administrative process. Also, a more representative mix between government and private sectors, and the various disciplines is desirable.

(B) The basic food/nutrition needs of all people could be met in the foreseeable future if the knowledge available today concerning how to grow, market and equitably distribute food, and manage consumption within the home were properly utilized.

There was a general consensus among Conference participants that if the labor-saving, food-saving, nutrition-improving, and money-earning knowledge available in the world today could become common knowledge among all members of the world community, malnourished people could overcome their food problems very soon, at modest cost, and with gratifying results. Information on alternative methods for meeting the basic food needs of all people simply has not been as widely disseminated as it should have been, and women food producers and traders are the largest single group which has been shortchanged. A re-evaluation of the current national strategies for development is in order, with widespread, rapid dissemination of the relevant information getting highest priority. This would require greater emphasis on the right kind of educational effort in developing countries, and corollary changes in the assistance provided by private and international agencies.

Implicit in the consensus was the conclusion that major emphasis in developing country programs (and development agency policies), i.e., the first order of business, should be how people can meet their food requirements within their lifetimes, i.e., now, in contrast to, for example, researching exotic potentials not likely to have any material impact before the 21st Century. However, the latter was not regarded as being unimportant. At issue is priority for alternative activities given the funds and personnel limitations in developing countries and aid agencies.

(C) Hunger and malnutrition do not occur "on the average," but are, rather, the result of specific situations which families, individuals, and certain groups in definable geographic areas face.

The Conference recognized that simply increasing the worldwide, or a developing nation's, supply of food may not mean the number who go hungry is reduced. Families--composed of both men and women--must produce their food or buy it in local markets. If the families' food/

nutrition problems are to be solved, programs and projects must be attuned to their specific needs. This led to a theme which was repeated many times during the Conference, namely, that more attention needs to be directed to local conditions; the small-scale, and simple forms of food production, storage, and marketing, which employ the bulk of the developing country people, and through which they obtain their daily diets. It is at this level where women are involved en masse in the food cycle. Also, much more attention needs to be given to household management. Storage losses can be reduced and better nutrition achieved from the foods readily available.

(D) Hunger and malnutrition are the result of many causes, but inadequate real income for individuals and the family is the strategic one.

The major causes of poverty must receive priority attention if hunger and malnutrition are to be alleviated. (The Third World women were united in urging the Conference to accept this viewpoint). Since those families, countries, areas, and subsectors of the economy which are poor are generally those where the productivity of the human element is low, i.e., women, men, and children work many days to produce and process a few kilos of sorghum, wheat, etc., increasing the productivity of the poor should be a major item in the attack on poverty. Providing opportunities for many more of the currently poor families to obtain sufficient income to properly cover basic food needs was recognized as a very difficult undertaking that would require many years, but societies could embark on the task, and in the short term there is much that can be done to make more food and clean, safe water readily-available to those who need it.

The Conference participants noted the agrarian subsistence subsectors of the developing country national economies and small-scale, local trade through which the poor generally obtain their incomes and food were the parts of the national food production and marketing systems which have received disproportionately low levels of development assistance in the past. It is at this level where women are most frequently involved in food production and marketing. The low level of access this group in the food system has had to development resources reinforces women's lack of integration into the development process, and accounts for their worsening economic plight and the sheer drudgery so many must face every day of their lives.

The Conference participants recognized inadequate diets and hunger are related to high fertility and the large families typically associated with poverty. The demographic factors that bear on the problems of food, nutrition, and family welfare are extremely important, and the remedy clearly must involve enhanced participation by women in designing and carrying out development strategies.

The Conference was united in the view that strategies for development in the developing countries should place more attention on the

sources of income for poor people, especially local, indigenous food production, storage, trading and household management. Examples for raising real income that were given included the introduction and improvement of vegetable gardens; support for increased small animal production, such as chickens, goats, pigs, and rabbits, which are often family enterprises managed by women, and provide a needed source of protein; improvement of traditional foods such as cassava; protection of wild food; credit for local traders (often women); education and support for local cooperatives (to include women); and improved local storage facilities. It was noted that small-scale, local production and trade activities are income-generating, and they increase demand for food and those goods and services which stimulate economic growth and development. They also foster monetization and commercialization of the economy. A recommendation from one group is typical:

"In recognition that one of the major barriers to improving the status of women and basic nutrition is absolute and increasing poverty of women, all appropriate development efforts should be designed to increase women's access to improved income through self-initiated projects, preferably using traditional and indigenous means of production."

(E) The public and policy makers in both developing and developed countries have generally defined food/nutrition problems in too narrow terms.

Development planners and others in strategic policy-influencing positions have not been properly framing food/nutrition problems. (Conference participants appeared to be in total agreement on this point.) The wrong questions have been asked, and too many programs have been planned to impact on the wrong people, in the wrong way. One problem is that in analyzing the situation, planners have used macro-analytical techniques which conceal who are the hungry, and why they are hungry. The techniques preclude proper understanding of the plight of the family, the individual, and women; and they tend to eliminate from consideration many desirable ways to alleviate the most serious food/nutrition problems.

The "costs" of inadequate problem definition include numerous developing countries utilizing strategies which have emphasized economic growth and longer-term investments at the expense of actions benefitting the rural poor and the other disadvantaged. To country leaders and the society at large, this is an important oversight, since the rural poor and other disadvantaged groups often are so numerous they constitute a majority of the citizenry. Policies have failed to create political stability, which in turn has reduced the national capacity to industrialize, cope with hunger/nutrition, and face other serious human welfare problems.

The first vital step toward achieving proper problem definition is for developing countries to involve a wider range of people, especially local people, including many more women, in the process of determining

local and national goals, identifying constraints to meeting those goals, and in follow-up project preparation and implementation. The key phrase is "participatory development," and more recommendations concerning it were generated by the workshops than on any other single subject.

(F) When large numbers of people are not getting minimum basic food/nutrition requirements, the national food/marketing system is not fulfilling its proper role. It is through the analysis of the entire system, i.e., not piecemeal analyses, that methods for improvement can best be determined.

The Conference participants agreed that improved management of the food production/marketing complex at all levels is needed in most countries--both developing and developed, but all levels do not require equal attention. In the past, some parts of the system in developing countries have tended to receive a great deal of attention and support, such as export commodities (usually cash crops), while other parts of the system, such as subsistence crops or the small local trader, were largely ignored. Certain geographic areas, such as those providing food for urban areas, have received much attention, and low-cost, self-help projects relatively little. Big projects have been favored over the small and the simple. One reason for the emphasis on large projects is that bilateral and international aid agencies who control much of the development resources available to developing countries now have project approval and implementation systems which are so complicated and costly small, simple projects are not worth the effort.

Conference discussion clearly indicated that participants questioned the priorities which have been assigned to alternative approaches and types of activities. More systematic analysis is required if assistance is to be directed to those elements of the system that need it the most. One suggestion receiving considerable support called for the establishment of very broadly-oriented, national food/nutrition centers to provide for a continuous evaluation of national food and nutrition situations, coordinate research, and supply policy and program guidance. The Center could provide technical assistance in the physical and biological areas, as well as on social and economic issues.

The emerging new international economic order is of great importance in the struggle against famine and poverty because it is a medium through which both the international and national systems can be evaluated, problems identified, and plans for improvement prepared and coordinated.

(G) The family is an important income-earning and consumption decision-making unit in all developing country societies, and it should be a focal point for efforts to put adequate food within reach of all people.

On the final day of the Conference, the women from the developing countries dramatically brought into focus a key issue which had emerged, but had not been faced squarely by the Conference. Should development strategies view women primarily in the context of the family, or in some

other manner? The developing country women's statement provided the basis for a consensus which had slowly been emerging, however was by no means supported by 100% of the participants. The consensus recognizes the role of women in the family and its importance, i.e., stresses the centrality of the family in developing country societies; while giving proper weight to the need for equal rights and status for women as individuals. Their statement had as its first, and presumably major point:

"We recognize that programs for women in development are valid and necessary, but the biggest problem is one of poverty and lack of economic power. We want to make clear to the Conference that while we can, and do, support programs specifically for women, we want to emphasize, (a) the real problem of development is poverty for some created by uneven distribution of resources, nationally and internationally, and (b) the woman is in the Third World an integral part of the family, and cannot be separated from men, women, and children. The family must be held as a unit."

We also recognize that in some countries women are awarded second-class status. We do not condone this second class, oppressive status, and we support bringing women to an equal status with others in the home, the marketplace, and society at large."

(H) If basic food/nutrition needs are to be met, developing countries must take into account the historic role of women in their food production and marketing systems, and involve them as equal partners in the development process.

If a key word were to be designated for the Conference, "participation" would be a likely candidate. Both by design and default, women in general, and major segments of the developing country economies in particular, have not been given equal opportunity to participate in the developmental process. The world is the poorer today as a result. Developing country strategies for development and development agency policies for both social justice and economic growth reasons must try to avoid repeating the errors of the past. Greater participation by and cooperation among women, program and project clients, Third World personnel, and a wider range of disciplines and interests in the developed countries will be necessary if the future is to be more than a rerun of the past.

#### IV. Summary of Recommendations<sup>3</sup>

The Conference produced ninety-seven recommendations from five sources.

<u>Sources</u>	<u>Number of Recommendations</u>
1. The 10 workshops (each met for 6 or more hours).....	75
2. The special meetings of the women from developing countries.....	6
3. Special interest groups--research, private voluntary agencies, etc.....	7
4. The CID faculty members meeting.....	3
5. Plenary Session VII.....	6
 TOTAL.....	 97

While no two recommendations are identical, a careful review of them indicates they can be classified and summarized without doing serious injustice to any group's effort. There is considerable overlap, with many of the recommendations fitting into several classifications. Approximately forty percent of the specific recommendations are listed below to illustrate the various classifications.

A. The Conference called for full, equal participation by women in the process of development.

Thirty recommendations pertained to greater participation by women in the process of development at all levels. They generally stressed the need for immediate action to implement the resolutions on women adopted by the World Food Conference, Rome, 1974.

Illustrative recommendations are that:

(1)...development projects be increasingly directed toward women. Suggested areas of concentration include, but are not limited to:

- indigenous food projects
- appropriate technology
- alternative organizational approaches, such as cooperatives
- increase in efficiency of traditional food systems

(2)...participation of women in development projects be increased at all levels including identification, design, implementation, evaluation, and follow up.

(3)...attention be directed to both the education of women and the entry of women as professionals and para-professionals into decision-making positions in areas of food, health, and nutrition in developing countries.

(4)...women be integrated into top administrative positions, and AID place high priority on needs of women.

(5)...women's agencies and organizations develop an international women's network for the purpose of (a) sharing skills to insure the involvement of women at all levels of decision-making in member countries, (b) educating each other on common problems, (c) seeking joint solutions to problems, and (d) promoting the World Plan of Action, which emerged from the I.W.Y. Conference in Mexico City.

(6)...existing and new programs be reviewed on a project-by-project basis to evaluate their impact on women, and necessary changes be made to insure women an equitable share in benefits.

B. The Conference overwhelmingly called for "participatory development," defined as greater participation by project clients, Third World persons, and a wider range of disciplines and interest groups everywhere in the process of development.

Thirty-six recommendations gave major emphasis to "participatory development." Illustrative recommendations are that:<sup>4</sup>

(1)...development agencies recognize that direct input from local communities into project planning, implementation and evaluation is absolutely critical...

(2)...an integrated, multilevel approach to intervention in regard to food and water be directed to the individual, the family unit in its various forms, the local voluntary associations and the development agencies of developing countries.

(3)...legal barriers to property ownership and credit accessibility by women be removed.

(4)...aid projects be directed primarily to encouraging local food production, with money being seen as a facilitator for local initiatives, rather than as a solution in itself.

(5)...research and project planning, implementation, and evaluation involve collaboration between research teams and the people involved-- at all levels: national, regional, and local.

C. The Conference called for development strategies to place a major emphasis on education, and for major changes in educational systems.

Twenty-two recommendations were concerned with education. Illustrative recommendations are that:

(1)...national governments and international development agencies work to remove barriers that prevent education for everyone.

(2)...educational projects for women be stressed...

(3)...national governments and international development agencies orient education at all levels for boys and girls toward agriculture, nutrition, marketing, and home management information and skills.

(4)...priority be given to nutrition education. This should concern itself with breast feeding, weaning foods, home improvements (kitchens, water-places, and toilets), and vegetable gardening.

(5)...university training include analysis and evaluation in education programs, information analysis, evaluative exposure to a variety of alternate development strategies, e.g., socialist and quasi-socialist development strategies and, within that, emphasis be placed on women.

(6)...agricultural stations provide field days for women...

(7)...radio and television programs be used to teach nutrition at an understandable level in local languages.

D. The Conference called for revisions in food, nutrition, and other policies; and in how the developing countries and development agencies organize their programs, with major attention being given to concentrating on the reduction of poverty.

Twenty-two recommendations concerned this topic. Illustrative recommendations are that:

(1)...Third World countries concentrate on developing national nutrition and agriculture policies which will provide adequate diets for women and children using indigenous foods. These policies would require use of national resources to provide an adequate, nutritious diet from locally-available foods.

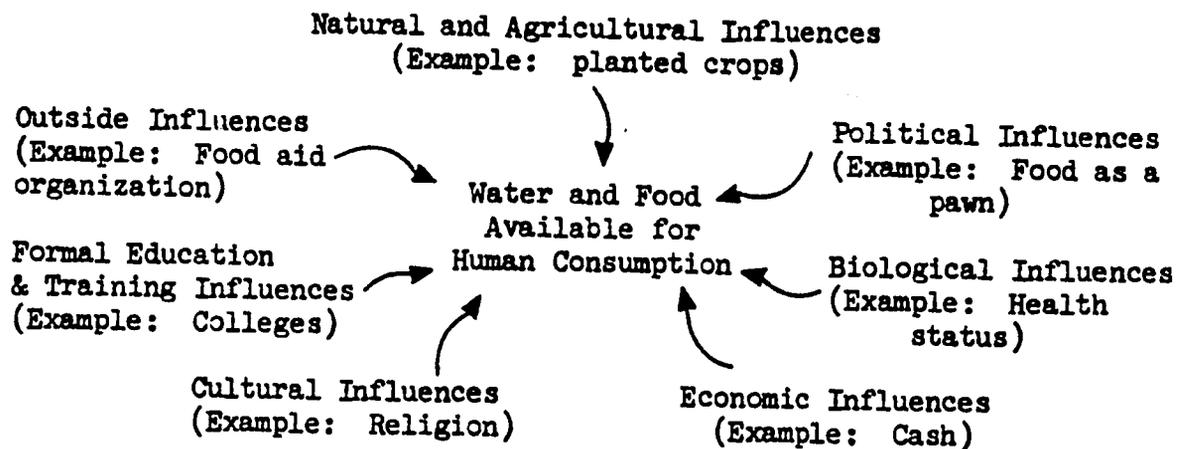
(2)...national food centers be established in developing countries using a multidisciplinary and fully-participatory approach, to:

---coordinate, and if necessary, conduct research and continuing evaluation of all aspects of production, distribution, consumption, storage, and preservation, household management, and community services (water supply, market facilities), with particular emphasis on women;

---advise on nutrition policy and national food systems; and

---collect accurate vital statistics (morbidity/mortality).

The National Centers should examine the factors that determine the nutritional status of individuals from the point of food and water available for consumption. Each influence is multifactoral. One example of each is provided.



(3)...food aid programs be provided in such a way as to complement host country initiatives in production, marketing, and consumption of food.

(4)...in recognition that one of the major barriers to improving the status of women and basic nutrition is absolute and increasing poverty of women, all appropriate development projects should be designed to increase women's access to improved income, preferable using traditional and indigenous means of production.

(5)...a system be developed to facilitate the exchange of information on infant feeding practices for Third World countries.

(6)...development agencies consider the health care impact of agricultural development projects.

(7)...local community development projects stress income-generating activities whenever possible.

E. The conference called for development programs to be attuned to local conditions.

Twenty recommendations pertained to this point.<sup>5</sup> Illustrative recommendations are that:

(1)...the Third World use resources within the community (i.e., teachers, community workers, etc., who have been raised in the community and have an empathy for the community and its citizens). (For teachers, additional seminars and workshops may be necessary as support. Local answers for local problems are necessary, and we must not overlook local values. We must make use of volunteers through schools, churches, and other institutions.)

(2)...local units assess traditional technologies used locally, and

improve these if appropriate, rather than bringing in inappropriate exogenous technologies.

(3)...funding preference be given to indigenous food projects, recognizing the availability of local food products and their adequacy to provide a nutritious diet.

(4)...incentive systems, consistent with local values that will motivate local people, be identified and applied in projects.

(5)...planners be sensitive to the cultural patterns and socialization processes of the recipients of projects.

F. The Conference called for broadening the scope of research programs.

Eighteen recommendations pertained to research. Illustrative recommendations are:

(1)...research should include developing in-depth social science evaluation measures to show: (a) the impact of food programs on the well being of families in general and women in particular, and (b) the impact of women's participation in such programs.

(2)...purely technical projects should not be the only component of Title XII-funded research, but social, political, and economic consequences must be considered in assessing the impact of development programs. To do this, a monitoring and information system needs to be established.

(3)...women be the special subject of and participants in research efforts leading to projects and policy changes in food and nutrition.

(4)...research relating to Third World problems be done in the Third World to a far greater extent than is now being done...and with Third World involvement in design and implementation.

(5)...U.S. universities and Third World countries develop evaluation and research institutes which will include a women's post to evaluate projects in relation to their impact on poor women within the respective country. Women affected should be involved.

G. The Conference called for participants to involve themselves in Conference follow-up.

Illustrative recommendations are that participants should:

(1)...arrange for an evaluation of the Conference, including Third World women in predominant numbers,

(2)...publicize the substance of the Conference,

(3)...(Third World Women) organize conferences on women and food in their countries.

(4)...(University women) encourage awareness of the need for scientific study of the interactions of women/food/water.

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References:

1. The Conference carefully avoided time-wasting arguments concerning definitions of "hungry and malnourished." A 1976 World Bank report, cited by Williams in a paper distributed in advance of the Conference estimates 930 million people are currently suffering daily deficiencies of 250 or more calories.
2. The term "working concensus" as used in this report means general, but not total, agreement.
3. A complete list of recommendations will be included in the proceedings.
4. This classification includes most of the resolutions calling for additional participation by women.
5. Note that many of the recommendations listed in A-D include references to localization too.

## FOOD/NUTRITION IN THE THIRD WORLD: AN OVERVIEW

Doris Howes Calloway

The Conference organizers have asked me to address myself primarily to the question "Why are people malnourished?" The several background papers for this Conference provide a good review of fundamentals and expose some issues salient to this discussion and on which I shall build. I shall begin by reviewing some early experiences to illustrate what I believe to be the major difficulty in policy and programmatic responses to the "hunger" issue. The difficulty, as I see it, lies in problem definition: planners and program/project directors have not adequately specified the nature of the problem and have not adequately understood the range of responses that are likely to follow particular interventions. To the extent that problems are diagnosed superficially, or wrongly, responding measures will also be inadequate or even counter-productive.

The simplest answer to the question "Why are people malnourished?", and a classic nutritionist's answer, is that people eat too much, too little, or the wrong mix of foods. This is, of course, the most proximate cause of malnutrition and the answer tallies with the three classes of nutritional problems seen today. Those who eat too much are obese; those who eat too little have a set of symptoms called variously, thinness, marasmus, dwarfing, stunting, PCM (for protein-calorie malnutrition) etc., and they may even die from starvation. Habitual diets that contain the wrong mix of foods leads to deficiency states of specific essential nutrients. The specific deficiency states still seen commonly are anemia (lack of iron, B vitamins, protein), serophthalmia and blindness (vitamin A), rickets (vitamin D), goiter and cretinism (iodine), pellagra (niacin, protein) and a type of dwarfing and delayed sexual development (zinc).

A modern nutritionist would add the fact that there may be, and usually are conditioning factors; that the problem is not simply one of intake. For example, obesity may be related to a lack of physical activity so that a normal or even low intake of energy exceeds a very low energy output. This situation may exist where people are unemployed and in poverty but given enough calories by means of some welfare program; and also where people have generous incomes but with low work energy requirements, with mechanical aids to household work and transportation and insufficient inducement to active recreations. On the low side of the intake picture, seen far more commonly in the third world, a low intake may be associated with poor absorption due, perhaps, to

diseases affecting the gut or to the presence in the diet of interfering substances; or with excessive loss as with hookworm infestation or heavy menstrual flow; or with infections such as measles and whooping cough. Vitamin D-deficient rickets and adult bone disease may occur with inadequate exposure to sunlight as with some religious orders, women in purdah, or poor infants kept shaded in boxes underneath market stalls.

The nutritionist would point out that many of these conditioning factors would have little impact on well-being if the person had a generous diet of good foods. Conditioning factors and malnutrition are interactive: both can be causes and both effects of the other. The undernourished child may succumb to a disease from which a well-nourished child would easily recover and a child in borderline nutritional state may be pushed over into frank malnutrition with a bout of diarrheal disease.

If the diagnosis of the nature of the nutrition problem were to end at this point (and in the past it has commonly done so), one appropriate response would be to introduce an educational program designed to change eating habits, e.g. to increase consumption of green leaves or organ meats, or to select cheaper sources of nutrients. Such programs have not produced striking results nor would I expect them to do so. Most people know what foods constitute an adequate diet within their own cultural food patterns. Our<sup>2</sup> experience with the Cocopah illustrates this point. Many of these Native Americans had evident nutritional problems but in response to a direct query they could easily list the components of a good diet--they simply did not have them. USDA studies also have shown that American households with lower incomes usually obtain more nutrients per food dollar than do higher income families--the poor already purchase nutrition more economically than do the rich.

A second common response has been to augment nutrient intake by providing food directly to defined target groups such as in the WIC program here or the milk distribution program in Chile. Such schemes do benefit some people but they have not generally reached those in greatest need (remote, rural, illegals, etc.), they are burdensome to administer, they are expensive, and they have no self-sustaining quality.

The observed association of malnutrition and poverty has led to the introduction of welfare programs intended to augment food purchasing power, rather than to provide food directly, in hopes of promoting economic as well as nutritional gains. These suffer from many of the same problems of food distribution schemes--access, administration and cost--generally have not had a sustaining effect on economies. The U.S. Food Stamp program now costs annually about \$5.3 billion and has not been proved to benefit those most in need, nor to lead to significant economic improvement of recipients or the communities in which they reside.

Nutrition problems in the poorer parts of the world have been wrongly defined, also, and this has led to serious waste of resources

marshalled to solve them and, perhaps more importantly, to prolonged delay in introduction of policies and programs that might succeed. I will cite two examples of how superficial diagnosis has led to ineffective remedial measures abroad.

Until the last few years the major nutrition problem in poor countries was seen as being lack of protein, even though the rubric protein-calorie malnutrition was the descriptor used. It is easy to understand how the emphasis came to be wrongly placed on protein--in contrast to calories, energy, or simply food--because many of the symptoms seen in those affected relate to the body's protein system (e.g. low levels of blood proteins, anemia, changes in the skin and hair) and the condition is correctable by administration of good protein-rich food. Importantly, the situation was diagnosed by physicians whose perception is of 'cases' rather than of populations from which the malnourished emerge, and physicians rarely know or appreciate the role of food as a carrier of nutrients and an economic burden. The wrong perception of the nature of the problem led to wrong solutions. For example, there were:

1. weaning foods like INCAPARINA. Years later children still die of malnutrition because the poor can't buy the products and the poor remain poor.
2. amino acid strategies such as flour fortification and high lysine corn. These strategies cannot be effective because the immediate cause of malnutrition is not lack or imbalance of specific amino acids, but rather lack of food, lack of health care and economic deprivation.

Another popular view of the cause of malnutrition is that there is a shortage of available food and the solution is to produce more food. Obviously this is wrong. The U.S. is an exporter of food and we have some malnutrition. Now Mexico and India have passed the point of self-sufficiency in cereal grains. But malnutrition is rampant still and no doubt will be even if exports from these countries become significant. In fact, the Green Revolution in Mexico has so diverted farm production toward the large land holders who can provide the required high tonnage inputs (fertilizer, machinery) that the amount of work available to landless labor has fallen and those at the bottom of the economic ladder are in worse state than before. And an enormous amount of resources has been diverted in the cause of increased production, including research funds and scientific effort, capital investment, preferential tax reductions and the like.

It is true, also, that some programs have failed because insufficient thought was given to the individual's perception of his state and his attitude toward it. Taking a simple example, we can agree that unclean water is directly responsible for gastrointestinal infection leading to human misery and contributing to the malnourished state. Lack of a convenient source of clean water also has a cost in terms of time--often a most scarce asset of women in poverty--and of energy due

to the necessity of carrying water from source to household. It probably has an associated cost of poor sanitation in the household. So, if clean cold water were to be brought into the village what outcome might be anticipated? Would household sanitation improve? Or would the woman elect to invest the time and energy saved into some quite different activity like playing with her children or planting a garden? More than improved water supplies may be required if our intent is to improve sanitation.

I. Why are people malnourished? Sometimes they don't know how to look after themselves. There are 'outliers' in every culture; some are too young, some too feeble. But mostly, even if they did know how, they couldn't look after themselves because a) they are in an adverse health environment; and b) they are unable to gain a livelihood. The recognizably malnourished emerge from a much larger pool of the marginally nourished and "at risk"--at risk of becoming frankly malnourished if they become ill, or if their crop fails or if they are displaced from land and/or productive labor. With displacement there is often a breakdown in the total social system. Families may be separated as the man leaves to seek wage labor elsewhere, or the mother may be forced to leave her infant to the inadequate care of older children as she herself enters at the very bottom of the labor market, or is driven to prostitution.

II. What, then should be our concern? Is it the existence of malnutrition? Or the constant growth of malnutrition? Or the situation in which it emerges--a situation in which there is no mechanism for responding, coping, concerning? Is it a solution if we treat malnutrition? If we cause it not to emerge? Are all "solutions" acceptable?

When we ask why people are not adequately fed and what needs to be done we find that there is no simple answer to these questions. We do know first, however, that we wish that society at all levels should be sensitive to and concerned for the existence of malnutrition; that it should recognize that malnutrition is a condition which both stultifies the individual and, often, reflects a basic sickness in society--a failure to respond to personal and social deprivation with human concern and effective action.

But what concern is appropriate? And what action is likely to be effective? First, we should surely be concerned for those who are patently malnourished. We need ways of identifying such people and ways of treating them. However, I believe that some efficient bureaucratic process for nutrition surveillance, mother child care and emergency feeding schemes, or whatever other activity, is not what we most need. These may be desirable and have an important role in mobilizing and supporting social concern at community, national and international levels. But national and international expressions of concern are not enough; there needs also to be concern at the community level. Treating the malnourished is not good enough--it does not eliminate malnutrition.

People need to be aware of what malnutrition is, that it is bad, that it is unnecessary, and that they have a role in its elimination.

### III. Bibliography and References

1. Both excessive and deficient intakes are seen in all countries, but the proportion varies with wealth and development.
2. Calloway, D.H., and J.D. Gibbs. Food patterns and food assistance programs in the Cocopah Indian Community. *Ecol. Fd. and Nutr.* 5: 183-196, 1976.

## SESSION II B SUMMARY

Nancy Ferguson

### Summary of Food/Nutrition Problems - Impact on Women and Women's Role in Interventions to Solve Them.

Dr. Schick defined adequate nutrition and identified food storage and preservation, sanitation, and professional insight as major constraints in providing food to the world's population. Dr. Graves clarified the topic of discussion. Increasing food supplies means getting more food into stomachs. 'Without outside intervention' means 'avoiding high technologies'. She stressed the value of manioc as a food and the needs for small scale remedies to problems. Dr. Fowler pinpointed multinational corporations as being involved in exportation of agricultural products from Third World countries. He believes that development is a process of people taking charge of their own lives not just a technical problem. Ms. Vajathron believes that food and population are political problems, not technical problems, and that solutions must involve increased participation by women in political activities. Women are already self-reliant and know how to deal with emergencies. They need to learn how to organize to increase their collective bargaining position. Dr. Cox believes that pricing structure is crucial to providing adequate food. Available land is not a constraint in meeting this goal.

During a general question session from the audience various speakers mentioned the following points:

1. The effect of low food prices must be considered as well as exportation of food crops.
2. Cassava (manioc) is a good calorie source and an important food.
3. Government food policies should encourage that food be used within a country and not exported.
4. Future research on tropical soils will alleviate problems, such as aluminum toxicity, which have prevented their use for crop production to date.
5. Nestles and Bristol Meyers Corporations are involved in marketing infant formulas in developing countries. Use of infant formulas, under typical 3rd World conditions leads to infant malnutrition due to dilution of formula and infant sickness due to bad water or non-

sterile conditions. They are being boycotted in the U.S, and Nestle's was sued in Switzerland.

6. Multinational corporations have not resolved the conflict between their responsibilities to shareholders and to consumers.

Discussant Dr. Harrison saw the nature of the food problem to be poverty and lack of power. While women already control agricultural production and have necessary knowledge, they need to become powerful. Dr. Johnson related the difficulties of being active in foreign development activities without specific institutional support.

## SESSION II--C SUMMARY

Edna Bay

The panel of Session II C was chaired by Dr. Vivian Cox of the University of Arizona and included Dr. Estrella F. Alabastro of the University of the Philippines, Lic. Irma Luz T. de Ibarra of the Latin American Home Economics Association, and Ms. Saadet Sarica of the Ministry of Agriculture, Turkey.

Dr. Alabastro surveyed problems of food and nutrition in the context of the Philippines, suggesting developmental alternatives with possible application to other areas of Southeast Asia. She underlined women's importance as contributors to family income and managers of family budgets. Citing inadequate levels of consumption for all food groups except cereals as a basic cause of malnutrition, she called for programs to orient consumer preferences to nutritionally adequate foods and for production incentives for farmers. Additional nutrition-related problems include poor income distribution, an unequal allocation of available foods, high rates of inflation and population growth, and heavy urban migration.

Cautioning that women's efforts to upgrade the Philippines' nutritional status must conform to national priorities, Dr. Alabastro outlined possible projects to assist women in their roles of homemaker and augmentor of family income. Home growing of fruit and vegetables, raising of poultry and livestock and establishment of small industries in crafts and food processing are possibilities, given capital and technical assistance from local and/or outside agencies. Women's groups could operate food processing projects to combat malnutrition and rural women could be trained as local community family-planning workers.

Noting that a multitude of factors are associated with food and economic problems in less-developed countries, Ms. Ibarra focused her remarks on women's role as food consumers in internal markets. She cited three marketing patterns. An Oligopoly exists where a number of producers control supply and are consequently able to fix prices. The resultant higher prices mean that only people with higher income may purchase oligopoly-controlled goods, including prepared meats, canned juices and foods, and milk. In a monopoly situation, two or three large-scale producers buy up the supply of small entrepreneurs and drive prices up. Again, only consumers with relatively high incomes can buy in the monopoly-controlled markets in grain, beans, rice and sorghum. A third marketing situation, that for fruits and vegetables, is based wholly on

small-scale production with produce placed directly on the market, a natural supply-and-demand situation, and consequent reasonable price level. Thus, income level determines the quality, variety, and quantity of food purchased.

Ms. Ibarra criticized as ineffective, government measures to set salary levels and stabilize prices. She stressed the need for educational programs in health, nutrition, and the basics of wise consumer action. She further recommended that developmental poles, that is, more advanced areas within a given country, be centers for change. Consolidation of existing programs is necessary, as is the advice of people on the level to be helped.

Basing her remarks on the example of Turkey, Ms. Sarica urged that general conditions be improved within her country as well as efforts made to improve women's status. Of a national population of 40 million, an estimated 6.2 million women are engaged in agriculture in addition to housework and food preparation responsibilities. Income is low and poorly distributed. Home food processing is hampered by a widespread lack of kitchens within the home, a lack of running water, and inadequate facilities for food storage.

Ms. Sarica cited deficiencies in protein and calorie intake, and noted that women may suffer from cultural practices which allow women less food. Pregnant and lactating women do not change their diet, a situation which leads to growth retardation and other deficiencies in children. She named as contributive causes of malnutrition: a population increasing faster than food production, income unequally distributed, poor food storage and marketing facilities, and a lack of knowledge about nutrition.

Ms. Sarica recommended that women be educated, though she cautioned that the male-centered Turkish culture must be taken into consideration. Lactating and pregnant women should be given food, though foreign foods and foreign administrative personnel would be unacceptable.

In the question and answer period, panelists were asked to assess the impact on women of agricultural export industries. Dr. Alabastro felt that agricultural exports were not deleterious to women, though she noted that food prices have risen faster than incomes. Responding to a question on women's employment in the agricultural export business, Dr. Alabastro remarked that food processing for export is a women's area in the Philippines. Ms. Sarica noted that most of the 5,000 wage-earning urban women in Turkey work in food processing.

The panelists were asked if they experienced problems as professionals in government bureaucracies. Dr. Alabastro replied that there is no discrimination in the Philippines. Both Ms. Ibarra and Ms. Sarica cited major problems in the possibility for productive work for women, the lack of access to decision-making positions, and the reluctance of men to work in subordinate positions.

# FOOD AND NUTRITION PROBLEMS IN A DEVELOPING COUNTRY AND WOMEN'S CONTRIBUTION IN THEIR SOLUTION

Estrella F. Alabastro

## I. Introduction

I have been asked, as a woman from one of the developing countries in South East Asia, to give my perception of the food/nutrition needs in my region of the world and on the role of women in meeting these diverse needs. I shall not be so presumptuous as to speak for all of South East Asia in this brief paper. Rather, I shall focus attention on the Republic of the Philippines from which I come. While I am certain that there are some needs and situations which are unique to my country, I am sure that some of the problems I will touch on could be found in other South East Asian countries.

The Philippines has a population of more than 40 million people, scattered over almost a thousand of its approximately 7,000 islands. A diversity of languages and dialects are spoken, and strong regional differences exist. Women of the Philippines, except in one particular minority group, have traditionally enjoyed a high status, compared with women in other South East Asian countries. They are considered almost co-equal with and partners of men. As such, they participate in decision making processes in the home. Although the man is the bread-earner and head of the family, the wife manages the family budget. She also contributes a significant proportion of the family income. Indeed, one sometimes gets the impression from cursory observations and casual conversations with Filipino women that there is no further room for improvement in their status. However, a profile of Filipino women prepared for AID by the Philippines Business for Social Progress (Aleta et al, 1977) indicates otherwise. Although women and men have equal educational opportunities, except in some technical and vocational areas that are still considered male domains, their opportunities for employment after finishing school are not the same. Only one-third of the labor force is women, and they occupy an insignificant proportion of administrative-managerial positions.

## II. Nutritional Status

The nutritional status of the Philippine population can be gleaned from the results of a nationwide survey conducted by the Food and Nutrition Research Institute covering the period 1957-1967. The weighted average daily per capita intakes of nutrients during this period are presented in Table 1.

Table 1. The mean daily nutrient intake per capita compared to recommended allowances.

Nutrient	Intake per Capita per Day	Recommended Allowance (1970)	% of Recommended Allowance Taken in
Calories	1970	2040	82
Protein (g)	46.9	50.4	93
Calcium (mg)	340	450	75
Iron (mg)	10	20.4	49
Vitamin A (iu)	1900	4000	48
Thiamine (mg)	0.75	1.02	74
Riboflavin (mg)	0.49	1.02	48
Niacin (mg)	14.0	13.4	105
Vitamin C (mg)	65	72	90

The table shows that protein in the diet is nearly sufficient, but the calorie intake must be improved. All other nutrients, however, except for niacin are deficient. Levels of iron, vitamin A and riboflavin are particularly low. The recommended allowance for iron in this table takes into account the low availability of this mineral in the diet. Biochemical testing of blood and urine and chemical tests confirmed these deficiencies (Bayan et al, 1969). Signs of vitamin C deficiency can be partly attributed to the losses in the nutrient during preparation and cooking, since vitamin C is easily oxidizable the heat labile.

It can be seen from the data presented that the nutritional status of the Philippines requires substantial upgrading. The encouraging protein level of over 90% of the requirement loses much of its value when the calorie and vitamin deficiencies are taken into account. The interaction of nutrients is well known. Thus, protein will be used as an energy source when the calorie supply is not sufficient to meet requirements for energy. Energy production is further reduced when carbohydrate oxidation is curtailed by a shortage of thiamine. These examples serve to illustrate the necessity of raising nutrients to their recommended levels simultaneously if improvement of nutritional status is to be attained.

### III. Causes of Malnutrition

Before I make any suggestions as to the possible roles that women can play in the alleviation of the food and nutrition problem, I shall first present a brief review of some of the causes of malnutrition, in the Philippine context.

Inadequacies in the food supply: The food balance sheet for 1973 (Table 2) shows the available food per capita per day by food groups. The available food supply and the actual food intake are compared with the recommended allowances made by the Food and Nutrition Research Institute as a guide for home dietary planning.

Table 2. Daily per capita food supply and food intake compared with daily recommended per capita food allowance. (Continued on following page.)

Food Groups	Actual Food Intake per capita per day (grams) A.P. <sup>1</sup>	Available Food Supply per capita per day (grams) A.P. <sup>2</sup>	Recommended Allowance per capita per day A.P. <sup>3</sup>
TOTAL PER CAPITA	784	915.9	1,006
I. Rice and other energy foods	<u>428</u>	<u>502.2</u>	<u>427</u>
1. Cereals & cereal products	<u>345</u>	<u>368.2</u>	325
a. Rice	253	250.7	
b. Corn	73	86.0	
c. Wheat Flour	19	31.5	
2. Roots and Tubers	65	83.7	74
3. Sugar and Syrups	18	50.3	28
II. Fruits and Vegetables	<u>195</u>	<u>192.7</u>	<u>290</u>
1. Leafy and Yellow Veg.	28	29.9	85
2. Vitamin C rich foods	29	21.8	71
3. Other fruits and Veggies.	138	141.0	134
III. Fat-rich food	8	12.9	30
1. Fats & oils	<u>8</u>	<u>12.9</u>	<u>30</u>

Table 2. Continued

Food Groups	Actual Food Intake per capita per day (grams) A.P. <sup>1</sup>	Available Food Supply per capita per day (grams) A.P. <sup>2</sup>	Recommended Allowance per capita per day A.P. <sup>3</sup>
IV. Protein-rich foods	<u>153</u>	<u>208.1</u>	<u>259</u>
1. Meat & Poultry	119	156.2	140
Fish & other marine products			
2. Milk & milk products	22	38.2	87
3. Eggs	5	10.1	16
4. Pulses & nuts except coconut	74	3.6	16

<sup>1</sup>Intake of E. P. converted to A.P. obtained from the table of average daily per day capita food consumption mimeographed by Food and Nutrition Institute as of May 10, 1974.

<sup>2</sup>Obtained from the CY 1973 Food Balance Sheet.

<sup>3</sup>Recommended allowance based on E.P. (edible portion) converted to A.P. Data obtained from an unpublished mimeographed report by the Food and Nutrition Research Institute.

<sup>4</sup>Excess could be due to home production, not accounted for in food balance sheet or to seasonal availability at time of survey, averaged out in Annual food balance sheet.

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The food supply situation is far from ideal. Calorie-rich foods, namely, cereals, roots and tubers and sugars were available in excess of allowances, but all protein and vitamin food groups except for meat, poultry and fish were in short supply. The latter were adequate for the first time, in CY 1973. The availability of "fats and oils", "milk and milk products" and "pulses and nuts" was particularly low.

This over-production of some food groups and under-production of other food groups, indicates a need to shift agricultural production from those food groups where supply is more than adequate to those food groups where it is not, particularly in the case of "pulses and nuts." However, if farmers are to produce specific commodities for nutritional purposes, strong incentives must be provided and demand sustained. Therefore, it is necessary that food recommended for nutritional purposes be acceptable to consumers' tastes and within reach of their incomes, and effective programs to orient consumer preferences towards the desired food mix level of intake be part of a national nutrition program. In this regard, promotion of nutritional consciousness, nutrition education, and other allied nutritional activities play a very important role.

The poor supply of some food groups like "eggs" and "fruits and vegetables" can be partly attributed to losses or wastage, as can be gleaned from the food balance sheets. Fruits and vegetables suffer the greatest from post-harvest wastage, due to poor traditional handling practices. A research report made by Pantastico (1974), shows post-harvest wastage among fruits to range from 14 to 40% and among vegetables, from 22 to 78%. All the stages of harvesting, packaging, transporting, storage and retailing procedures of fruits and vegetables contributes to the total wastage. Thus, the need to reduce wastage of seasonal perishable foods is critical, particularly since facilities for transportation to market are also poor.

The fact that available food exceeded the reported food consumption, except for fruits and vegetables where supply and intake are just about equal, would seem to indicate that for these food groups, inadequate supply is not the main or only reason for people's inability to get the food they need.

#### IV. Cumulative Percentage Distribution of Families and of Total Family Income by Income Class

In the Philippines, a large proportion of families belong to the very low income brackets, and the bulk of total income is held by a small group (see NEDA, Statistical Yearbook 1974). It is logical, therefore, to expect some inequities in the allocation of the available food, with those in the higher economic brackets having a better opportunity to get a larger slice of the food supply because of their higher purchasing power.

An individual's purchasing power is dependent on the price of goods as well as income. The Philippines, like other countries the world over, has been hard hit by inflation. Statistics show that incomes did not increase as fast as prices.

To meet the food needs of the entire population, it is necessary to increase income, effect a more egalitarian income and wealth distribution, and stabilize the prices of food items that are important in proper diets at reasonable levels.

High Population Growth Rate and Migration to Cities: The population growth rate of the Philippines, which in 1970 was 3.01%, remains high, despite vigorous government efforts to implement family planning programs. This is a matter of grave concern, since a high population growth rate will reduce the benefits derived from increased agricultural production.

Another problem in connection with population is the heavy migration from rural areas to cities. Migrants usually have low education and income. Since costs of marketing services are much higher in highly urbanized areas than in rural areas, food costs are much higher in cities. Migrants, therefore, spend about 90 to 95% of their total income for food of poor nutritional quality, since they are not aware of dietary requirements. Their choices of food items are also limited by lack of household facilities for food storage and preparation.

Government programs to decongest the cities include development of rural areas through dispersal of industries and relocation of families living in slum areas to resettlement areas outside the city limits.

#### V. Government Policies and Programs

Individual or group efforts of women to alleviate the food/nutritional situation will be effective only if they fit within the framework of national priorities.

The national development plan formulated by the government has been regularly updated and modified in order to reflect environmental changes.

The emphasis of the plan is on agricultural and industrial development. In agricultural development, the government expects to promote improvement of rural income and food self-sufficiency through expanded food production, natural resources development, land reform and cooperatives. Industrial development will generate new and more employment. This will be accomplished through labor intensive projects, manufactured exports, industrial linkages, regional dispersal, tourism, and small and medium-scale projects. It is realized that private sector participation is essential to the success of agricultural and industrial development programs. For its part, the government is committed to infrastructure development programs, ensuring peace and order and better management of government.

It is also the national policy to promote the full human development which includes health and well-being. As an offshoot of this policy, a Philippine Nutrition Program has been formulated with five intervention schemes, namely, food assistance, nutrition information and education, health protection, food production and family planning. Food assistance consists of giving high calorie and high protein foods to third degree malnourished children. Nutrition information and education projects are aimed at reaching the greatest number of families through schools, mass media, and community activities, such as mothers' and farmers' classes.

The main targets of the health protection program are malnourished children whose nutritional status will be monitored, related diseases treated by city or rural health units, and referred to malnutrition wards in severe cases. The food production scheme encourages families and school authorities to utilize vacant lots in the production of nutritive foods such as fruits and vegetables. Family planning emphasizes the spacing of children for better education and nutrition.

#### VI. Role of Women in Meeting Basic Food Nutrition Needs

In what development programs would the Filipino woman be most effective? It has to be realized that the Filipino woman considers her role as homemaker her primary one. As such, she has a major responsibility for her family's well-being. Her other important function is to manage the family income. Her role as augmenter of the family income especially in the low socioeconomic groups is likewise important. She finds reason, therefore, for her participation in development programs/projects when these activities will benefit her family directly in terms of augmentation of the family income, better health and nutrition of the family members, and better educational opportunities for the children. It should also be noted that 2/3 of Filipino women live in rural areas and are therefore more prepared to engage in agricultural projects or in industrial projects that are not capital intensive or technologically complex.

Rural women constitute a work force which can be tapped in the home production of fruits and vegetables and in the backyard raising of livestock and poultry. I believe that they can easily be persuaded to engage in these activities, as the advantages to be derived are apparent. They will, however, need technical information and small capital loans. In this connection, I would like to cite the involvement of a private organization: the Philippine Bureau for Social Progress, in the development of some towns in Laguna, a province in Southern Luzon. One of its projects is to promote hog-raising in a certain locality. To initiate a family into the business, it provides it with a certain number of piglets. After a sow has given birth, the family is expected to return this same number of piglets to PBSP, which are then given to another interested family.

Other income-generating projects that women can engage in are small scale craft and food processing industries. These projects can be either single entrepreneurs or cooperatives. Small food processing concerns would be income generating, and would also serve to decrease food wastage and help stabilize prices of fresh commodities during the glut period, increasing the incentive for greater production. In order to set up income-generating projects, assistance will have to be provided in:

- a) identifying viable projects in a community
- b) securing capital from lending institutions
- c) developing the technology required
- d) setting up quality control procedures

- e) marketing of products
- f) training of women for entrepreneurship

The Philippine Bureau for Social Progress is also involved in the establishment of income-generating projects in pilot communities where it works with loosely-structured women's groups. There are indications, even at this early stage, that this could be a successful approach. I have personally witnessed the enthusiasm of these women in the PBSP projects when we were called in by PBSP to advise the women on technical problems they encountered in some food processing projects. The inroads made by private organizations like PBSP in developing rural communities cannot be discounted. However, because of financial constraints, the areas benefitting from them are rather limited. More can be achieved by a network of cooperating government agencies, private organizations and educational institutions.

Identification of viable projects in a community can be done by local people from government agencies and educational institutions. I believe that we have the expertise to enable us to do this. What remains to be done is to organize this group of experts and coordinate their activities so as to cover a wider area in a shorter period of time. This same group of technical persons can assist in preparing project feasibility studies required by some lending agencies for approval of loans. It is in the technological aspect where I feel there is need for inputs from outside agencies. Educational institutions located in agricultural communities are usually too ill-equipped and too poorly manned to make any substantial contributions in this regard. Equipment and consultants provided by an outside agency to agricultural universities and colleges would be needed to beef up their capabilities to develop technological packages for a given region.

Local government agencies and civic-oriented private organizations can help small scale industries locate local and foreign markets and meet product specifications demanded by the market. An outside agency with worldwide contacts would, of course, be helpful in establishing foreign markets.

Entrepreneurship training for women in small-scale industries has been one of the programs of the Institute for Small Scale Industries of the University of the Philippines funded from local and foreign sources. Financial and manpower assistance for these programs from outside agencies is necessary to enable them to serve more participants and conduct training outside the Metropolitan area. In addition, we need to develop manuals in the vernacular for the management training programs.

The participation of women can also be significant in the government's Nutrition Program. Women's groups can be mobilized in the procurement, preparation, processing, and packaging of cheap indigenous foods that are good sources of protein and calories, to be used in the food assistance projects for severely malnourished children.

The need to reach out to more rural areas is felt most severely in the family planning program. It has been said that outside a radius of 7 kilometers from a family planning clinic, the program is practically inoperative. This has been attributed to the lack of trained personnel willing to work in rural areas. Women volunteers from the community, when properly organized, motivated and trained can fill this gap. As members of the community they will be better accepted than government workers, who are considered outsiders. There is no doubt that acceptance of family planning methods will be accelerated if rural housewives are approached and motivated by women in their own locality. Training of selected women from the community who have been singled out as possessing the necessary qualities to be leaders and motivators is a necessary precursor to their involvement. This can be done by local people with the assistance of foreign consultants who have had similar experience in other developing countries.

The voluntary participation of women, as individuals or in groups, can also facilitate nutrition education outreach.

## VII Conclusions

I have cited in this brief paper the food and nutrition problems that face my country today and the development programs of the government which are aimed at solving these problems. I have also mentioned some of the programs in which women can play a significant role provided they are given the training and other forms of assistance prerequisite to their participation. The examples that I have given are by no means complete.

In closing I would like to echo the words of Mrs. Imelda Marcos, our First Lady, who remarked that thus far, the development process has not been very successful because it has not made full use of women who are "the nation's and the world's greatest potential". I hope that, realizing this, we shall soon correct this oversight.

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## DEVELOPING COUNTRY WOMEN'S PERCEPTION OF FOOD NUTRITION PROBLEMS

Saadet Sarica

In 1978, 83 million people, one every four seconds, will join the 4.2 billion already living on the earth. This is equivalent to a new country as large as France joining us with all its desires and wants. A large share in the increase will be in the developing countries, and they will find it difficult to meet basic human needs, especially food, for so great a number. Many of the newborn will face a life of poverty and want.

Most developing countries have similar reasons for their difficulty in increasing food production and alleviating poverty. Since I am more familiar with my own country's situation and problems, I will focus on Turkey's present economic and social situation, and then evaluate nutrition problems in this general context.

In almost every country the social and economic status of women is lower than that of men. The plight of women in the developing countries is especially difficult because social and economic conditions are generally poor, and to this must be added the problems of being women. Backwardness is a function of the system, so we must first evaluate the total conditions prevailing in a country, and then look at women's status before thinking about how women can help to improve their status and contribute to the whole society. A country that finds ways for women to participate fully in the development process will greatly benefit the entire population in addition to raising women's status. Some economic, social, and demographic statistics on Turkey are presented below, followed by a discussion of the nutrition problems.

Turkey has a population (1975) of 40 million, increasing at a rate of 2.6% per year. Males account for 50.6%, or 20,417,000, and females for 49.4%, or 19,781,000. Population density is 50 per square kilometer.

Generally, Turkey is in an early stage of industrialization. Sixteen million people are considered economically active, and 63%, or 10.4 million of the economically active live in rural areas. A majority (60%), or 6.2 million of the rural area workers are women, who also do the housework and prepare food for the family. Are these hard-working women satisfactorily fed? Let's first look at the national general nutritional level, and then at women's nutrition.

Turkey's annual per capita income is \$900, and 65% of the Gross

National Product (GNP) comes from agriculture. The average family size is five, but families are larger in rural areas, especially in the east and southeast. Annual income is generally lower where the family is larger. Nearly 15% of the families have below what is regarded as the minimum annual income (\$750) required to provide basic needs. Twenty-seven percent of the families have approximately the minimum income. The percentage of families below the minimum is higher in the towns and villages than in the metropolitan areas. Most of Turkey's farm population resides in villages which also include laborers, traders and service people. The villages have six to seven times more families in the very low income group than do the metropolitan areas.

Daily calorie consumption averages 3,038 in the cities, and 2,920 in the villages. Protein consumption is also lower in the villages; 86 gr. compared to 91 gr. in the cities. These national averages compare favorably with many developed countries and show that Turkey does not suffer in aggregate from severe protein or calorie hunger. However, there are regions and classes deficient in both.

Bread and wheat products are the staple foods in Turkey. On the average, bread provides approximately 44%, cereals 58%, and milk and milk products 4.9% of the daily calories. Total calories, protein, and animal protein intake falls as family size increases and income decreases.

With the unequal distribution of income found in Turkey, it is not surprising the consumption of food differs greatly between metropolitan areas and villages. Compared to cities, the consumption of bread, wheat products, other cereals, yoghurt, and milk fat are higher in the villages and the consumption of cheese, meat, fish, eggs, dry pulses, fresh fruit and vegetables, oils and sugar are relatively low. The average intake is 2,291 cal/per capita per day. Total protein averages 68 gr./per capita per day, of which 18.0 gr. is animal protein.

Given the above nutritional data, let us now look at eating habits, food preparation facilities, and women's struggle to provide adequate food for their families.

Looking at the nation as a whole, 63.9% of the family meals are eaten from a common pot on the table, and separate plates are used in only 36.1% of the families. (Only 5% serve meals on separate plates in the villages). Eating meals from a common pot may lead to unequal distribution of foods between the members of the family, especially for women, since they often eat after others, either because their serving responsibilities detain them, or their traditional respect for men inclines them to eat only what is left. In some areas, especially in the North and East, women eat after the men. If there is a guest, women stand and wait to serve the guest.

Some women lack proper facilities to prepare food, which affects both the time spent preparing meals and food quality. There is no

kitchen in 29.7% of the houses in Turkey, and more than half the rural families have no kitchen in the home. Running water is absent in 34% of the houses--87.8% in towns and 94% in the villages of Eastern and Central Antolia. Wood and gas are the most used energy types for cooking.

There are few facilities to preserve food; only 18% of the families in the villages have an enclosed cupboard, and 8.2% a refrigerator. This percentage rises to 42.5% and 70% in metropolitan areas, respectively. Home preparation and storage of food is widespread, with 97.2% of the families in the villages storing their flour at home and 80% baking their own bread. In over 50% of the families, women make and store the basic foods such as bulgur, macaroni, yoghurt, cheese, etc., at home.

Women frequently do not get proper care during pregnancy and lactation periods. Village women bear 5 children on the average, and 94.2% of them make no change in the type of food they eat during pregnancy and lactation. Even outside the villages, only 6% change their diet during lactation. Village women generally work in the field up to delivery time, and in some areas breast feed their babies up to 2 years. Beyond this, children generally have no special nutritional care before or during school age.

Twenty-two percent of the preschool children in the villages and towns have retarded growth; and 16.4% of the school children and adolescents, 7.3% of adult men and 3.7% of adult women are underweight. Approximately 8% of the men, and 25% of the women are obese. The evaluation of the anthropometric measurements shows that growth retardation among preschool children and adolescents is very common, while women in the same families suffer from obesity.

Due to malnutrition in general and lack of care during lactation and pregnancy, 32% of mothers suffer from low hemoglobin levels. A total of 34% of the population and 50% of the children have hemoglobin counts below normal values, suggesting that millions of people suffer from anemia. If the other vitamin or mineral measurements were taken, the deficiency percentage probably would be similar.

What are the reasons for malnutrition? First, population is increasing faster than food production capacity, with the largest increase in the rural areas where diets depend largely on what is locally produced. Second, income is not distributed equally, and this inequality, especially between rural and metropolitan areas, is growing larger. Third, food marketing has not shown rapid improvement, and people eat what is available. Insufficient food reaches the consumption center, and storage facilities are inadequate in rural areas. Fourth, knowledge about nutrition is very poor, both in metropolitan areas and in villages. Fifth, traditional eating habits inhibit the use of new and more nutritious methods of food preparation; for example, Turkish people consume little canned or frozen fruits and vegetables.

Since women are responsible for family food preparation, and are

often illiterate, receiving little education, it would seem wise to concentrate first on general education for women, and then to teach them about nutrition. Training in reading could contain information on improved nutrition.

How can we educate women? How can we reach them? These problems cannot be separated from a country's general economic and social situation, and this means we cannot separate women's education from men's culture. Men must learn that if half of the population is not educated so that its productivity cannot increase, the country cannot develop. In the national development plans for developing countries, emphasis should be placed on this point. Local development plans should make provision for educating women and providing them with proper food, especially during pregnancy and lactation. Food intake improvement should be evaluated at the end of plan implementation periods.

Do we need foreign aid to solve food and nutrition problems? Foreign aid in the form of food will rarely achieve its aim, because foreign food does not meet villagers' desires. In addition, since much of it goes to urban areas and high-ranking persons, it often does not reach the needy. Foreign technical personnel find it difficult to adjust their thinking to local conditions. They have great difficulty understanding and working with villagers. We must remember that even an urban person is a stranger to a villager.

The establishment of cooperatives that would include women could be of great benefit in many developing countries, and aid there would be especially appreciated. Through cooperatives, women and men could get together in the same place and participate in food production, education, and processing. Perhaps a special place for new types of food production and processing could be established in cooperative centers. In this way, women could be employed in money-earning activities which would draw them away from working only in their homes. This is very important because when they get money, they will have the power to buy food in addition to what they produce. Once women are aware of additional nutritional needs and opportunities to vary their diets, they need more variety in foods.

### SESSION III

OBJECTIVE: TO REVIEW WOMEN'S INVOLVEMENT IN ALTERNATIVE TYPES OF  
CURRENT AID AGENCY FOOD AND NUTRITION PROJECTS

#### A. Session Summary

Bonnie Ann Stewart  
Agricultural Economist  
Niger Natural Resources Project  
Office of Arid Lands  
University of Arizona, Tucson

#### B. Reports

##### 1. STRENGTHENING VOLTAIC WOMEN'S ROLES IN DEVELOPMENT

Dr. Carolyn Barnes  
Project Director  
USAID

##### 2. THE COMMODITY SYSTEMS APPROACH - A COSTA RICA PROJECT TO INCREASE BASIC FOOD PRODUCTION

Marvis Knospe  
Nutrition  
USAID/Costa Rica

##### 3. COSTA RICA/OREGON COOPERATIVE NUTRITION PROJECTS

Margaret Lewis  
Home Economist  
Oregon State University, Corvallis

##### 4. CARE/KENYA WATER DEVELOPMENT PROGRAM

Martha Whiting  
CARE Field Representative  
Kenya

## SESSION III SUMMARY

Bonnie Ann Stewart

OBJECTIVE: TO REVIEW WOMEN'S INVOLVEMENT IN ALTERNATIVE TYPES OF CURRENT AID AGENCY FOOD/NUTRITION PROJECTS.

Case studies of projects which utilize alternative approaches to providing basic food and other needs.

I. A Specialized "Women in Development" Project (Upper Volta--Dr. Carolyn Barnes, USAID/Upper Volta)

A. Focus of Project: Strengthening Women's Roles in Development. (SWID). Involves participation of village women and the female extension service. Project was initiated in October 1977, and is implemented through the national-level Rural Domestic Economy Unit within the interministerial Coordinating Committee for Rural Development.

B. Country Setting: The Rural Domestic Economy Unit:

1. Provides advice and technical services to the Organizations for Rural Development (ORDs).

2. Country is divided into eleven ORDs.

3. Ten of these eleven have their own domestic economy staff composed of:

a. Field agents

b. Female regional coordinator

C. Concepts Underlying Project:

1. "The resource base of a country is combined in the market economy and non-market economy." The latter activities, which involve market resources, are frequently ignored. The non-market activities fall primarily upon the women. These include:

- a. Food production for household consumption
  - b. Household management
  - c. Household maintenance
  - d. Human resource development, such as raising children.
2. "Villagers must participate in the identification and design of their development activities."
  3. "Development can be accelerated by increasing the knowledge and skill base of government officers and staff."

D. Components of the Project: (The objective being to increase women's capacity, either individually or collectively, to organize, manage and carry out economic development activities at the village level and to institutionalize a credit system to support such activities). Focus is placed on:

1. "Upgrading the knowledge and skill base of rural domestic economy agents and technicians" through training courses, workshops, aids, audio-visual materials, extension agent activity.
2. Establish a revolving loan fund to provide credit in-kind to groups of women or individual women. A total of \$360,000 is being granted to the Voltaic government for this fund.
3. Establish a management information system.

E. Criteria for Selection of Loan Activities: Activity must generate revenue to repay loan, directly involves and benefits women, and is feasibly applicable in similar environments. Examples of such activities include: vegetable gardens, peanut oil presses, donkey carts, and motorized mills for grinding grain.

F. Male Support is essential at all levels in order for project to succeed, since males have authority over the time and labor of women, and land. Also, certain requisite activities might be traditionally performed by men.

In general, indigenous support for the project has been forthcoming, indicating a recognition by Voltaic men of the crucial role of women in agricultural activities.

II. A Commodity-Systems Project to Increase Basic Food Production. (Costa Rica).--Ms. Marvis Knospe, USAID/Costa Rica.

Commodity-systems loan of 6 million dollars.

A. Background:

## 1. Problems

a. Low incomes on farms due to : poor quality of soils, location, inefficient cropping patterns, etc.

b. Insufficient employment opportunities for the rural poor due to the agricultural production patterns in the area which tends to be very seasonal with great fluctuations.

2. The resolution of these problems must focus on integrating the linkages in the Costa Rican food system whereby the farmers and consumers meet in the markets. This will involve high value labor intensive crops. Elements in this food system include;

a. Production

b. Distribution

c. Disposable income

B. Approach: Commodity Systems Approach whereby for each commodity the following elements must be considered:

1. Production

2. Processing

3. Marketing

Because women's activities are integral in the production, harvesting, processing and marketing of most agricultural products (e.g. vegetable production, coffee, harvesting, small retail shops), women will be more active as this loan becomes effective across all areas of economic activity. Technical assistance will be given to families and not just to male-oriented activities.

III. An Integrated Area Development Project (Indonesia)--Ms. Sara Jane Littlefield, USAID/Indonesia.

A. Objectives: An integrated area development approach which focuses on self-help and local participation in order to improve the quality of life of the rural poor.

B. Approach: Develop regional socio-economic profiles by local and central government officials in cooperation with AID Team experts three to six month residencies in an area are required to develop an accurate profile of the province.

1. The socio-economic profile is determined.
2. Problems are identified
3. Development programs are posited.

For each regional profile, different problems are identified and different programs must be proposed.

C. Results Anticipated:

1. Develop skills of local governments to identify area needs and develop programs designed to meet the needs of these people. This assistance will focus on the:

- a. Provincial government
- b. District government
- c. Sub-district government

2. AID Activities intended to accomplish results:

- a. Technical assistance
- b. Training programs in project management, budgeting, auditing, and in collecting baseline data.

3. Hopefully, a systems model will be formulated which would be applicable to all provinces as a framework for development planning.

IV. A Youth-Oriented Food/Nutrition Project (Partners of the Americas, Oregon/Costa Rica, 4-H Nutrition/Rabbit Project).--Ms. Margaret Lewis, Oregon State University.

A. Activities: Nutrition/Education project

1. Technical Assistance
2. Training of Costa Rican Volunteers (ages 19-29)

B. Recommendations:

1. Costa Rican home economics agents needed nutrition-education training.
2. Coordination of the federal level of home economics agents.

3. Basic information and printed materials are needed.
4. Selection, training and supervision of volunteers and training agents is essential.

C. Follow-up Activities:

1. Nutrition-education workshop was held in the fall of 1977.
2. Peace Corps worker prepared a manual on nutrition for distribution in the local areas.
3. Young local women have been working with 4-H clubs in the area and in community activities.

D. Project Evaluation: (indications of success)

1. Several women walked two days in order to attend a cooking class.
2. Costa Rican Ministry of Agriculture has committed their support to the project.
3. Technical assistance offered has been coordinated with activities of other assistance organizations.

V. CARE Water Projects (Tunisia and Kenya)--Mr. Ray Rignell and Ms. Martha Whiting, CARE

A. Objective: To secure more and better water. For many women in developing countries, water is the strongest felt need at the village level. The activity of fetching water takes top priority in terms of women's activities and represents a tremendous expenditure of time and energy.

B. Tunisia:

1. Objectives:
  - a. Renovate existing wells
  - b. Improve the quality of water.
2. Scope: The project does not deal specifically with women, but it deals with women in terms of personal health and with their involvement in securing their families' health through the eradication of water-borne diseases.
3. Activities: (improvement of wells at 100 different sites)

- a. Renovation of wells
  - (1) Well covers
  - (2) Installing lining in wells
  - (3) Improve watering troughs
- b. Improve the quality of the water with disinfectants.
- c. Introduction of health education training programs using female extension agents.
- d. Integrate evaluation techniques as part of the project, recognizing that women must be both addressed and involved in project activities.

C. Kenya: (1975 USAID/CARE)

- 1. Objective: Provide domestic water supplies to rural communities in order to release women from water-gathering activities.
- 2. Scope: 53 rural communities. Rural communities and the government are involved in terms of defining community needs and in terms of implementing projects:
  - a. Community input--41%
  - b. Government input--31%
  - c. CARE input--28%
- 3. Analysis: This will involve returning to the rural areas at a later time (periodically) to see if women have been released from their burdensome activities of collecting water. The evaluative base line data will be gathered in three areas of the country. The following is a list of baseline statistics before any scheme had been initiated. The statistics focus on the energy expenditure of women in water collection activities in rural areas)

CENTRAL PROVINCE

- a. Head Load: 22 liter cans, 40 lbs. each
- b. 1/4 to 1/2 mile trip.
- c. 8 trips per day

- d. 34 min. per trip
- e. 37 gallons water collected per day
- f. Water usage: cooking, washing utensils, bathing, drinking, crops and animals.

Western Province

- a. Head load 18 liters
- b. 3-5 miles per trip
- c. 2.7 trips per day
- d. 2 hours & 5 min. per trip
- e. 11.8 gallons of water collected per day
- f. Main water usages are for cooking and washing utensils.

Rift Valley Province

- a. Head load 18 liters
- b. 3-5 miles per trip
- c. 2.8 trips per day
- d. 1 hour 23 min. per trip
- e. 6 gallons water collected per day
- f. Main water usages are for cooking and washing utensils.

VI. Comments on New Peace Corps Initiatives--Irene Tinker

A. Focus

- 1. Rural Development
- 2. Rural Poor

B. Activities:

- 1. Nutrition projects--child nutrition
- 2. Grain storage work

3. Well construction

4. Fish ponds--discrete but have not integrated the spinoffs and side effects of the project.

5. Involvement has been primarily with men. However, now with a great effort, the government of Zaire has allowed women to be involved in projects such as building fish ponds.

6. New activities of Peace Corps: focus now on both secondary activities in addition to primary activities. This involves the administration of surveys by teachers to gather information, which is then used by other Peace Corps workers and the local government. Focus has been on three areas:

- a. Health diagnosis: identification of health needs and requisite support systems
- b. Appropriate technology
- c. Look at the role of women to what Peace Corps can do. Do not, as yet, know nearly enough of what Peace Corps can contribute in terms of women's needs in developing countries.

C. Conclusion: Peace Corps must focus on the above issues. Development assistance efforts must be more perceptive of the impact of Peace Corps activities on families, women, children, etc. This awareness can be facilitated by collecting more survey data.

STRENGTHENING VOLTAIC WOMEN'S ROLES IN DEVELOPMENT  
A PROJECT REPORT PREPARED FOR  
THE WOMEN AND FOOD CONFERENCE

by

Dr Carolyn Barnes  
Project Director

The USAID Strengthening Women's Roles in Development (SWID) Project in Upper Volta directly involves the participation of village women and the female extension service. The project, begun in October 1977, is implemented through the national-level Rural Domestic Economy Unit within the interministerial Coordinating Committee for Rural Development.

I. Background

The Rural Domestic Economy Unit, established in late 1973, provides advice and technical services to the Organizations for Rural Development (ORDs). The country is divided into eleven ORDs and ten of these have their own domestic economy staff, consisting of domestic economy field agents and a female regional coordinator. The recently established ORD of the Sahel has no female extension service. Currently there are approximately 110 rural domestic economy agents in the entire country. The female extension agents are responsible for promoting and supervising:

- 1) production activities, e.g. cultivation of food and cash crops, raising small-scale livestock, and handcraft production;
- 2) home economics activities, e.g. sewing, food preparation and household management;
- 3) hygiene, health and nutrition, e.g. maternal and child health care;
- 4) general activities, e.g. functional literacy.

Due to the country's poverty and the general lack of attention by donor agencies, the female extension workers have tended to receive little support, either in materials or training. Furthermore, rural women lack the means and frequently the time to undertake activities encouraged by the extension agents. Hence, the USAID SWID project was conceived in late 1974.

## II. Concepts Underlying Project

The following are the major concepts which guided the project design.

1) The resource base of a country is the combined output of the market economy and non-market economy. while the market economy, which includes government employment and sale of produce, is readily recognized, the human resources devoted to non-market activities are frequently ignored. The non-market economy includes production of food for household consumption, household management and maintenance, and human resource development, e.g. raising children and adult education. The non-monetary tasks fall heavily on women, restricting their contribution to the market economy which denies them the means to improve their non-market responsibilities. To provide women with the means to engage in the cash economy impacts positively on some of their non-market responsibilities.

2) Villagers must participate in the identification and design of their development activities. Local level participation helps ensure the commitment of required resources by implementing a desired activity. It also indicates that the necessary behavioral changes will be forthcoming. Furthermore, village involvement in the decision-making process allows social/cultural constraints to be taken into account.

3) Development can be accelerated by increasing the knowledge and skill base of government officers and staff. The effectiveness of extension agents can be increased through training in problem-solving, communications, and provision of technical information. The capacity of regional and national-level staff can be improved by upgrading their administrative and technical skills. This can be facilitated by the use of training aids and simple reference material.

## III. Project Description

The purpose of the SWID project is to increase women's capacity individually or collectively to organize, manage, and carry out economic development activities at the village level, and to institutionalize a credit system to support these activities. The project consists of three major components, education, credit and management information.

First, emphasis is placed on upgrading the knowledge and skill base of rural domestic economy agents and technicians through training courses and workshops, and ensuring follow-up by participants. Also, simple training aids and audio-visual materials are being developed to use both in courses for extension agents, and for the agents to use in transferring information to rural women.

Second, a revolving loan is being established to provide credit in-kind to groups of women and individual women. Credit is extended for a period of up to four years, with an eight percent interest rate. Creation of the revolving loan fund will help ensure that women have access

to credit after the three year life-time of USAID project inputs. A total amount of \$ 360,000 is being granted to the Voltaic government for the loan fund out of a total three year USAID grant of \$ 1,056,000. While the amount may appear small, the aim is to avoid burdening women with a heavy repayment schedule by providing access to small amounts which are within their capacity to repay. Each of the four project-specific Organizations for Regional Development will receive twenty percent of this amount to establish their own decentralized revolving loan fund. An additional twenty percent will be administered by the Rural Domestic Economy Unit for use by other organizations/regions.

The third component is the establishment of a management information system. This will include; feasibility studies on loan applications, monthly reports by female extension agents, periodic financial reports and bi-annual reports to monitor the functioning of project activities, and baseline and evaluation studies to measure project impact.

A special project feature is local level participation in selection of loan activities. The general criteria established are replicability, self-sufficiency and receipt of benefits. In brief, if an activity can generate sufficient revenue to repay the loan, directly involves and benefits women, and is potentially replicable in similar environments then women can receive credit for their chosen undertaking. It is left to the women themselves through discussions with their respective female extension agents to decide the type of activity they wish to initiate and to apply for the loan. The criteria allow flexibility in selecting activities most suited to the local government.

Since agriculture is the mainstay of the regions, the activities undertaken with loans will center primarily on labor-saving devices to free women from burdensome tasks, and to increase production, processing, storage or marketing of crops. Although no loans have been given as yet, frequently mentioned areas for them are vegetable gardens, peanut oil presses, donkey carts, and motorized mills for grinding grain.

The ability to identify appropriate activities depends to a large extent on one's relevant knowledge. Discussions with women's groups and extension staff have made it apparent it would be useful to combine the local participation aspect with dissemination of information and demonstrations in order to increase awareness of alternatives for resolving problems. The relative isolation of these women has prevented them from knowing about a range of plausible activities which they could undertake.

While the loans will primarily be made for income-producing activities, secondary activities will be planned around these. Once the women have the financial means then attention will be placed on helping them plan and organize other desired activities such as those centering on nutrition and health.

#### IV, Male Support

While this project may be classified as a special "women's project", it is essential to have male support at all levels if it is to succeed. At the village level men must be consulted and support gained if the women are to participate, because a male is usually the head of household and usually has authority over the allocation of the time and labor of its female members. Also, since males control access rights to land, their consent must be obtained if land is needed for an activity. Further, since according to social norms certain functions are performed by men, their involvement may be necessary to undertake such activities as construction of buildings and fences.

Within the government domestic economy agents, regional coordinators and national staff are under the direct supervision of men; hence the consent of these men is essential for project success. For instance, in order for the female staff to participate in training sessions these male officers must give their permission. Moreover, some male civil servants will be directly involved in project implementation through approval and collection of loans, and ordering of equipment for loan activities.

Voltaic men usually acknowledge the vital role of women in rural development and generally provide the required support. This is probably true because a sufficient year-round supply of food is never assured and there must be full recognition of women's contribution to agricultural endeavors if the country is to have an adequate supply of food.

## THE COMMODITY SYSTEMS APPROACH - COSTA RICA PROJECT

Marvis Knospe

The goal of the Commodity Systems Project, as well as of the AID program in Costa Rica, is to increase the incomes of the rural poor. Studies indicate that the bulk of poverty in Costa Rica lies among farmers and landless workers whose future income and employment opportunities cannot be raised through increased production of either basic grains or traditional export crops. This project is intended to bring about an institutional change in the Ministry of Agriculture's approach to the target group and make an immediate impact on a portion of that group.

The production of food is and will continue to be, the principal productive activity of the target group, either directly as farmers or indirectly as employees of farmers or others engaged in post-productive activities. The only purpose of producing food, fibre or other rural commodities is to fulfill the need or desire of a consumer. Ability to produce is only one element in the equation. If what is produced does not reach the consumer or she/he is unable, unwilling, to pay for the project, the farmer is no better off, and probably worse off, than she/he was before she/he produced the commodity.

The total food system encompasses the sources and ways in which the current and prospective food requirements for its population are to be met. Non-food rural commodities and exports also make a material contribution to improvement of the situation of the rural poor. The total system is complex and there are inter-relationships between the various links of the system. While an attempt to deal with the system as a whole might be appropriate for academic research and computer modeling, such work would probably not result in tangible benefits for the rural poor in the near future.

It is feasible, however, to select a particular commodity, analyze the needs of present or potential consumers for the product, and identify the factors involved in meeting that need. This will provide assurance that the farmer will have a market if he produces the particular commodity. The individual commodity systems will serve as building blocks leading towards an understanding of the total system.

If the particular commodity is one already being grown in Costa Rica, the approach will highlight segments of the system which can be improved. If new, the analysis will indicate the elements which must be established before the anticipated material benefits will be realized by the producer.

If it is to be a useable approach, a further distinction must be made between the direct and the indirect elements of the system. Almost any public or private sector activity could be said to affect consumer demand for a commodity, therefore judgment must be exercised on those activities which materially affect the efficient establishment and operation of the system. The direct commodity system is defined as those activities directly and physically concerned with the commodity -- production, harvest, on-farm use, assembly, processing, distribution and consumption. Indirect aspects of the system are those inputs or factors which substantially contribute to, or detract from, the efficiency of the direct system and have varying degrees of importance.

While the Government of Costa Rica must provide the leadership of instituting the commodity systems approach, a cooperative working relationship between the private and public sectors will be essential if efficient systems are to be established and goals achieved. Appropriate private organizations will have to be involved in the analysis, planning and design phases as well as in the implementation of programs and projects.

The approach will be developed in the following steps:

1. Identification of the target geographical areas and groups;
2. Selection of what appear to be promising commodities for GOCR emphasis in the selected areas;
3. If the commodity is one in common use in another country or countries, a model of the direct system for the commodity will be prepared from available information from such country or countries, showing the known alternative uses and markets for the commodity; critical indirect aspects will be identified;
4. If the commodity is one already produced in Costa Rica, the existing direct system and the material indirect factors (in terms of the particular target area) will be identified and analyzed; an informed comparison with the model will identify potential areas of improvement in the existing system; if not currently produced in Costa Rica, the model will provide guidance for the design of the new system to be established;
5. If the commodity is not one in common use in other countries, no design will be available so the system will have to be designed from experience, available information and relevant research.
6. A synthesis of the separate Costa Rican commodity systems will identify common and supportive elements, develop an understanding of the inter-relationships and develop an increasing awareness of the form and content of the system as a whole.

Improvement of the lot of the rural poor is essentially a problem of integrating effective consumer demand with the products derived from

the activities of the rural poor. The commodity systems approach provides the comprehensive view and framework for identifying the relevant and important factors at an early stage and the design and implementation of responsive programs and projects.

## References:

1. Leeper, Donald S., "The Commodity Systems Approach and the Private Sector, "unpublished, May 25, 1977.
2. Costa Rica-Commodity Systems Project Paper, Agency for International Development, September 1977.

## COSTA RICA--OREGON COOPERATIVE NUTRITION PROJECTS

Margaret Lewis  
Extension Nutrition Specialist

### Abstract

Costa Rica and Oregon are partners in the Alliance for Progress--Partners of the Americas program. During the past five years there have been many professional, cultural and educational exchanges between these partners. Because of this relationship there are currently two nutrition projects in Costa Rica that are the result of the cooperative efforts of the Costa Rican Ministry of Agriculture/4-S clubs and Oregon State University Extension Service/4-H clubs.

FOOD PRODUCTION AND NUTRITION PROJECT 1975-1980  
(funded by the W. K. Kellogg Foundation)

### I. Purpose

This is a proposal to mobilize the resources of the 4-S club members of Costa Rica to accelerate rural development in the 1975 through 1978 period by increasing the production of basic foods and improving nutritional levels in rural areas.

### II. Implementation:

Oregon State University will provide technical assistance in nutrition.

A total of six former 4-H members will participate in the YDP (Youth Development Project) over a period of three years beginning August 1976. These volunteers will work in local extension offices on nutrition education. Each volunteer will be in Costa Rica 18 months.

Rural farmers will be surveyed to determine production of food for home consumption--emphasizing basic grains and re-surveyed after three years to evaluate the program.

Farmers will be encouraged to grow and use agricultural products through education by the 4-S agents and the availability of low cost loans through the popular bank.

### III. Results:

#### Nutrition Project--1976-1977

- \* Three nutritionists from Oregon visited Costa Rica to consult about nutrition project needs, April 1976.
- \* Two Youth Development Project (YDP) volunteers, Nancy Foote and Pat Boroughs, from Oregon arrived in Costa Rica, September 1976. The volunteers will work with rural homemakers through local extension offices for 15 months.
- \* Two home economics agents from Costa Rica visited Oregon and Texas to observe nutrition projects, November 1976.
- \* Pat and Nancy (YDP volunteers) were invited to Turrialba for a month to help organize 4-S clubs and teach nutrition.
- \* A one week nutrition education workshop was held in Costa Rica for Home Economics Agents and Regional Supervisors. The workshop was co-directed by an Oregon State University Nutrition Specialist and a Peace Corps Home Economist working for the Ministry of Agriculture. The workshop utilized Costa Rican Nutritionists from the Ministry of Health and the University of Costa Rica plus the YDP's from Oregon and the Costa Rican Home Economics Agents who visited Oregon. Thirty-six agents and three area supervisors participated, August 1977.
- \* Two more YDP volunteers from Oregon, Debra Durchslag and Adela Rodriquez, arrived in Costa Rica for 15 months, August 1977.
- \* The Director of the 4-S club foundation and two 4-S supervisors visited Oregon to observe 4-H projects and participate in the National 4-H Congress.
- \* The YDP volunteers in 1977 worked with 4-S clubs, conducted workshops in food preservation and for school lunch cooking and worked with well-baby clinics.

#### Food Production--1976-1977

- \* In the Regional Center of Meseta Central Occidental with its seven offices, 476 members and their families participated in vegetable gardening and poultry raising projects.

- \* In the Regional Center of Pacifico Seco with its six offices, 600 members and their families produced 500 acres of corn, 200 acres of rice, 10 acres of vegetables, 1500 pullets producing eggs.
- \* In the Regional Center of Zona Norte, with its five offices (added in the last quarter of 1976) it is estimated that the project will reach 500 club members and 1500 families in 1977.

#### RABBIT PROJECT 1975-1977

##### I. Purpose:

The Oregon Costa Rica Project is to assist in the improvement of the dietary condition of rural residents in Costa Rica and is the outgrowth of a request by the Costa Rican government that Oregon, through its partners of Americas Affiliation meet this need.

##### II. Implementation:

A Costa Rican Agriculture specialist will be trained in rabbit production at Oregon State University.

Oregon 4-H members will supply rabbit breeder stock to Costa Rica.

Ministry of Agriculture will supply space and facilities at the experiment station for the stock.

##### III. Results:

Boris Coto, Agriculture Specialist, spent three months in the Spring of 1976 in Oregon gaining a first hand knowledge of rabbit management and production. A significant part of this time was spent with Dr. Nephi Patton in Oregon State University School of Veterinary Medicine.

In September 1976, seventy rabbits were sent from Oregon 4-H members to Costa Rica.

Four-hundred-fifty rabbits have been raised by the experiment station at Allejulea, Costa Rica as breeder stock.

Boris has trained agents and volunteer leaders in hutch construction, rabbit management and rabbit butchering.

By July 1977, 194 of the breeder stock rabbits had been supplied to 55 4-S club projects. Nine other projects had been started with 24 rabbits.

In October 1977, The Ministry of Agriculture published a bulletin on how to raise rabbits.

Twenty-one more rabbits were sent to Costa Rica by 4-H club members of Oregon in August of 1977.

The 4-S Club Foundation Director, William Gomez, reports in November 1977 that more than 1,100 rabbits have been raised by 4-S members.

IV. Cooperating Agencies and Organizations:

Ministerio de Agricultura y Ganaderia  
Ministerio de Salud  
Universidad de Costa Rica  
4-S Clubs Foundation  
Community Development Office (DINADECO)  
Popular Bank  
W. K. Kellogg Foundation  
Partners of the Americas  
Ibero-American Rural Youth Advisory Council  
Professional Rural Youth Leaders Exchange Program (PRYLE)  
Oregon State University Extension Service  
4-H Foundation  
Oregon State Division of Health  
Kiwanis Clubs

## CARE--KENYA WATER DEVELOPMENT PROGRAM REPORT

Martha Whiting  
Field Representative, CARE--Kenya

Since 1975, CARE (Co-operative for American Relief Everywhere) and U.S.A.I.D. have assisted 53 self-help water projects in six provinces of Kenya. The purpose of this program has been to make domestic water supplies accessible to rural communities in order to release the time of rural women in these communities for other productive activities. The program also attempts to institutionalize these projects in the rural communities in order that they will be able to operate and maintain the schemes over time. CARE has been responsible for the selection of all sites, purchase of materials for completion of project phases, supervision of implementation of materials and follow-up work.

All self-help projects are initiated and organized by the communities themselves under the "let us pull together" effort. The communities form a project committee and register the project with the local community development officer (C.D.O.) of the Ministry of Housing & Social Services (M.H.S.S.). Once the project is registered, the community has the right to raise funds and begins to do so. The project committee then applies to the District Development Committee (D.D.C.) for the right to have the project designed by the government (MWD) and to be assisted by a DDG or for special assistance from organizations such as CARE, Freedom from Hunger, or Charity Sweepstakes. Once a project has been designed by the MWD, it is then up to the community to begin implementation of the scheme. All self-help schemes designed by the MWD are designed in Phases so that communities will be better able to pay for the schemes. Phase I of a scheme consists of taking water from the source to a reservoir or storage facility. Phase II of a scheme consists of water flowing by gravity from the reservoir down main distribution lines to the local communities or C.W.P.'s. Phase III for a scheme consists of water being pumped into people's homes. The number of phases and design of the scheme is based on the government's basic services water standard which is used to design these schemes and estimates how accessible these rural water supplies will be to the rural community.

Once a project has been approved by the DDC, the project moves on through the provincial and national development planning levels until it is referred to CARE. CARE works on the provincial level with representatives of the MHSS, MWD, MOH, and MFP to coordinate all efforts for the selection and implementation of self-help water projects. CARE has four criteria it uses for site-selection. They are: (1) Each project must be

for a rural self-help water supply primarily for domestic consumption; (2) Each project must be a government priority project; (3) Each project must be technically feasible; and (4) Each project must involve the community. The communities must have begun the scheme before CARE provides assistance.

Once a site is selected for assistance by CARE, sample women of the area are interviewed concerning their water needs. A local meeting is called by the CDO and 50 women present at this meeting are chosen to be interviewed. The women are asked about their activities the day before, their daily water activities and community activities in which they participate. Baseline data has been collected in the majority of sites selected. The data would be better if supported by observations. CARE plans to use this information to evaluate the project once schemes have been operating for at least 2 years. The evaluation will include observations and interviews of both users and non-users of the supplies.

### I. Baseline Description of Existing Situation

Water is usually carried by women in Kenya and in three main vessel types: Mitingis--large tins containing 22 litres and weighing approximately forty-four pounds; debes, or clay pots, containing 18 litres and weighing approximately thirty-six pounds; and gourds, each contains four litres and weighs approximately four pounds. Water is either carried on women's heads, on their backs, strapped to their heads or any variation of these methods. Children are also involved in this task and spend a large amount of time helping their mothers with it.

### II. Data Collected<sup>1</sup>

In each of these, water is used for: animals, washing clothes, cooking, drinking, washing, cleaning utensils and bathing.

CARE Scheme Sites	Average						
	Litres/ Contained	Miles Walked/ Trip	Trips/ Day	Hours/ Trip	Hours/ Day	Litres/ Day	Gallons/ Day
Giathieko (2) Kiamuku District Central Boniau	22	.25-.5	6.7	.5	3.58	147.4	36.8
Central Abothygodin Mexu Eastern	22	1-3	4.8	1.16	5.5	86.4	21.6
Nairobi Trans Nzoia Rift Valley	22 18	1-3	3.4	1.5		68.0	17.0

III. Bibliography and References

1. Collected in collaboration with Ms. A. Krystall at Bureau of Educational Research, University of Nairobi.
2. Water also used for crops here.

## SESSION IV

OBJECTIVE: TO DETERMINE WHAT CAN BE DONE TO MAKE NATIONAL FOOD PRODUCTION/DISTRIBUTION SYSTEMS MEET THE NEEDS OF ALL PEOPLE

### A. Session Summary

Ann Bunzel Cowan  
Instructor  
Anthropology/Sociology/Planning  
Pima Community College, Tucson

### B. Papers

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2. ASSISTANCE, HUNGER, AND MALNUTRITION: A COMMODITY SYSTEMS APPROACH

Donald S. Leeper  
International Food Systems Consultant

3. WOMEN PARTICIPANTS IN THE FOOD MARKETING SYSTEM IN WEST AFRICA

Jeanne Foote North  
Editor, Development Assistance Program  
Annex on Women  
USAID/Ghana

4. WOMEN IN THE FOOD SYSTEM

Estrella F. Alabastro  
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5. WOMEN IN THE FOOD SYSTEM: IDENTIFYING CONSTRAINTS TO THEIR  
FULL PARTICIPATION

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## SESSION IV SUMMARY

Ann Bunzel Cowan

Session IV was concerned with identifying the constraints to women's full participation in economic development and mechanisms by which their contribution could be increased. Each speaker had a somewhat different approach to the problem, but there were some common threads throughout. All have indicated that increasing women's integration and productivity are fundamentally linked to increasing their productive capacity, at least in part, through some sort of basic education or training. This, in turn, is dependent on finding ways to weaken some of the legal and socio-cultural bonds among both donors and recipients that tie women to a limited range of traditional roles, skills, occupations, and opportunities. It was generally noted that increasing the incomes of the poor, of whom women are by far the largest portion, was the most likely means for increasing the quantity and quality of food available to them.

DOUGLAS CATON, DONALD LEEPER and D. WOODS THOMAS focused on the more general, cross-cultural aspects of the problem, while JEANNE FOOTE NORTH, ESTRELLA ALABASTRO and SAADET SARICA focused on nation or culture specific data and solutions. Caton, in his Overview, was most comprehensive. He pointed out that while we as yet do not know enough about what women actually do, what they do is still no measure of what they can do. "Not until we stop viewing women strictly as socio-cultural beings, and shift utilization to fulfilling the requirements criteria of a technical resource input in economic development can we expect to make headway." (in the full economic utilization of women) He noted that for women's welfare and utilization to be increased and for their integration into national planning activities to occur, international development planning agencies must make a commitment to such a policy. It would then be possible to implement mechanisms for integration, which would begin by:

1. Meeting Basic Human Needs, including those for literacy, training, higher education, minimum health standards and services, and adequate diets.
2. Providing relief from undue burdens or stress, particularly prejudice with respect to job or educational opportunity.
3. Creating effective legal, institutional and technical mechanisms with social and political sanctions.

To do this one would also need to develop an information system concerning the skills of women, their training needs and systems needs--aware of the trends in relationships between economic sectors. Finally, he noted that for employment to increase, human needs had to be met; to modernize a system, skills had to be advanced; mechanisms for integrating women were necessary, and links to other sectors would have to be taken into account.

Leeper, noting that women, who make most of the food consumption decisions, do 50% of the food production in some countries, and 40% of the internal marketing, must be considered in any food production/distribution system analysis. He feels that the way to reduce malnutrition is to develop local food self-sufficiency by developing the capabilities of the poor and improving their incomes.

He believes that once priorities are set, total analysis of selected key commodities can locate means to improve production, distribution and nutrition relatively quickly, since total system analysis to get at bottlenecks is too ambitious a project. In addition, he feels that it is government's role to facilitate private enterprise and include private entrepreneurs in project planning.

Raising some questions about the roles of women in Southern Ghanaian marketing, North noted that their presence (up to 85% of the traders) must be recognized, their activities studied, reported, re-recognized, and the data used in market reform projects. She noted that their roles have been undernoticed and underutilized at the same time that these traders, mostly women, are blamed for general economic conditions over which they have no control.

North therefore recommends that more studies be done of the entire marketing system to discover to what extent the bottlenecks are vehicles, roads, credit or poverty of buyers or sellers. She emphasized that to be useful, these studies should be multidisciplinary, including at least both anthropologists--to look at cultural consequences of changes--and economists to evaluate effectiveness of practices. Sociologists and psychologists as well, would add useful perspectives which often are ignored.

North also noted that contrary to U.S. norms, African women are often expected to be financially independent of their husbands and support their children. Therefore, it is of particular importance that their income needs not be ignored in the effort to modernize the sector. The effectiveness, for the women, of current methods--labor intensive and part time--must be studied and considered before changes are made.

Alabastro noted that while half of Philippine working women are employed in agricultural production, and most wives are consulted about major family purchases and credit arrangements, women are given no training in this work. Partly because of this, and also because of prejudice against women working, inequality of opportunity in employment and

promotion and the limited number of occupations open to women, women earn 44% less than men.

Since 43% of women contribute to family income, this can make a difference in the quantity and quality of food available to many families. In addition, food supply could be increased by better processing and storage; distribution improved by a price information network, and Marketing Board and consumption improved through nutrition education.

Basically, Alabastro's recommendations were directed to government enforcement of the law of equality, particularly in employment and promotion; and expansion of education and training of women (in home management, farm production, financing, purchasing, work simplification, personnel management, meal management and food preservation); she also recommended establishment of a price information network and development of a consumer protection movement.

Sarica reported that, while women have legal equality in Turkey, their actual inequality in status persists, though it varies with the degree of urbanization. Women work hardest and have the least role in decision making in the most traditional sub-cultures, particularly among the nomads. Although most village women work in agriculture, new technologies are taught only to men, often in places where women are forbidden entry. Only half the women are literate. Since rural incomes are one-third that of the cities, these women are active in income generating activities, although development programs have not provided them equal opportunities to develop their skills.

Recent urban migrants are eager to learn new skills to improve their productivity and income. Fully urban upper and upper middle class women have more equality in the home in decision making and division of labor. Still, many of these women work, earning less than their husbands and doing more of the housework.

Constraints which restrict women's advancement in status and nutritional adequacy are: tradition, inadequate data on conditions and attitudes of women, inadequate awareness by both women and men of how women's low status retards the development of the whole country, poor distribution of income, marketing practices and lack of coops, food processing and storage information and techniques.

Programs must recognize local social factors and consider both women and men equally in the development process.

Thomas summed up, noting that the issues of productivity and equity were complex and that we need more information on how the constraints of tradition, culture, public policy, knowledge, institutions can be reduced. He noted that there is far too little non-biophysical research and too little education for women, particularly of a technical nature. He asked what the U.S. educational system could do, and seeking suggestions

for the development of a priority agenda, challenged the audience to think about what their institutions could contribute.

The following three questions, for which no answers were recorded, were asked from the audience:

1. Are there any projects aimed at changing attitudes, e.g., women's self-perception?
2. How can women be self-reliant when prices are determined outside?
3. What is the impact of modernization in meeting requirements when women are left to produce with less labor, e.g., with children in school?

HOW WOMEN CONTRIBUTE TO THE PRODUCTION/  
DISTRIBUTION SYSTEM - SUMMARY

Douglas D. Caton

I. Introductory Statement:

In response to the task assigned me on the elements of the food production-distribution system, I have prepared an overview paper on the technical aspects of a food system. The technical aspects are however, but one side of the equation. Since the paper prepared is included herein I will here take up the food situation and the human factor side - together with major national and international policy considerations (referring to the prepared paper as appropriate.)

II. Demand and Supply Aspects of LDC Food and Agricultural Systems

Crises in the world food system have focused attention on the central role of food and energy and on the need to better monitor the agricultural and food distribution system, improve its operation, and anticipate its future behavior. However, and perhaps even contrary to popular belief, the narrowing food margins in the developing countries are not entirely due to the lack of dynamics in food production, or to production shortfalls because the weather took a bad turn - but that people production threatens to outrun the rates at which food supplies can be made available.

The world's concerns about the nutritional needs of all people likewise raises a number of important agricultural production and food distribution issues. It is quite possible, for example, that with sufficient and appropriate efforts world food problems are solvable in the sense that the world has the capacity to achieve an improvement in per capita food supplies for all people during the remainder of this century. Commensurately, how large the increase in per capita food availability to the poor will be depends, to a very significant degree, upon achieving a reduction in the rate of population growth.

The idea of an international grain reserve and the concepts of food aid also have considerable merit, emphasised as rather limited and possible objectives, but in doing so making it clear that the developing countries must seek to supply almost all of their food from their own resources. While the position that the developing countries must produce most of the additional food that will be required in the years ahead is a

sound one, it does not follow that it is in the interest of each country to produce all the food for which there will be demand. They should have the opportunity to choose between production of food and acquisition of food by trade.

### III. Elements of a Food Production-Distribution System:

#### A. Assumptions and Considerations

What one must emphasize in dealing with the fundamentals of the question on integrating women into the food system and the national economic system is not to deal with the question in terms of traditional short-term projects, but look to relieving the causes of their economic underutilization.

The fact that women have been used on a social strata basis in traditional ways on assigned tasks in food production and trade is not a sufficient measure of effective utilization of a resource. Likewise, citing statistics on the labor contribution of women in agriculture, and writing reports on how they contribute to the food distribution and marketing process merely provides an indication of how they have contributed, and should not be accepted as a sufficient indication of how they can ultimately contribute.

This is because such indicators seldom stand up under the inspection of cost effectiveness and utilization efficiency criteria. Not until we stop viewing women strictly as socio-cultural beings, and shift utilization to fulfilling the requirements criteria of a technical resource input in economic development, can we expect to make headway.

This is true because technical resource input is neutral with respect to gender in spite of the fact that there are socio-cultural biases, historical precedents or other irrelevant selection criteria that now determine what product is to be produced or task done.

#### B. Human Needs and Integrating Mechanisms.

The paper prepared for distribution at this conference stressed that the need to develop effective integrating mechanisms for women, the relation of integrating mechanisms and needs, and a complimentary undertaking called relief from "undue stress or burden", are described as follows:

1. Meeting basic human needs directly on and germane to the technical coefficient criteria requirements for utilization in the food system. Needs to be met include literacy, training, higher education, minimum health standards and services, and adequate diets.
2. Relief from undue or unnecessary burdens or stress in food production, water and firewood gathering, and the like; with particular emphasis on relief from socio-political bias or prejudice with respect to job or educational opportunity.

3. The creation of effective integrating mechanisms into the food production-distribution system, with further linkage into other sectors of the national economy. With appropriate social and political sanction, such mechanisms may be legal, institutional, or technical.

C. Technical and Economic Considerations:

The requirements for agriculture is that it provide: 1) a domestic food surplus and contribute to export earnings and 2) human and investment capital to other sectors so as to contribute to overall economic development. Ideally, agriculture forms a food basis for national security, while at the same time providing the greatest possible human employment opportunity.

A consequent characteristic of a developed or modern agriculture is an emphasis on increasing yields by means of technological process, and the substitution of production factors on the basis of cost effectiveness. The underlying tendency of this set of relationships is to reduce employment per unit of production, with total employment depending on total land in production plus the labor demand of particular commodity mixes and production patterns.

It must be kept in mind, however, that population in the rural areas is two-thirds or more of a developing country's total population. Given current population growth rates on a population this size, combined with the seasonal nature of agricultural production, and the tendency of modernization of production to substitute technical for human factors, the long term employment market in agriculture may be even more restricted than at present in terms of growth rates relative to population.

D. Integrating Mechanisms

"How women can contribute" to the operation, improvement or expansion of the food production-distribution system cannot be determined until both their capabilities and the systems requirements are assessed and matched. This means developing capability profiles on women, where they are, how many there are, and what their deficiencies and capabilities are with respect to the tasks that need to be performed in the system, presently and over the longer run.

A systems assessment also needs to be made relating food supply-demand projections the skill, training, and number requirements of labor, management, administration, and other utilization inputs needed as the system changes and evolves. All of this information must be compiled and fed back into the "human needs" programs which should be developed to facilitate the economic integration of women.

Thus, education and training is an integrating mechanism, information development and feedback is an integrating mechanism, and job classification and job rating are integrating mechanisms. These mechanisms, of course, cannot operate effectively unless the employment constraints on

women are mitigated or removed including socio-political bias, assignment to traditional roles, and social structure inferiority.

Women, by constructively rational criteria, are a vital economic development resource. It does not make much sense to continue to re-argue this point. What needs to be done, however, is for once, to present the argument in relevant economic terms.

Moreover, since each food system is site specific in makeup and development stage characteristics, the discussion here can catalogue in broad category terms the various tasks and assignment to which women could meaningfully contribute. It is not possible without the specific knowledge indicated to indicate numbers and qualities, nor to concretely address the nature of in-country socio-economic constraints on the utilization of women in the various assignments without a sufficient working knowledge of the cultures.

Therefore, in the absence of an adequate data base, and given the task the leadership of this conference has assigned itself to come up with "an integrating strategy", I have confined my contribution to outlining the elements and relationships of the components of a food system for the purposes of relating: 1) employment to human needs requirements, 2) system modernization to skills advancement and impact assessment on total employment, 3) need for integrating mechanisms with respect to women, and 4) the linkage necessary to other economic sectors.

The extent to which women will be considered, or even utilized, in the development picture depends upon the extent to which they are available to be employed in the development process, the extent to which they can achieve a skill and mobility status to meet the employment requirement, and the extent to which social equality is a condition of employment.

A difficulty I find with conferences of this kind is that they all tend to be primarily concerned with self-expression. There is also a tendency to assume that the audience outside is composed of people enough like the conferees to have a vital interest in what is said. The truth is that there exists rigid and inflexible attitudes out there on the role and purposes of women. The real danger in this, as far as women's socio-economic progress is concerned is that women, in facing the conditions of reality, become pessimistic and tend to accept conferences held, legislation passed, or logical arguments presented, as substitutes for the concerned and forceful actions and efforts they must undertake to help create and implement the long term remedial measures required.

#### IV. Policy Implications:

A. A need for a policy resolution of the critically important human welfare and economic utilization questions regarding women preceded by studies to develop detailed information on:

1. The economic status of the food system, and that of the integrated functions of the related sectors, to obtain a sufficient indication of the tasks for which women might be considered.
  2. The detailed information outlined on human needs with respect to nutritional status, cost-benefits of relief from undue or unnecessary burdens, training, education, technical know-how on food production and distribution, and mechanisms necessary to utilization in other sectors.
  3. The underlying reasons for bias in economic utilization in the national development process as it may be related to economic performance, or technical preparation.
- B. A policy determination should be made whether the economic/utilization of women should be left to the processes of the labor market, or whether guidelines should be provided by a special organization or planning unit of the national development planning systems.
1. Such a unit or organization would have as a primary responsibility the development of domestic and internationally linked programs to deal directly with the human needs requirements.
  2. It would work with the national planning system to develop effective integrating mechanisms to bring women into the overall economic system.
- C. The implications of internationally based country development assistance policy includes:
1. People oriented assistance activities and national development planning support directed to the human needs requirements of women.
  2. Assisting to specify effective processes and mechanisms to integrate women at all echelons of the food system, or into other economic sectors.

V. A Supporting Argument from an Actual Developmental Experience.

Given that women can contribute to economic development in other than traditional roles, dependence must be placed upon economic theory for the logical arguments for economic justification and upon the concepts of "induced" development innovation and to indicate the practical routes to effective overall economic development.

In real terms, the Republic of China, Taiwan agricultural and rural development experience amply demonstrates the practicality of a total rural development approach and a forward looking concept of integration of labor and capital surpluses into the other national economic sectors. In this instance, it also helped to have a strong leadership and authoritative mechanism, the Joint Commission on Rural Reconstruction in place.

An outline of the Taiwan rural development experience from the period 1945-50 to the present, covering development of food system, rural development, and utilization of the rural labor force is contained in the submitted paper.

EXECUTIVE SUMMARY  
ASSISTANCE, HUNGER AND MALNUTRITION:  
A COMMODITY SYSTEMS APPROACH

Donald S. Leeper

Food for all, the assurance of adequate diets for all in the developing countries, is a, if not the, principal goal and mandate of the International Development and Food Assistance Act of 1975. Freedom from hunger is a basic human right and Congress, in the 1976 Right to Food Resolution, has made it a fundamental point of reference for United States policy in foreign assistance.

The goal is framed in terms of real food for real people, in tangible not theoretical terms. It recognizes that the majority of the hungry and poor of the developing world live in rural areas and most are engaged in some aspect of the food cycle, truths often ignored in past foreign assistance efforts.

Local food self-sufficiency is the key to resolution of the current, and prospective, hunger problem. It must be recognized that the people of the country, the poor majority, need to develop the necessary capabilities themselves. It cannot be done to or for them by AID, the local government or anyone else; they can only help.

A panel organized by the National Academy of Sciences has concluded that just increasing agricultural production cannot resolve the hunger problem, contradicting the fundamental premise of past assistance efforts. "The major immediate cause of hunger is poverty," notes the panel, recognizing that the cost of producing and distributing food to a consumer must be paid for by someone, an important verity often overlooked. Undoubtedly there will always be some necessity for U.S. food assistance in disaster situations and local food programs, but self-sufficiency will not become a reality until most of the consumers can pay the costs from their own productive labour.

Only recently has the significance of women in the resolution of the hunger and malnutrition problem been recognized. On the consumption side of the equation, the end objective of assistance programs, women are the most influential group. And, it is estimated that women, as farmers, produce 50% of the food and, in some countries, control and operate up to 40% of the national marketing system. Failure to reach the women of the Third World will assure lack of success.

Food is the subject of a system. A systems approach will provide a country with the essential analytical and management framework for connecting consumption (nutrition) and production (agricultural development), ensuring that what is produced actually reaches the target consumers and contributes to improvement of their diets. Improvement in the food system will materially assist in resolution of the poverty problem, the rural poor being principally engaged in food production and related activities.

The complexities of the food system of any country probably ensure that attempts to improve the total system is unlikely to provide improved diets within the near future. But individual commodity systems can provide guidance on emphasis and priorities and serve as building blocks leading to an understanding of the interrelationships and the system as a whole. It is feasible to select a particular commodity, analyze the needs of present and future consumers, and identify the factors involved in meeting those needs. Initial emphasis on the principal commodities currently providing nutrition to the poor, not over 10 or 12 in any country, is most likely to show early results at least cost. The introduction of new commodities may be necessary to meet nutritional goals. Judgement must be exercised in the commodity systems activity and the focus must be on those activities which materially affect the efficient establishment and operation of the system.

Governments of the developing countries must provide the leadership for the institution and application of the approach. A principal thrust of AID's assistance must be towards the development of the necessary understanding and capabilities. Since most of the talents and practical experience required for the production and distribution of food are only found in companies engaged in food system activities, not government or academia, their participation will be essential. Entrepreneurs, principally those of the developing country, will have the principal role in the establishment and performance of system activities, in production, processing and distribution of the food and providing the jobs and income for the poor. A close and cooperative working relationship, rather than the all too often antagonistic one of the past, between the public and private sector, is needed if the goal is to be achieved. Appropriate private organizations must be involved in the planning, analysis and design phases of government programs and not just relegated to implementation as in the past.

The government's major role in the food system is in the stimulation of entrepreneurial activity, in providing the hospitable environment and assurance of necessary support. They should emphasize the formation of groupings, using the cooperative or other forms of organization, of small farmers or other entrepreneurs presently too small to be commercial into economically sized units. Such groupings must be managed in accordance with entrepreneurial principles or they fail, attested to by the rather spotty record of such organizations in the past. Once effectively established they, in effect, become self-sustaining members of the private sector community.

The goal of "food for all" can be achieved within a reasonable time frame, given the necessary commitment and appropriate assistance. Unless this

most basic of all needs can be met, assistance in other directions will be of little relevance. The commodity system approach provides the framework and enlistment of private enterprise the vehicle for meeting the challenge. Development of the concept should be pursued with all deliberate speed, otherwise nature will resolve the hunger and malnutrition problems with serious consequences for us all. It represents a new initiative directly responsive to the new directions of AID's mandate.

WOMEN PARTICIPANTS IN THE FOOD MARKETING  
SYSTEM IN WEST AFRICA

Jeanne Foote North

Food distribution is considered by some to be the major problem in parts of Africa, a problem with humanitarian, political and economic ramifications. Economists and development professionals cite the inadequacy of the food distribution system as the principal obstacle to increased agricultural production and to economic development. (1)

Throughout Africa women are active in the marketing of food. Statistics of their relative numbers vary with locale and with reporter. There is agreement, however, that the great majority of traders in West Africa are women, and that women are particularly dominant in the sale of food. It is difficult to collect reliable statistics regarding women's occupational trading role in these countries. There is, for instance, the question of whether statisticians tally the multiple roles of women in areas in which trading is considered not an occupation, but a way of life, complementary with farming and motherhood. There are instances in which some observers reporting on agricultural procedures have not known of the housebound trade in food undertaken by women in Muslim seclusion. Yet estimates and statistical reports are that as much as 85% of the food traders are women. (Some judge that in Ghana one-third of the women population is in marketing while census reports are that 70-80% of southern, urban women are traders.) (2)

In order to make vital improvements in the important, problematic food marketing systems of West Africa, more needs to be known than is now known. Intervention and assistance must be based on greater understanding of the business practices which prevail, and their economic significance. Yet analysis should take into account the possible effect on economic considerations of the society in which the traders themselves operate. In West Africa, at least, this means that attention to the solution of marketing problems requires an understanding of the motivation, organizational skill and resources of the women who are the bulk of the traders. Certainly, if an improved market is to be beneficial not only to the public, but also to the women whose livelihood is dependent on trade, their role must be understood.

The literature on the food distribution systems in West Africa is extremely small. The literature on women in marketing is still smaller. (Some marketing studies are noncommittal on the gender of the traders under study. Most, after designating the sexual proportion of the trading population, make little later reference to this aspect of their study.) Governments have commissioned some studies of commodity systems by leading universities and able consultants. Some of these have been financed by international donor agencies. Useful smaller economic studies are available. There have been published reports of scholars who examined the situation of women in markets ethnologically with less attention to the functioning of the market and economic analysis of the marketing process. There have not, however, been enough studies of economic purpose and interdisciplinary approach.

There is considerable disagreement about the relative efficiencies of West African marketing procedures as there is variation in understanding of what practices prevail.<sup>(3)</sup> This lack of agreement can be attributed not only to professional differences, but also to the great change and variation in market patterns and the difficulty of obtaining accurate information. There is tremendous variation in trading practice, varying with commodities and regions, and there are many exceptions to the norm for one commodity in one region.<sup>(4)</sup> Participants in the trade are evasive when asked marketing information, due at least in part to mutual suspicions of those in and out of the marketing system and the cultural, social and informational inhibitions to candid disclosure of information.<sup>(5)</sup> Culture-bound perceptions of many investigators play a part.

Development of food production and distribution for domestic consumption was neglected by colonial administrators in favor of programs for cash crops for export. The system for distribution of indigenous food probably did not keep pace with general development because there grew a dependence on artificially cheap, imported food. Governments and public alike agree that food supplies must be developed for local use and also to feed an increasing urban population of countries which have little foreign exchange.

In this part of Africa, the public is aware of many deficiencies in the trading system serving them. The wastage of food and its spoilage and deterioration is one concern.

Instances in which there is an extreme scarcity of a much desired commodity in the urban markets while farmers are unable to sell this same commodity at the source of production is another problem. Economists studying this must decide if it reflects a transitional, temporary situation, whether the trading system itself is too inflexible or unsystematic to cope with needed agricultural change, or whether government regulation of prices is at fault. Are the high costs and inadequacy of transport facilities, both vehicles and roads, and the unavailability of credit the major problems? Is this due to the poverty of the final purchasing clientele who cannot in the aggregate create an effective

demand? Is the market chain too costly so that a price suitable to farmers and to final buyer is impossible, or, on the other hand, does the society not allow sufficient compensation to the trader to make the transactions necessary in such cases of dis-equilibrium?

There is often a lack of food available for purchase for local use in the rural food growing areas. <sup>(6)</sup> Those who farm for their needs are not so badly affected by this problem as are the smaller number of government professionals, transients, etc., but the effect is a further disincentive to living in these rural areas where food producing capacities are constantly lessened by exodus of those able to leave. This is probably due to the lack of enough cash in the area to create a local demand, a one-way trading system in which traders come to buy and not to sell, and scarcity of labor. "Labor" would be women, as they are assigned by society the jobs of head portage and marketing. Women are in disproportionate numbers in these areas, but their work responsibilities grow with the exodus of men and children for work and education.

The public is aware of the high costs of food, hoarding, smuggling, and the scarcity of needed commodities. These ills reflect a number of factors whose origins are not with the individual traders: government economic policy and the economic crises which governments struggle to solve, population growth, fast pace of urbanization, and the fact that trading patterns do not necessarily follow national borders. Are these troubles largely a result also of the faults of the traders themselves? There is popular agreement by government and public that this is so. Efforts are made by governments to control or to bypass the trader, but they have not produced the desired results.

It is possible that the woman-labor-intensive market system does an optimum job when its difficulties and resources are taken into account. The collecting and bulking of small amounts of food from often poorly accessible locations with insufficient motorized or animal transport and poor containers is often the difficult first part of the chain. Commanding scarce transport, negotiating generally poor roads, arranging logistics and business agreements with associates at a long distance in the absence of published price information and rudimentary communication facilities is part of the work of the long distance traders. The final end of the chain usually involves breaking bulk through arrangements with a long chain of intermediaries so that the consumer, who requires it, can purchase in extremely small amounts. Throughout, there is the question of space for accommodation of produce, at its worst a considerable problem. The system of credit extended by those in one part of the trading train to those in another, or to the farmer, fisher-producer, (the pattern is varying), enables the system to work. It may be that the present system is relatively efficient given its constraints, but it is not adequate to the job imposed by modern societal and economic changes.

Official efforts to assist the trader to a higher level of performance are exceedingly few, in part because of the general lack of acceptance of the principle that trading involves costs, and that the trader should be compensated for these, as well as enabled to earn a reasonable wage. Also, the political power of the urban population which sees the trader as culprit in their economic distress precludes much attention to this problem.

Remedies must be based on understanding and understanding must include pertinent knowledge of the traders themselves. Because trading and its methods represents an adaptation to the woman's role for many in West Africa, the discussion of traders by sexual grouping can be pertinent to the economic and social purpose. An illustration is the research of Rowena Lawson and Eric Kwei, which demonstrates that the organized efforts of women fish mongers had an inhibiting effect on the expansion of the fishing industry in Ghana, and on the financial independence of the fishermen. (7)

Impinging on the economy of marketing in West Africa is a cultural difference between African and "European-type" societies which is insufficiently articulated. This is the differing kinds of material/financial responsibilities expected of many African women. Even in some Muslim dominated societies, a wife has responsibility for providing the soup ingredients to supplement the grain supplied by the men. In matri-lineal societies, it is expected that the women will provide at least some of her personal needs, and usually a major share of the needs of her children and the family as a whole. This usually entails her spending as much time in revenue production as her husband.

"It is interesting that society does not put a corresponding value on this economic sphere of the Southern Ghanaian woman's life from which its expectations are high." (The roles of childbearer, child care-er, and homemaker are valued much more.) Fiscal autonomy between spouses is almost complete in some traditions in Ghana. Perhaps this discrepancy accounts for the relative lack of official attention to these pursuits, and for such anomalies as the prevalence of speaking of "the farmer and his wife" (when all seem to agree that in much of the country the wife commonly puts in at least as much or more time farming as the husband.) (8)

The following questions come to mind as ones which an interdisciplinary team might raise when analyzing West African food distribution:

In parts of West Africa women are traders of produce from small farms because of the cultural dictate that head portage of food crops must be by women. One common pattern is for the woman-farmer to sell for the man the cash crop, which she has helped to cultivate; to keep the produce of the household plots she tends alone for family use; and to sell the yield of her small personal plot for her own use. How do interventions such as farm to market transport affect 1) the quantity of food marketed and the incentives to produce more, 2) women's burden of work, and 3) her small personal income?

To what extent are vital trading functions managed by women, whose trade is purposefully part-time so that she may meet her financial needs, as well as her household obligations? (9) Does this practice inhibit the system's ability to cope with seasonal, crop or economic changes? Where this part-time trading by women is common, does the lack of competition by full-time traders indicate that a) trade offers little profit, b) that small amounts of produce originate in widely dispersed sources, or c) that there is excessive profit, enabling traders to make a living with part-time work?

It is commonly believed that traders (at least the women) do not use banks for credit, savings or money transfer, yet large amounts of capital are required for many of their transactions. (10)

1) Does the mutual reliance among traders for credit carry obligations in ways that restrict trade?

2) Does the "susu" arrangement of women's trading groups enable them to function without banks? (In the "susu", each participant contributes an agreed amount weekly or monthly, and each participant receives in turn, the collected contributions of all once each week or month. Does this practice involve large enough amounts to have significant economic implications?

3) The individual trader usually begins her trade from very small amounts of capital, usually a gift from husband or mother. Most continue to operate on very small margins. Others build large businesses from these beginnings. Would men compete more for this trade if banking credit were available and used? Would more women be able to be assured of a minimum, basic living? Would prices be lowered? Would marginal traders, (who sometimes sell long hours for exceedingly small profits) be out of the competition?

Would the necessity of earning, the lack of other available economic opportunity for semi-literate women and interest in the market place, combined with the ability to care for children while practicing sedentary trading assure a large supply of urban traders regardless of the compensation? How does this affect price? (11)

The question of whether there is freedom to enter trade and whether there is collusion in the setting of prices in West African trade are areas for professional disagreement. Economic significance of the question relates to the competitiveness and thus the efficiency of the market. There seems to be definite evidence of instances of restrictive arrangements among marketing associations when stall space or commodities are scarce and compliance is required of those allotted stalls or supplies. Other studies conclude that no evidence of collusion is found in the system. Some authorities claim that the lack of availability of capital itself is restrictive of entrance to the market and thus inhibitive to competition. (12)

To the extent that economists depend on word of mouth information about market function in West Africa, they take into account social and cultural considerations. Numerous researchers, including co-lingual ones, seeking statistics, have reported conflicting, changing, vague and evasive answers to be the norm. A number of researchers believe that this is due in part to the wish to keep to oneself information which would allow individual decisions regarding disposition of income. Candor would allow the extended family's greater participation in these decisions. Those collecting data should be aware of the possibility of this cultural dimension. <sup>(13)</sup>

There seems to be historical evidence that women are traders where better opportunities are open to men in the population. <sup>(14)</sup> In locations where trade has become more professional and lucrative, it seems to be dominated by men, though in the rural hinterland, rural trade is done by women. If trade in West Africa is to develop with fewer difficulties, improved food distribution, and become more profitable, will the economic status of women thereby decline? Or will those women with substantial responsibilities be better able to discharge them in a developed market?

Note: Allusions here to "West African cultural practices" have a Southern Ghanaian bias. They are, however, common enough to illustrate the discussion. Yoruba women may not do much farming or carry much food from farm to market as described here. One may ask if this difference in practice between societies (and the motorized transport available) affects the volume of food sold from the small farms of each region.

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Hill, Polly, in Meillasoux, *op. cit.*, refers to Muslim selling "much" grain at home for the men, as well as other foods for herself, p/ 304.

re: other parts of Africa:

- Miracle, Marvin in Bohannon and Dalton, *op. cit.*, States 40% of traders in Copperbelt are women.  
LeVine, Robert, in Bohannon and Dalton, *ibid.*, States in Kenya, women are the ones who bring maize, elusine and eggs to sell to middlemen.  
Reining, Conrad, in Bohannon and Dalton, *ibid.*, "In Zande markets women were most often the sellers of food products.", p. 538.  
Lewis, I. M., in Bohannon and Dalton, *ibid.*, States that in Somaliland, women sell the milk, ghee, grain, poultry, eggs, vegetables and fruit.

3. Miracle, Marvin, in Meillassoux, op. cit.  
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    Jones, Em. O., op. cit., p. 222.
4. Sai, Florence, The Market Woman in the Economy of Ghana, unpublished thesis, Cornell University, 1971.  
    Nypan, op. cit.  
    Lawson, Rowena, Eric Kwei, African Entrepreneurship and Economic Growth: A Case Study of the Fishing Industry of Ghana, Ghana U. Press, Accra, 1974.  
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    Hill, Polly, Rural Hausa, A Village and Setting, Cambridge U. Press, 1972.
6. Lawson, Rowena, in Meillassoux, p. 390-91.
7. Lowena, Kwei, op. cit.
8. North, Jeanne, in North, et al, "Women in National Development in Ghana", 1975. U.S.A.I.D.
9. Sai, op. cit.  
    Nypan, op. cit.
10. Though half Sai's sample of urban cloth traders stated that they had bank accounts, other researchers, with other market groups, and non-systematic observers have not found that banks are used by average trader.
11. The relationship between trading and the drive for independence from husbands and lineal kin is touched on by several students of Ghana: Sai, Nypan, Addae, Klingshirn, McCall and Little.
12. Miracle, op. cit.
13. Jones, op. cit., takes issue with the thought that family relationships serve as a deterrent to capital formation, and to the trader's using income as he/she sees fit, as Christerson, Kamark, Hunter, Dorjahn, and Lewis have described. Sai and Nypan tell of the use of capital for family and personal use, regardless of whether it is related to extended family structure. (Nypan found the annual range of decline or expansion of business in

terms of working capital to be from 22% to 900%.) Garlick notes the restriction of the accumulation of capital by small Kwahu businessmen (though secure), and attributes it to values stemming from extended family system. (Garlick, Peter, African Traders and Economic Development in Ghana, Oxford, 1971.) On a parallel issue: some observers of their own (West African) cultures state that secretiveness results from the wish of those in cultural transition to use their income as they see fit. Polly Hill, however, thinks it is a general characteristic, and tells of the grain seller standing before his grain in a rural market where all know him, denying that he sells grain.

14. Rothberg, Robert, in Bohannon and Dalton, op. cit. (Found that where trade had become sophisticated and lucrative, in Rhodesian cities, it was dominated by men, while women were the principle traders in small towns and villages.)
- McCall, D. F., "Trade and the Role of Wife in a Modern West African Town" in Social Change in Modern Africa, A. Southal, ed., Oxford U. Press, 1961. Attributes the rise of female traders to the coming of Europeans and the decline of inland trade, the concurrent rise in wage employment for men, and the obsolescence of more lucrative trade in slaves and gold.
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## WOMEN IN THE FOOD SYSTEM

Estrella F. Alabastro

While developing countries may be different from one another in terms of political, cultural, social and other environmental aspects, they have some common problems. They are characterized by low levels of food productivity aggravated by a high population growth rate. There is usually a wide gap between food supply and food requirements which, because of low purchasing power, prevents a large proportion of the population from buying adequate food of high quality, even with a potentially adequate supply.

The various approaches to the food problem are not new: increase agricultural production, cut growth of population, improve methods of moving the produce from farm to consumer to minimize wastage and keep food prices down. No one among us could argue against these approaches. But how would one, either as an individual or as a member of a small group contribute their share to the solution of these seemingly gargantuan problems? Unless we come up with simple down-to-earth recommendations on how a citizen can meaningfully participate, we may all be tempted to sit on the sidelines and leave all the responsibility to cope with the hunger problem to our governments.

Let us, therefore, look at various inputs to the food system, the problems and constraints at each point, and the ways by which women can contribute towards resolution of the problems. The examples and data presented here are primarily drawn from Philippine experience.

### I. Agricultural Production

A significant proportion of women in developing countries live in rural areas. In the Philippines rural women constitute about 2/3 of the female population. About 33% of all women are in the labor force, and over half of these are employed in the agricultural sector. Most of them (about 70%) work as unpaid family workers. They are engaged in such activities as transplanting, weeding, fertilizing, harvesting and threshing. Women also are in charge of raising vegetables and caring for farm animals for the family's consumption and to augment the family income.

Studies show that women are generally consulted by their husbands in matters concerning the use of family finances for the farm. Thus, they participate in decision-making regarding the buying of carabaos and

other farm animals and the purchase of fertilizers and pesticides. Their opinions are likewise solicited in technical matters as in the adoption of new rice varieties or new rice cultivation practices.

One problem that has perennially plagued farmers concerns financing. Farmers need loans for farm inputs and to support their families during the lean months. The many requirements and delays in the processing of loan applications in legitimate lending institutions often prevents farmers from getting loans. He often becomes a prey to loan sharks or of unscrupulous buyers to whom he must promise to sell his produce below market prices.

In the Philippines, the wife is usually in charge of family income management and her opinion carries much weight regarding where to borrow money.

Despite the involvement of rural women in agricultural production and their participation in decisions affecting agricultural productivity, there is no formal program in which they are trained and prepared for this role. Although the literacy rate of rural women in the Philippines is fairly higher (77%), a large percentage of them (83%) leave elementary school before they graduate. In school, women are required to take Home Economics subjects including home management skills. They are not, however, given even the rudiments of agricultural production techniques, and it is generally the husband, alone, who benefits from contacts with agricultural extension workers.

If women are to be more effective in the national efforts to improve agricultural production, it is important that they be given the opportunities to learn production techniques and other aspects of production-related skills such as financing and proper use of funds. Such knowledge and skills can be transmitted in school or through out-of-school training programs.

## II. Processing

In developing countries, food wastage is high, particularly in the post-harvest stage. Causes for high food losses are myriad: inadequate storage and transport facilities, poor handling procedures, defective packaging, and localized production which cannot be used by the local markets or distributed to others.

Processing is one way of cutting down losses. Processed food adds to the food supply as this is food that is otherwise lost. One approach to the food wastage problem is to set up food processing centers. The success of this approach is contingent on the availability of technical people who are willing to work in rural communities and provide whatever technical assistance is necessary. Such manpower is non-existent at the present time because preparation for professional food technology can be obtained in only a few universities in the Metro Manila area and graduates can and do remain in the metropolis in the employ of large food manufacturing concerns.

With assistance to scattered agricultural schools, a curriculum could be developed to rapidly produce a dispersed technical food preservation corps to assist in extension programs. Such a two-year vocational/technical program would probably be sufficient to train enough women as extension workers in food preservation rather than the long four to five year Bachelor's program in Food Technology.

### III. Marketing and Distribution

Most developing countries have inadequate transport systems which cause difficulties in the flow of food supply from production areas to consumer markets. This situation results in inordinate cost buildups and an uneven distribution of food, such that some regions have surpluses while others have shortages of certain commodities. Developing economies are also characterized by inefficient marketing systems in which food commodities go through many middlemen before reaching the consumer. In the Philippines, an average of six to seven middlemen operate between the farm and the consumer, and in extreme cases, this number could be as high as 21.

The importance of a good marketing and distribution system is best illustrated by an example. Livestock accounts for about 1/3 of the protein in the Filipino diet. There is, however, a wide disparity between the distribution of livestock population which provides the meat and the human population which consumes it. There is a concentration of people as well as food processing establishments in the Metro Manila and surrounding areas but these areas account only for a small proportion of the livestock population (1/5 of the hog and carabao population and 1/4 of the cattle population). It becomes necessary, therefore, to transport live animals to the population centers and the processed goods back to the production centers. The shipping cost is an added cost absorbed by the consumer.

Improving marketing and distribution systems must receive as much emphasis as agricultural production since produced food is of little use if it does not reach the consumer when he needs it and at prices he can afford.

What is women's participation in the marketing and distribution of food? Let us start with the farmer's wife who is, almost always, in charge of marketing the farm produce. She would contact a buyer, of which there are many types depending on the services that they perform - exporters, wholesalers, retailers, miller-wholesalers, etc. It is often difficult for her to determine which one of the many types of buyers would pay the best price, especially so if she has to depend on the buyer for price information. This situation is compounded by an unclear system of grades and standards for farm products.

To assist the farmer and his wife in disposing of their produce, the government could develop a price information network and set up an active Marketing Board to increase the bargaining power of producers in negotiating prices.

Cooperatives could also be used to market produce, but at present, there are few women members of such organizations. A study to determine the constraints on their participation would be helpful in any campaign to increase it.

Women are also involved in packaging and retailing. While the presence of small retailers and vendors may account for some inefficiency in the marketing system, the present system should not be changed without making provisions for alternative and equally remunerative activities for these women.

#### IV. Consumption

The wife, as family budget officer, is largely responsible for deciding how much of the family income is spent on food and on what items. She procures the food, plans meals and directs their preparation. Her main considerations in buying food are: freshness of the food, prices and food values. For those in the low socio-economic levels, price is more important than nutritional value.

Women's concern for nutritious, safe and quality foods can best be expressed through participation in consumer movements rather than individuality.

To improve the housewife's effectiveness in the procurement of food and in the planning and preparation of nutritious meals, information on food prices and where to buy should be made available. For rural housewives, there should be programs on backyard food production methods. Mass media should also be used liberally for lectures on meal management and nutrition education.

The financial advantages that the family derives from a working wife cannot be overlooked. In the Philippines, a survey showed that the wife contributes to family income in 43% of the households. It has been found, however, that employed females earn about 44% less than males; among the self-employed, they earn 31% less. Reasons for this disparity include: prejudiced attitudes against women's working; inequality in employment opportunities, wages and promotions; differences in types of jobs filled by males and females. The government can do much towards the improvement of the employment status of women by implementing measures that ensure strict compliance with the law of equality regardless of sex. For self-employed females and others who desire to combine housework with income generating activities, non-formal training programs on entrepreneurship, credit and financial control should be established nationwide to benefit women.

Women's concern for nutritious, safe and quality foods can best be expressed through consumer movements rather than individually. In countries like the U. S. and Japan, women provide the life-blood for such movements. In developing countries, women should likewise play a more

active role in the enforcement of regulations on the safety and quality of food. Women can be a vital force in the enforcement of a nutrition labelling regulation so that all processed food items would contain nutritional information in terms that consumers can readily understand. Women can also band together and expose false and exaggerated advertising claims for food products.

Women can do a great deal to ensure safe and quality food items. The big problem is how to motivate and organize them to do it. I am sure we can learn much from the histories of consumer movements in developed countries.

#### V. Research Activities

Women also provide vital inputs into the food system in the area of research. In the Philippines, food and nutrition research is female territory. The Food and Nutrition Research Institute has been conducting food consumption surveys in all regions of the country. It has come up with recommended daily allowances for the different nutrients by sex and age groups; and has recommended daily intakes by food groups for the entire population as well as by regions. The data collected by the agency on the diets of families and their socio-economic characteristics are perhaps one of the most comprehensive in our part of the world. When it is equipped with computer and staff resources, it will be able to analyze the data and provide information on the relation of poor diet to economic characteristics of families and identify the combination of foods that will provide reasonably good diets at low cost.

Other research that this agency and other research agencies conduct are on the preparation of food and development of food products from raw materials which, at the present time are not being utilized, such as wastes from abattoirs and processing plants.

#### VI. Conclusions

The participation of women in providing the nation with the right amount and the proper quality of food is vast. They are involved in the production, distribution and consumption of food, as well as food and nutrition-related research.

For women to be more effective participants in the production and delivery of food to the ultimate consumers, it is important to provide them with home management skills as well as training in the following areas:

- a. farm production and management methods
- b. financing and utilization of funds

- c. food purchasing
- d. work simplification methods
- e. personnel management
- f. meal management and nutritious education
- g. food preservation

A network of information on prices of farm commodities, wholesale and retail, should be made available to assist the rural housewife in obtaining the best price for the farm produce as well as to provide a minimally cumbersome system of standards for farm products.

Women should be encouraged to participate in consumer protection movements to ensure the enforcement of regulations on the safety and quality of foods. Perhaps government support of consumer organizations could initiate them.

The financial benefits accruing to the family with a working wife which can, therefore, buy more and better food for the family cannot be overlooked. To assist women in their role as augmenters of the family income, women should be given the same employment opportunities, the same fringe benefits and the same opportunities for promotion as a man holding an equivalent position. There should be programs designed for the self-employed women to enhance her management capabilities.

Women are a potential force in improvement of country's food and nutrition situation. To be useful, this potential must be developed particularly through training provided by both government and non-government entities. Much remains to be done.

WOMEN IN THE FOOD SYSTEM, IDENTIFYING CONSTRAINTS  
TO THEIR FULL PARTICIPATION

Saadet Sarica

In the previous sessions, the race between increasing food production and population growth has been discussed. In developing countries, the increase in food consumption per individual has been small, and has in some cases declined. The increase in production in the developing countries through improved technology and irrigation systems is being largely absorbed by the rapid growth of population. The way to solve this vitally important problem is to (1) increase food production, and (2) decrease population growth. Both depend on economic and social development. Other things being equal, economic and social development is largely a function of the quality and productivity of the people involved in economic activities.

The productivity of women and men are interdependent in most societies and the aggregate level of living of the people depends on both. In any definitive economic analysis, both women and men must be considered; however, in this Conference we have been asked to focus on the roles of women.

Every society has its own prescriptions regarding the appropriate behavior of women. In most countries, women have traditionally been considered inferior in status to men; and in economic, social, and political affairs, they have been underprivileged, undereducated and underrepresented. Although attitudes are changing, undereducation and underrepresentation tend to be self-perpetuating unless there is some injection of help.

In their current status in most countries, women have maternal, physical, and intellectual roles to play. As mothers, they are directly responsible for the nutritional needs of the next generation. They also have a great influence on the mental and social development of children of both sexes, which is of vital importance in development. In addition, they also do much of the physical work, especially in agriculture in poorer communities.

According to the International Labor Organization, about 65% of the 562 million women in the world's labor force of 1.637 million are in developing countries. In Africa, 80 percent of all women live and work in rural areas, and do at least 60 percent of the agricultural work. Turkey is similar to the other developing countries in many ways, but quite different in others. In Turkey, 10 million of the 16 million economically-active population work in rural areas, of which 6 million are women.

women. Most working women live in rural areas, and they do much of the work done there, which is primarily food production. In this regard, Turkey is probably similar to most developing countries. However, to better understand women's productiveness, we must look at their social status and civil rights. Here, Turkey is not similar to many of the other developing countries.

In 1926, under Ataturk, women were granted approximately equal rights with men. The civil code, which was modeled on Swiss civil law, did away with most of the legal differences between men and women. Women obtained the right to vote in 1930, and to stand for parliament in 1934. Legally, men and women have equal opportunities to work and to an education, etc. But practice is quite different from law. In Turkey, women did not struggle for their rights, but rather were granted them. In practice they can benefit from them only to the extent that present social attitudes allow.

Women's participation in production, and the constraints they face in general, depend on their social class. Turkey is a transitional country where two-thirds of the population live in rural areas, and where people in rural areas are beginning to feel the effects of the economic development in the rest of the country. The mechanization of agriculture, the decrease in the infant mortality rate, the greater availability of education in the cities, and a gradual but steady reduction in soil fertility have produced a steady shifting of population from rural to urban areas. As a result, a new type of family has emerged: the rural-urban family. Women exposed to urban life for the first time must change some of their work patterns, attitudes and habits. However, it is widely believed that all housework and food preparation is the responsibility of women.

For analytical purposes, family types may be grouped as follows:

1. Families in rural areas:
  - a. Nomadic tribes
  - b. Villages
2. Rural-Urban families
3. Urban families

Women's status, rights, privileges and participation in production are different in each class.

Nomadic tribes live on the plains in winter and go up to the mountains in summer. Their main economic activity is animal raising. Women have great responsibility in milking the animals, making cheese, or yogurt, preparing sheep wool, and making the family's clothes. They are also responsible for repairing the tent and keeping it in order. In this class, women participate in production more than men. They are in the worst status of any class. They have no permanent facilities to prepare or cook food, and their children have little opportunity to go to school, because of their immobility and distance from where the schools are located.

Most important, they have no rights in the decision-making process. Equality of rights with men under the law has little real meaning. It is very difficult to reach these women and provide them with the information required to improve their lives or raise their status.

In villages, the situation is better than for the nomadic tribes, although traditional pressure is also strong in this class. Women work both in the field and house, but the husband has all the authority. The majority of working women in Turkey are in this class. While 5,199,000 women work in agriculture, only 581,852 women work in other sectors. The village women have fewer privileges, less security, and lower wages than the urban women. Most women workers in agriculture are in fact family laborers, and receive no cash income at all. In spite of their hard work in the field and their work in the house, they are economically dependent on men because they have so little direct influence in decision making. They are forbidden to go to many of the places where men go, such as the coffee houses, or to become a member of a cooperative. These kinds of places are often the ones where innovations or new techniques are the introduced, as well as places to watch T.V., listen to the radio or read the newspaper. Local and national problems are also often discussed in these places. It will be very difficult to lower the barriers to access and reach village women.

Throughout Turkey there are differences in the educational levels attained by boys and girls, but particularly so in the villages. The situation is improving, but the fact remains that in most of Turkey from very early ages, girls are taught to marry and to obey their husbands. In the villages, going to school is frequently considered a luxury for girls. While 72% of boys go to primary school, only 58% of girls do. Sixty-five percent of men and only 49% of women are literate. Girls who do go to primary school generally are encouraged to prepare themselves to teach school or enter the health services. Girls often attend the secondary-level girl's schools, which stress housework or child care. While some do attend middle-level agricultural schools, which offer training directly related to production, only about 300 girls were being educated in the agricultural schools in 1970.

The agencies introducing new agricultural technology into rural areas generally train only men in its use. Where tractors and other new technology has been introduced, it has tended to push women into the houses. (In some areas their burdens were lightened, but frequently they were not.) They are considered slow in understanding innovations and partially because their illiteracy rates are higher than for men, they are the last to be taught new techniques.

In the Middle East, including Turkey, the average annual income in rural areas is one-third that of urban areas. Thus, there is a tremendous motivation for rural women to take an active part in income-generating activities. The development thrusts made to this time have not given much attention to providing equal opportunities to women.

In the urban areas, there are two different groups with great differences in economic and social status. One of these is the rural migrant

who lives in the suburb. Recent migrants live in small, quickly-built houses. In time, these houses may be improved and become relatively comfortable, but initially they are small and crude. Men in this class work in factory or clerical jobs; women do the housework. Family income is less than the urban average, and they continue to follow rural customs while living in the city. After living in the urban areas for a while, they acquire a taste for knowledge, and their expectations rise. They have insufficient income to meet their rising expectations. People in this class have great potential for change. They are ready to accept education and new ideas, and become more productive in order to increase their income. As women of this group are exposed to urban life, traditional constraints weaken, and they begin to have a share in decision making.

The other urban group is the fully "urbanized" family. In sharp contrast to the village family structure, the urban, upper, and upper-middle class Turkish family is generally small and nuclear, more egalitarian and less patriarchal, with a shared division of labor. The wife generally plays an important role in the family decision-making process. Most of the women in the upper-middle class work, although the types of work are generally service or secretarial work. These types of work are poorly paid when compared to the technical work that men in the same class do. Females are guided toward the schools which teach socially-oriented skills, secretarial services, etc. In higher education, there are only 786 women in science and technical education disciplines, compared to 9,858 men. Often women prefer the less-tiresome, or part-time outside the home jobs because they must work so hard at home. This often leads to the urban family buying food that is easy to prepare, but poor in nutritional value. Efficient marketing or partially-prepared, nutritious food would help urban women provide more balanced diets, and lessen their burdens.

Summary and conclusions: Improved insight into alternatives for better diets for the different classes depends on our being aware of the constraints which prevent women from being more efficient, or higher in status than they are at present.

Some constraints are:

1. Tradition, which is still strong among the nomadic tribes and in the villages. Tradition reflects environment and historical factors. Women work very hard and have little say in decision making. The situation is very difficult to change.
2. Inadequate data and analysis on conditions and attitudes of rural women. The data and analysis available do not give policy makers sufficient information to formulate relevant and effective policy decisions and remedial programs.
3. Lack of awareness by both women and men of the consequences of women being low in social status, and inadequate motivation of both to try to change the situation. The whole society, and particularly men, must become fully aware of the current and potential contributions of women to society.

The efforts of men, as well as women, are needed to make it possible for women to have equal rights and opportunities in practice, as well as by law.

4. Inadequate income, and poor distribution of income. In much of Turkey, especially in the lower classes in the rural areas where there is little marketing of the family produce, people primarily eat what they produce. Thus, if they produce grain, they mainly eat bread or grain products. Their diets are unbalanced. In the smaller towns, the market for food is primarily local; therefore, they too consume mostly local products.

In the urban areas, food prices are among those which have risen rapidly in the past, and the urban poor have suffered. In the last five months, the wholesale price index showed a 20% increase, and food prices rose more than this.

5. Poor distribution channels. Marketing is one of the main constraints to getting food to where it is needed. Price differentials between the production and consumption areas are great. There is a need for marketing cooperatives. Women could take an active part in cooperatives to sell what their families produce. This would also provide them with contact with the outside world.

6. Inadequate local storage and processing facilities. The rural poor cannot afford to build storage and processing centers. Women can play an important role here if additional knowledge is provided. Information on how to retain nutritional values in preserved food is needed, and with technical aid in the form of teachers, women could be helped a great deal.

If the above constraints are to be relieved, programs must be made specific according to region, or local place. To solve the many problems, research must be done to identify the needs in each area. Research must be on social, as well as the technical and economic problems, because without knowing the social constraints, it is impossible to solve the other problems. Let me conclude by stressing that we must not forget that society is a unity consisting of men and women, and both must be considered equally in the developing process.

SESSION V

OBJECTIVE: TO IDENTIFY WAYS IN WHICH WOMEN CAN "MAKE A DIFFERENCE" IN  
THE FOOD/NUTRITION SITUATION IN DEVELOPING COUNTRIES

A. Session Summary

Coralie Turbitt  
International Center for Research on Women

B. Statement Summaries

1. WOMEN AS AGENTS OF CHANGE

Marianne Huggard  
United Nations Representative  
International Association of University Women

2. HOW WOMEN CAN MAKE A DIFFERENCE

Mary Burke  
Center of Concern  
Washington, D.C.

## SESSION V SUMMARY

Coralie Turbitt

### HOW CAN WOMEN MAKE A DIFFERENCE?

The moderator, Olga Stavrakis stated the main elements of the problem in terms of disparities of power between the "haves" and "have nots." Those who possess money and other resources have the power to influence national policies and priorities. Women, as a rule, do not have power. Something must be done to return the elements of power to women.

#### PANEL:

Mary Burke: The public's concept of development is distorted, and educational programs need to be implemented in the U.S. to acquaint the public (voters) and its representatives about the goals, complexities, and technical aspects of development. Women's organizations are in a good position to do this, and the issue of hunger is one which people can understand.

Mary Ann Huggard: More women must be involved in the process of decision-making and design at all national and international levels so that the needs of women find their way into policy/program planning. A token woman will not suffice. One way of getting more women involved is to train more in the technical skills of development. Private organizations, especially women's international non-governmental organizations, can be helpful in leadership training for women.

Stanton Dreyer: The Overseas Education Fund of The League of Women Voters OEF has a program in Thailand with the National Council of Women to do just that. Training is being provided to women at various levels (i.e., national, provincial) who can then properly identify and interpret the needs of rural women in technical and programmatic terms. This program involves regular meetings with key government officers to sensitize them to the concerns of women.

Dessima Williams: Before we can suggest solutions to the problem, the problem must be properly identified. The nature of the problem should suggest the solution. The problem of food and nutrition (and all development) is more structural than technical. A radical change in the formation of national policies in both the U.S. and developing countries will be needed to eliminate these structural barriers to equitable development. Both cultural imperialism and lack of access to productive resources are structural problems associated with unresponsive government policies.

Irma de Ibarra: Donor agencies should send more sensitive people into the field to work with host country government officers in the design of projects. Design must be done in the field--not in Washington. Far more understanding of target populations, which can be gained through social research, is needed to augment the purely technical information which shapes the projects.

Exchange of students between the U.S. and developing countries is one way of getting more sensitive people involved in development.

We should seek and support the LDC women who are now working in development activities, so they do not remain marginal in the planning process.

The discussion reinforced the wisdom of mass participation in planning of projects by the people for whom the project is designed. Women need to become more sophisticated in skills and political/economic understanding if they are going to have any control over development.

## WOMEN AS AGENTS OF CHANGE

Summary of Statement by

Marianne Huggard

One area in which women can make a difference has already been alluded to during the last few days. This is the need for more women to be involved at all levels of the decision-making process. I would suggest that this is of the utmost importance if the role of women in development and in particular in the production of food is going to be adequately considered. It is inevitable that in a group of all men, women's roles might very easily be overlooked, forgotten, or thought just not worth talking about. Even when there is a token woman present it may be difficult for her to make a meaningful contribution as she has no back-up or support system.

As a representative at the United Nations, I have observed that women are frequently missing from or inadequately represented at meetings which vitally concern their interests. One case in point has been the committee which has been reviewing the progress of the Second Development Decade. At the last couple of meetings, among forty or so men, there have been only three or four women at the most. Women were also not really in evidence at the Seventh Special Session of the General Assembly on International Economic Cooperation and Development, despite the fact it was held in 1975--International Women's Year.

The question which we should consider is how to get more women involved in decision-making from the community right up to the international level. This is not a problem for women in developing countries alone. It is also a problem for women in many developed countries. It is not just a question of education in the formal sense or of the availability of qualified women. Women have to be trained how to make it in what is basically a man's world. They have to learn how to be effective and have to acquire the necessary skills in leadership techniques and working with men. They must also learn techniques of collaboration and working together. Otherwise, they will continue to be missing, or present in insignificant numbers in the places where the decisions are made on development, food production, water supply, etc., all of which affect their lives.

In many countries there are already mechanisms available which could be used for this purpose. Some are already working in this direction.

These are the voluntary or non-governmental organizations, particularly those directly concerned with the status of women and women's issues. Those with the broadest networks, such as the International Council of Women, the Y.W.C.A., and Associated Country Women of the World are ideal means to reach women, as they are known and have the confidence of women at different levels. Then Non-governmental Organizations (NGOs) should be encouraged to run courses on leadership effectiveness. In countries where there is only one women's organization, that organization should be providing this training, together with the more traditional types.

Obviously, there are many other ways of involving women in the decision-making process. I have deliberately considered only one. In the discussion following the remaining presentations, perhaps you will suggest others from your varied experiences. All I would hope is that when we are considering recommendations on the various components of the role of women in meeting basic food and water needs, this will not be overlooked.

## HOW WOMEN CAN MAKE A DIFFERENCE

### Summary of Statement by Mary Burke

Women can make a difference by affecting AID policies to be more responsive to their needs here and abroad.

As AID is an instrument of foreign policy, it is under mandate from the State Department and Congress. Congress, in turn, is responsible to and responsive to the U.S. public--to a degree. One reason for current AID policies is the relative misunderstanding and/or ignorance of the impact of AID on the lives of people.

One of the many ways of changing the policies of AID would be to educate the U.S. public, especially women. Women's organizations and groups are an excellent vehicle for that--especially if university women were to have input into the programs developed for that education.

Educational Programs to inform women on their role and interest in foreign policy formation should be instituted with input from university women. Such programs should include four components:

1. Teach the goals, process and problems of development.
2. Describe the context of global structures and relationships and including the diversity of culture, experience, and history. An important input into this would be information from Third World women on the impact of aid and on aid projects.
3. Stress the linkages of concerns--both those that are similar and those that are divergent because women are at different points in the policy and/or consumption-production system.
4. Attend to the value of organized political action, including letters to Congress, etc.

SESSION VI

OBJECTIVE: TO DETERMINE WHAT FINANCIAL INSTITUTIONS CAN DO TO FACILITATE  
FULL PARTICIPATION OF WOMEN IN PROGRAMS TO MEET FOOD AND  
NUTRITION NEEDS

A. Session Summary

Maryanne Dulansey  
Consultants in Development  
Washington, D.C.

B. Remarks

1. WHAT CAN INTERNATIONAL DEVELOPMENT BANKS DO?

Grace Finne  
Economist, West Africa Projects  
International Bank for Reconstruction  
and Development

2. WHAT CAN PRIVATE INSTITUTIONS, PARTICULARLY COOPERATIVES DO?

Mary Jean McGrath  
Cooperative Education Specialist  
University Center for Cooperatives  
University of Wisconsin  
Madison, Wisconsin

## SESSION VI SUMMARY

Maryanne L. Dulansey

During Session VI, there were two speakers, Grace Finne of IBRD and Mary Jean McGrath from the University Center for Cooperatives.

Grace Finne, who works particularly with women's credit institutions in West Africa, commented on the timeliness of the conference and explained that she has her own measure of development: a developed country is one where women control or spend about half the disposable income.

Using Africa as an example, she sketched the importance of women's roles in food production, distribution, and consumption processes, reiterating that men usually have greater access to cash income from farming, since they are the ones who concentrate on cash cropping. She noted that women farmers will not increase food production if it simply means more labor and there is no return in terms of additional cash income. In Finne's opinion, the strongest motivation for increasing food production is the opportunity to obtain cash income in order to buy more goods.

Ms. Finne identified a number of additional constraints on increasing food production in Africa. These include: (1) the lack of female extension agents, (2) immediate post-harvest crop loss because of poor storage facilities, (3) waste of surplus product that could be marketed if better transportation facilities existed. She noted that the World Bank has set the dual goals of increasing food production and enhancing cash income. The World Bank has over 400 projects in the pipeline now, some of them agricultural projects proper, and some more comprehensive rural development projects. She sees the latter as having great potential for increasing production. For example, she showed how rural road development projects can provide women with access to markets.

Finne sees a need for more World Bank-sponsored projects that (a) provide leadership training for women in the areas of extension, management, marketing, and transportation, perhaps through E.D.I. (Economic Development Institute), (b) encourage women to organize for self-help at the local level, and (c) provide incentives to women to produce and sell more food.

Two questions were addressed to Ms. Finne regarding the number of women in positions of authority at the World Bank, how each of us can seek to influence the policies and projects of the World Bank, and how we can obtain information about their activities, such as finance evaluation reports.

Mary Jean McGrath, who has been working in the field of coop development since 1947, sees cooperatives as an effective strategy for meeting women's food and nutrition needs in developing areas. Since coops are operated by their members on a non-profit basis, they are by nature adapted to the needs of community welfare.

She sees, however, a number of problems in the institution of coops in developing and developed areas up to now. Governments in most developing countries have instituted cooperatives, but often they have imposed on rural people by well-meaning change agents, with little popular support and little faith in the abilities of the people they are trying to help. Further, in our own assistance efforts, there is a lot of emphasis on entrepreneurial skills, but if these are used at the expense of one's neighbors, there is a breakdown of the community. Therefore, McGrath called for greater social responsibility in the formation and encouragement of coops.

Second, there is a need to get rid of male dominance in coops, since membership is often based on farm ownership. There is a need to open membership to women and/or farm women's coops per se. McGrath then went on to describe a number of coops which have been successful in offering rural women increased opportunities. She described cooperatives in Tanzania, Nigeria, Kenya, Uganda, Lesotho, India, Bangladesh, Philippines, Japan, and the Americas. These were organized variously to serve production, marketing, credit, and other functions. Often, women have been the initiators of such successful coops, mobilizing themselves and then applying for legal status.

Ms. McGrath sees both a need to establish more coops and more functional linkages. As an example of linkages, she described a Panamanian coop that combines housebuilding, credit, and loan functions. She also sees the three-tier cooperative system of local primary societies, secondary-level cooperative unions, and apex cooperative societies or national federations, as a network for mobilization of opinion. Such public opinion, based on a grass-roots consensus, can help re-order national priorities with regard to food and nutrition.

## WHAT CAN INTERNATIONAL DEVELOPMENT BANKS DO?

Grace Finne

### I. Introduction

I feel privileged to participate in this timely conference on "Women and Food", and to share with you some thoughts on what the World Bank can do to facilitate full participation of women in programs to meet food and nutrition needs. I would like first to share with you my own definition of an already "developed" country to set a target for the countries striving towards development. My definition is very simple: a "developed" country is a country where women control or spend about half of the disposable income.

The contrast in development stages between countries becomes quite evident if we use this as a yardstick of economic development.

### II. Role of Women in Agriculture in Developing Countries

The important role of women in the successful implementation of rural projects is well-recognized by the World Bank. In many developing countries, food crops such as maize, sorghum or cassava roots are the women's responsibility. Women select the seeds, plant the crops, and weed the fields. Generally, the whole family joins in harvesting the crops. The women also carry the crops from the fields by head load. Women sort, shell, or process food crops, as well as cash crops, and help with the bagging.

In many rural societies, both in Africa and Latin America, men traditionally prepare the land by cutting trees and burning brush. Men are also responsible for cash crops such as coffee, cocoa and palm oil. As a consequence, men generally handle practically all the cash and the women farmers can earn cash only when surplus food crops are sold in the market place.

Implementing agricultural projects generally implies increased labor input by both men and women. If the area has unemployment or under-employment, this added work input mobilizes human resources more fully. On the other hand, when farm families are already hard at work, the added work in fertilizing, weeding and pest control and the extra effort required in harvesting and transporting a larger crop may be difficult to achieve unless labor productivity is increased by labor saving devices. World

Bank projects, therefore, frequently introduce new technology to facilitate such time-consuming tasks as the sorting and shelling of beans or maize, or grinding of grain.

Another time-consuming task for farm women is to supply water for the household. A recent World Bank study on appropriate technology in farming revealed that rural women in Kenya spend from 3-6 hours per day to get water for the household. Most of this time was spent in carrying water by head load.

Several rural development projects financed by the World Bank include new wells for potable water. However, the problem of water supply to villages might also be considered in connection with road projects. New wells providing water for road construction might be located at towns where the wells will continue to serve the townspeople. The use of tank trucks for transport of water might be encouraged. Although transport of water jugs by headload implies no out-of-pocket costs, human portage is the most expensive form of transport in economic terms because of its limited capacity and because time and effort could be spent more productively in growing food.

### III. World Bank Agricultural and Rural Development Projects

To increase food production and enhance rural incomes is a main strategy of the World Bank. During a two-year period (1975-77 fiscal years), about 400 agriculture and rural development projects were being implemented. As of November 1977, the World Bank has 239 agricultural and rural development projects in the pipeline. These projects include a wide range of activities geared to the needs and potentials of each country.

To cite a few examples of agricultural projects, maize production in Zaire will be stimulated directly by providing fertilizers and improved seed, and indirectly by constructing storage facilities and access roads. Rice production in Burma will be expanded by reclamation of swampland through flood control and drainage works. In Nicaragua, a current Bank project seeks to increase milk production.

The so-called rural development projects differ from the agricultural projects mainly by being more diversified and comprehensive. A rural development project in West Africa, e.g., is designed to diversify agricultural production by introducing rice cultivation as well as to increase yields and quality of traditional coffee and cocoa production. Community health will benefit from the better water supply and health services financed by the project. To provide production incentives to farmers, the project will set up retail stores, stocking farm implements and basic consumer goods at a small markup. Thus, higher farm incomes can be translated into more goods, rather than being absorbed in higher prices. This is of particular importance to women food farmers who have a much smaller cash income than the men who control cash crops.

projects financed by the World Bank reduce the economic cost of operating all types of vehicles which make up the traffic. To my knowledge, however, no particular study has been made on how these savings are translated into lower bus fares, nor what other measures might be necessary to bring this about, such as providing more buses or minibuses, encouraging competition, or regulating or deregulating tariffs.

To illustrate the high cost of bus transport relative to rural incomes, I will cite an example from northern Cameroon where I was on a mission for the World Bank a few months ago. I inquired about the passenger fare between two towns about 95 km apart, noticing the frequency of crowded minibuses with bundles of food precariously stacked on top of the roof. I was told that the passenger fare was 1000 francs for the 95-km trip, with extra charges for the bundles and baskets on the roof. Now, this fare is equivalent to about 7 US cents per mile. The average per-capita income of this region is estimated at about U.S. \$70 per year, or 19 cents per day. The bus fare for a ride of about 60 miles is therefore equivalent to 21 days of work for a person with "average" income. Most bus riders would probably be above average income. Women farmers find it profitable to sell food products at an urban market in spite of the high bus fare. This small scale personal marketing is equally advantageous to the urban housewife who receives more ample supplies at lower prices than she could by buying from middlemen. If World Bank road projects are designed specifically to lower bus fares, this would indeed have a multiplier effect on food marketing and the participation of farm women in small scale marketing.

#### VI. What Specific Actions May the World Bank Take to Facilitate Participation by Women in Food and Nutrition Programs?

I will make a few suggestions. The World Bank should try to institute programs to train women leaders in the fields of agricultural extension, management, marketing, and transportation.

An important tool to train more women is the Economic Development Institute, the training division of the World Bank. EDI conducts its own courses in the developing countries and at headquarters in Washington, covering all aspects of project preparation and execution. At the same time, EDI maintains close contact with national training institutions in the developing countries.

The World Bank might also encourage women at the local levels to organize self-help projects. These projects may require only some technical assistance. These small sub-projects may be quite diverse, including, e.g., improvement of foot paths to the fields and pooling of surplus food for marketing.

I also would like to suggest that incentives to women to produce and sell more food should become more generally recognized as part of World Bank projects, whether in the form of better availability of consumer goods or as lower bus fares to the market town.

Whether as part of integrated rural projects or as separate ones, road projects are also of key importance in promoting food production. They facilitate transport of farm inputs, provide new marketing opportunities, and reduce the cost of transport. In 1976-77, the World Bank financed construction and improvement of about 40,000 km of rural roads in 56 developing countries. In addition, the World Bank is financing road maintenance programs to assure that the roads will remain serviceable for a number of years.

#### IV. Constraints

The implementation of World Bank projects promoting rural development meet with serious constraints. I shall illustrate with only a few examples. In Africa, the traditional division of farm work between women and men creates problems in introducing new farm methodology. Male extension agents are not permitted to communicate directly with the women working in the fields, but only with the male heads of family. A simple solution to this problem would be to train women in agricultural extension work. However, agricultural training centers are frequently residential schools, and the students have been all men, because tradition tends to keep women in the village.

Although women farmers may put in a tremendous effort in increasing food crops, the size of the crop may be tragically reduced by fungus diseases, insects, or rodents eating the crop in the field. World Bank projects try to reduce these losses by pest control and improved storage, but these measures generally require several years to become effective.

When surplus food production has been accomplished, marketing constraints may leave a substantial part of the available food supplies unsold and going to waste. To overcome this constraint, road projects should improve typical marketing routes for food products, as well as for export crops.

#### V. Small-Scale Marketing by Women Farmers and Measures to Facilitate This Function

Women farmers may first try to sell food at the roadside in their own village. To promote this marketing, road projects might include widening of roads through villages to encourage marketing and reduce the risk of accidents. While gravel roads generally are adequate for the low traffic on rural roads, road stretches through towns might warrant asphaltting to reduce the dust for roadside marketing. Roads which pass through more populous towns might be widened to provide loading areas for trucks and buses at marketing places. This will enable farm women arriving by bus to sell their heavy bundle of produce themselves, rather than to middlemen who own a truck or taxi. I also feel that lowering bus fares should be an explicit objective of rural road projects, because so much small-scale food marketing depends on bus transport. Road

Recognizing the need is the first step in solving problems, and I would like to close these remarks with a citation from Mr. MacNamara's speech at MIT in April 1977. He spoke of the need for giving women a greater economic opportunity, stressing the importance of better education, nutrition, health, and family planning, and he added:

"But women need market-oriented training and services, as well as access to credit, extension services, and the skills necessary for participating in a cash economy."

The World Bank will undoubtedly increase its assistance to the Governments of the developing countries in meeting this challenge.

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The opinions expressed are those of the author and not necessarily those of the World Bank.

WHAT PRIVATE INSTITUTIONS--PARTICULARLY COOPERATIVES--CAN DO TO  
FACILITATE FULL PARTICIPATION OF WOMEN IN  
MEETING FOOD AND NUTRITION NEEDS

Mary Jean McGrath

I. Introduction

This presentation will concentrate on what cooperatives can do, because, as organizations operated by their members on a nonprofit basis, they are inherently oriented to community welfare. (However, a number of the ideas suggested or reported here can be adapted to other forms of enterprise, or put into practice by other types of private institutions).

I will not repeat here the evidence for the neglect of women in the process of development (12) or the facts amply documented elsewhere in literature most of us have shared, on the drop in local nutrition levels that has all too often accompanied increased food production for market (8). Nor will I go over the restraints that have kept women from taking their rightful place, as half of the human race, in social and economic life.

Rather, I will concentrate on why and how cooperatives might be expected to improve the situation of rural women in poor countries. Keeping in mind the workshop format of this conference, I am looking forward to your reactions and suggestions to be transmitted back to groups now working on this problem.

II. Nature of Cooperatives

Women have always had a place in modern cooperatives, which can be said to have begun in Rochdale, England, in 1844 with the setting up of a small consumer store. One of the founders was a woman, Ann Tweedale. Membership was open to all persons without social, political or religious restriction, and rule number 25 of the society took care to define "persons" as including females as well as males. Each member had one vote, regardless of the amount of money invested. Interest paid on capital was limited, and any surplus resulting from the operations was returned to the members, on the basis of the amount of business each one did with the cooperative.

Throughout the world, cooperatives still adhere to these principles, which evolved over centuries of trial and error, and today cooperatives,

by government policy, are the preferred form of agricultural enterprise in most poor countries.

### III. Make Haste Slowly

However, we have no desire to romanticize cooperatives, and they certainly present no magic formula for development. Many cooperatives have failed, or are doing a less than adequate job of serving their members. In their haste to put their economies on a locally-owned basis, a number of governments imposed what they called a cooperative form of enterprise, but in actuality was a government-run organization, with no real cooperative spirit and little or no local control. Some of these governments thought they could make up for lack of local education and managerial skills by dominating the cooperatives, or by providing outside employees to run them. The lack of involvement of members violated the self-help nature of cooperatives, and was a major cause of failure. Well-meaning change agents (mostly colonial agents, but some also from the USA, even today), with little understanding of cooperatives and no faith in the ability of the people they were trying to help, brought about this state of affairs. Some persist in this misguided paternalism, but most governments are now trying to rectify these early mistakes by educating the local people on how to manage their own cooperative businesses. This is likely to be a long, slow process, but it is the only road to real development. Lappe and Collins put it so well:

...development assistance is the facilitation of a process by which the people empower themselves through an awakening to their own collective potential. Technical knowledge becomes constructive only when it is offered in response to needs identified by the people themselves and only when it can be used to further possibilities for self-determination. (8: 369-370)

### IV. Need to Emphasize Social Responsibility

It is standard to call for the development of entrepreneurial skills to hasten economic growth in poor countries. But the development of entrepreneurial skills not linked to wholesome community values allows excessive individualism to have full play. This has caused many of the current economic and social problems in poor countries. Too often, technical assistance workers have been dismayed to see their sincere efforts to assist poor people result in the breakdown of community, the growth of rivalries, and a greater disparity of incomes.

A true cooperative offers incentives for personal and family advancement, but not at the expense of one's neighbors; just the opposite: the personal gain is the result of working together. It is a type of entrepreneurship that involves people in their own betterment, through the exercise of social responsibility.

## V. Need to Get Rid of Male Dominance

Even the best, most self-reliant cooperatives reflect sexual bias. Throughout the world, (the USA is no exception) all but a few cooperatives are dominated by men. Although cooperative principles clearly forbid discrimination against women, the heavy weight of tradition has meant that many cooperatives do not really allow women to take leadership roles, and in the case of agricultural cooperatives, many of them do not allow women full membership, because the bylaws specify that the membership is open to the person who is the farm operator or owner. The husband is legally the land owner in most cases (in some countries, women are not allowed to own land), and is considered the agricultural producer, even though in many countries most of the farm work is done by women.

In the USA, farmers' wives, many of whom are full working partners with their husbands in the farm operation, are campaigning to get the bylaws of their agricultural cooperatives changed, to allow for family memberships. African women cooperators are now also actively petitioning for the same rights. (6) Australian agricultural women in Queensland succeeded in getting their cooperative law amended in 1974 so that children over 16 and wives are fully eligible to be members of cooperatives. (11)

Since, in less-developed countries, particularly in rural areas, the cooperative is often the only access poor people have to low-cost credit, it is doubly important that women in poor countries be given full access to cooperative services. In much of the world, the only alternative source of credit is a high-rate money lender who charges extortionate rates. (In the Philippines, market women were paying 10 percent per day to money lenders to finance their stalls, before credit unions were organized there).

## VI. Nevertheless--Progress for Women in Africa

Despite the problems mentioned above, cooperatives have been offering rural women increasing opportunities, as is clear from the reports from a 1974 seminar in Nairobi on the involvement of women in cooperatives in Africa (13), and from other sources:

Tanzania: The Ujamaa villagers' production and multipurpose cooperatives could also be called agricultural cooperatives. Women's and men's activities are interrelated. Mbilinyi comments, "For most Ujamaa villages, individual members, men and women, are paid in cash or kind according to their work. For many women, this is the first time they have received cash remuneration on a regular systematic basis." (10) "Women's participation in rural development in Tanzania is seen through various existing groups which function on a cooperative basis. Their main activities are mat-making, tailoring, pottery, bread-making and vegetable gardening. The vegetable gardening is doing especially well and helps to increase food production for direct consumption and for selling; the marketing of the produce is done directly to the community

schools." (13) The low level of education and lack of cooperative training were problems reported.

Nigeria: It was not until 1969 that women became members of farmer societies. In the Western State in a project based at Otta, a produce marketing society that developed into a credit society, admitted women. Then a joint farming system was set up by the husbands while the women were helped to set up individual poultry farms. In Itori village, migration of men to the city caused a shortage of farm labor, so women became organized into cooperatives, which they used for credit, storage, marketing and farming tools. (13)

Kenya: In 1952, women poultry traders were organized into cooperative "egg circles," and they sold to the government wholesaling agency, but when their production couldn't keep up with demand, they lost business and became discouraged, and it was a long time before they again wanted to start cooperatives. "Women in Kenya carry out much work on the farm, e.g., cultivation, picking and harvesting of crops, milking, as well as delivering produce to the societies' stores. Nevertheless, they remained in the background as cooperatives grew and expanded throughout the country." (13)

To remedy the situation, the Kenya National Federation of Cooperatives organized its first seminar for women in 1970 and has held more than 30 women's seminars since. As a result, more women are employed in positions of authority in cooperatives, but there is a long way to go. Women do participate in self-help community projects, but they need more help with marketing their products, and efforts are being made to help them organize cooperatives of their own, suited to their needs.

Uganda: "The female population in rural areas is entirely in charge of growing of subsistence crops, and is also responsible for most of the farming activities concerning coffee, cotton and vegetables. Many of these women are members of the 2,700 cooperatives of which about 2,400 are agricultural marketing cooperatives..." The Kweye Growers Cooperative society was cited as an example of a women's cooperative. It was founded in 1968-69 by 20 women. The cooperative furnished members with agricultural tools, and built food storage. Membership has increased to 130. The government helps this group with technical assistance on bookkeeping and management but the group feels the need for regular training courses to raise members' general education level. (13)

Lesotho: In this country, 99 percent of the cooperatives have more women members than men because so many spend most of the year in mines in South Africa. Women do the major farm work and belong to agricultural cooperatives for credit, supplies, and marketing. Better supervisory help from the government and training for managers are needed, it was reported. (13)

A major impetus has been given during the last decade to helping rural women in Africa by the International Cooperative Alliance; United

Nations agencies; cooperatives, private foundations and other governments in Europe, notably Swedish and German. Year-round grass roots educational programs have been conducted; special offices have been set up in government ministries for assistance to women cooperators; cooperative colleges have put on female instructors, and women's seminars have been burgeoning all over the continent.

At an East African ICA Regional Women Co-operators Seminar in Kampala in 1974, the Minister of Cooperatives of Uganda said, "Women should not isolate themselves into special women marketing, thrift or handicraft societies; they should belong to the same societies with men and compete for leadership on an equal footing." (6:5) However, the women at that meeting noted that "encouraging women to join cooperatives in itself alone is not enough if men remain unconvinced of the vital role of women."

Their recommendations called for (a) early revision of all cooperative restrictions on women's membership (with independent memberships for wives in polygamous homes); (b) grass roots level education programs for women to be carried out by the apex cooperative organizations in each country; (c) set aside of special funds for women's education; (d) women cooperative education and publicity officers to be appointed in each country; (e) introduction of education about cooperatives in schools; and (f) broad-based programs by cooperatives of training on other aspects of women's role as homemaker. (5:60-61)

#### VII. Women Cooperators are Active in Asia, too

Asian women have a long history of cooperative activity in several countries, most notably in India and Japan.

India: Women's cooperatives have been actively promoted in India, and by 1965 there were 2,378 women's cooperatives in that country, including thrift and credit societies, crafts, industrial cooperatives for soap making, sewing, etc. In the early 60's, the National Cooperative Union of India set up a women's wing with full-time staff.

In 1962 in Delhi, the International Cooperative Alliance sponsored a seminar on "The Contribution of Cooperation to the Emancipation of Women," with a focus on South East Asia. Among the areas discussed were the need for family budgeting and the potential of rural cooperatives as training centers. It was pointed out at that meeting that most families were indebted to money lenders. Cooperatives were also urged to do literacy education work in rural areas, since other state and voluntary education efforts were inadequate and most of the rural poor are still illiterate. It was suggested that the participation of women in local cooperative activity would "help women to become citizens and effective partners in the democratic society." (4)

Year-round grass roots educational sessions for women are conducted by the National Cooperative Union of India, with assistance from the International Cooperative Alliance office for South East Asia, which is

in New Delhi. Publications as well as classes are devoted to all aspects of better family living. The cooperative colleges in each state in India regularly include a number of women who make full-time careers of cooperative education.

To mark International Women's Year, women in Bombay set out to raise 10 million rupees to set up a 350-bed cooperative hospital to be run entirely by women. Most of the purchasers of shares (Rs. 50 each) are women. This is to be the first of a chain of hospitals to be set up throughout the state in rural areas "in view of the miserable conditions of the rural masses, and the acute shortage of medical facilities." (1)

Japan: As early as 1957 the Japanese women's agricultural associations recognized the cooperative as a useful tool, calling for (a) promotion of the spirit of agricultural cooperation, (b) promotion of the cooperative movement, (c) improvement in agricultural techniques and farm management, (d) improvements of rural standards of living and the raising of cultural standards, and improvement in the economic and social status of women. (3)

"The Central Union of Agricultural Cooperatives in Japan deals with women through the primary societies of which she becomes a member by her own right and that of family membership. (In this context, we must remember that it is the women in Japan that do most of the farming.) ... the rural women are keen to bring about betterment in rural economy and improve their living, together with the rise of their status." An ICA survey done in the 1960's reports: "In order to realize ideals ... the cooperatives promoted the organization of women's cooperatives in each district within the boundary of the general unit cooperatives ... leading to the National Women's Association of Agricultural Cooperatives." (4:25)

Bangladesh: It is worth noting that the famed Comilla project, that has become a model for rural development in Bangladesh, involved women in the project from its inception, insisting on literacy education and family betterment classes for women. Developers were surprised to find that the women took a real interest in the business of the cooperative society, and even encouraged the prompt repayment of loans.

Philippines: Many women in the Philippines hold positions of importance in the promotion of rural cooperatives; some are managers of rural cooperatives that have men as the majority of members. I have personally observed their ability, and the respect in which they are held by the membership. Here, as elsewhere in Asia, women do a great deal of the agricultural work. I interviewed several female agricultural extension agents that worked with cooperatives, teaching improved farm practices, including animal husbandry. Carabao milk, not much used for human food because it is hard to keep in a tropical climate, is being collected and pasteurized in a coop dairy, and is on sale in the cooperative supermarket, which means better nutrition as well as more income for rural families.

A Filipino woman who saw the great waste of surplus fish got the

University of the Philippines to devise an easy process to make a tasteless high-protein fish powder with a small machine that cost only \$12. She wants to help village cooperatives use it to improve local diets, and at the same time earn extra income from their fishing.

These random observations are only intended as indications of the tremendous scope there is for women to upgrade food and nutrition, and their own status, through cooperatives. I personally know women working in rural cooperatives in Korea, Taiwan, Thailand and Vietnam. Doubtless, there are countless others in Asia.

In the Americas: Similarly, women working in or for cooperatives of the rural poor come to mind in Argentina, Belize, Brazil, Colombia, Dominican Republic, Honduras, Jamaica, Mexico, and Peru, not to mention our own United States where cooperatives are helping women fight the battle against poverty and hunger, in the rural south, as well as in the cities. In the Americas, where there is far less official government assistance to cooperatives than in either Africa or Asia, some women are the initiators of cooperatives. They mobilize a group of charter members and apply for legal status, as a non-profit, cooperative corporation. This is particularly true in the case of credit unions.

#### VIII. Credit Unions Mobilize Small Savings

One might question whether the small savings generated in rural credit unions in a poor country could have any significant impact. However, experience has shown that such credit unions are an effective method of mobilizing small amounts that would otherwise be wasted, go for entertaining or short-term pleasures, or would be saved in traditional, non-productive ways. In many countries, it is common to hide or bury money.

Credit unions do not have the restrictions that hamper women from making full use of their agricultural cooperative societies, since all persons in the group are equally eligible for all the services of the credit union.

Given the real poverty of the bulk of the membership in poor countries, surprising amounts of capital have been saved, and invested in provident and productive loans in the local communities these cooperatives serve. (See table in appendix).

Credit unions also help subsistence farmers who have no property of any real value to pledge for a loan, by lending to them for small agricultural production (to buy a pig, for two ducks, etc.) that can enable them to get off the subsistence treadmill and into the cash economy.

#### IX. Linkages, and Future Potential

Some cooperative linkages are already practiced in developing areas,

but they could be greatly expanded. For instance, in Panama, the Foundation for Cooperative Housing pioneered a scheme for better housing of the rural poor, using a local credit union to collect small savings, and provide small loans for materials. Local voluntary labor was mobilized to replace grass huts with permanent housing at low cost, using the local credit union for the small cash outlay needed, and creating a revolving fund to continue building more housing.

Often, credit unions operate out of facilities shared with agricultural supply and marketing cooperatives. The availability of consumer loans through the credit union reduces the need for farmers to divert their production loans to meet consumer needs. Similarly, credit unions often enable a consumer cooperative to operate on a cash basis.

On a much simpler level, even finding a place to hold a class or meeting of women can be difficult. The neediest women are found in the most isolated rural areas, where there are few schools or institutions of any kind. Social gathering places of men are usually taboo for them. The cooperative could provide such a meeting place, and not just for the occasional class. Cooperatives can provide a forum for ongoing education and dialogue about food and nutrition, and other better-living skills. Often such classes don't motivate women because, even if they understand and accept the new knowledge about better diet, improved sanitation, and health measures, they don't see any way they can get the economic wherewithal to adopt the new methods. A cooperative could link such discussion of new practices with the economic potential to implement them, by making available credit to women who could produce a marketable surplus if they had access to inputs.

Financial institutions are usually too remote from the village-level woman (in every way) to have personal contact with her. A local cooperative could help local women farmers make an economic plan for the crop season, help them learn how to analyze for themselves their needs for inputs to improve yields and quality, how to figure costs and estimate returns on the harvest. This could be done in small discussion groups or study circles. It might result in development of cooperative or group farming, even on an informal basis, which would be more efficient in many cases. An additional value for women would be more self-awareness, and an increase in self-confidence, based on the knowledge of the economic value of women's work in agriculture.

The cooperative provides a natural grouping and focus for a continuing self-survey of local needs and potential that could result in a community putting more emphasis on food production and processing for local consumption. While cooperatives might have little impact on a country's economic structure and policy, they could still bring about local change in food production and eating habits--a big order in itself.

The cooperative system of local primary societies, secondary-level cooperative unions, and apex cooperative societies, or national federations, that is common in most Third World countries, does provide a network for the mobilization of opinion.

Poor nations show an increasing sophistication in reassessing the nature of economic and social development assistance: they no longer automatically equate industrialization and the growth of Gross National Product with development, and they are beginning to see the evidence that producing more export crops for foreign exchange will not solve the problem of hunger, or raise the real level of living. These facts "speak truth to power" in a way that is gradually working toward a reordering of priorities.

Of course, such a reordering of priorities is impossible without the strong support of public opinion: a grass-roots consensus that adequate nutrition is the basic right of every human being, and therefore the top priority for the nation, is the only basis for real change in policies affecting food and nutrition.

We dare to hope that cooperatives can make a modest contribution to the formation of this resolve, for, "No army can withstand the power of an idea whose time has come."

###

#### X. Appendix

##### GROWTH OF CREDIT UNIONS CONFEDERATED WITH WORLD COUNCIL, 1976 (14)

	Africa	Asia	Caribbean	Latin America
Number of Credit Unions	9,477	3,029	505	2,088
Number of Members	920,489	1,109,383	207,980	1,520,825
Shares & Deposits (Savings)-- In U.S. Dollars	\$48,733,693	\$74,021,043	\$64,497,382	\$211,885,299
Loans Outstanding-- In U.S. Dollars	\$52,895,897	\$72,769,843	\$61,545,108	\$215,461,754

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## SESSION VII

OBJECTIVE: TO DETERMINE WHAT CAN BE DONE TO IMPLEMENT THE WORLD FOOD CONFERENCE RESOLUTION ON WOMEN AND FOOD AND IMPROVE PRIVATE AND GOVERNMENTAL PROGRAMS

### A. Session Summary

Mary Burke  
Center of Concern  
Washington, D.C.

### B. Workshop Structure Information

1. Discussion Questions
2. Resumé Form Distributed and Collected

### C. Workshop Group Recommendations, Rapporteurs, Leaders and Discussants

#### 1. GROUP A

Beryl Burt  
Home Economist  
University of Arizona, Tucson

#### 2. GROUP B

Laura Beane  
Holwis Farm  
Fort Atkinson, Wisconsin

Marion Marshall  
Department of Agriculture  
University of Minnesota, Minneapolis

#### 3. GROUP C

June Gibbs  
Home Economist  
University of Arizona, Tucson

## 4. GROUP D

Sandra Anderson  
College of Nursing  
University of Arizona, Tucson

## 5. GROUP E

Helen Henderson  
Anthropologist, Niger Natural Resources Project  
University of Arizona, Tucson

## 6. GROUP F

Ann Bunzel Cowan  
Instructor Anthropology/Sociology  
Pima Community College, Tucson

## 7. GROUP G

Frances Miller  
Early Childhood Education  
American Association of University Women

## 8. GROUP H

Linda Dietrich  
League of Women Voters  
Tucson, Arizona

## 9. GROUP K

Nancy Ferguson  
Ecologist, Niger Natural Resources Project  
University of Arizona, Tucson

## 10. GROUP M

Douglas Caton  
A.I.D.  
Washington, D.C.

## D. Voluntary and Individual Recommendations

1. GROUP N: Women from Developing and Underdeveloped Countries

2. GROUP O: Research Interest Group

3. GROUP R: CID Faculty Report and Recommendations
4. Hunger Project
5. Farm Policy Statement
6. Ethiopian Women's Welfare Association: Statement

## SESSION VII SUMMARY

Mary Burke

Session VII had as its objective the determination of what conference participants felt could be done to implement the World Food Conference Resolution on Women and Food.

Suggestions for action came in the form of the written recommendations and verbal reports from the workshops, ad hoc groups representing specific interests and individuals. The recommendations from the workshops fell into six closely related categories, underlining the need to face and overcome the poverty that lies at the root of hunger;

### I. Conference Evaluation, Feedback and Publicity

Recommendations called for the involvement of Third World Women in the process.

### II. Involvement of Women in Development Planning and Programs

Participants saw the need to involve women at all levels of the development process, from international decision making to grass roots evaluation. Much stress was laid on the need to incorporate women and their concerns in all aspects of project planning, implementation, and evaluation. Several recommendations specifically cite the importance of women in policy-making positions on university research boards such as BIFAD and CID.

### III. Research and Education

Participants stressed the need to undertake substantial research in areas ranging from developing profiles of women in developing countries to determining the impact of development projects on attitude. Education and Research Institutes in Developing Nations were seen as possible vehicles for this. Great stress was laid on sharing the information gained, especially with Third World women. In addition, participants saw the need to develop education programs to overcome the economic illiteracy of women throughout the world and to expand both the scope and distribution of agricultural training programs and nutritional

education programs. The use of local languages in all media was stressed. Many participants urged that special efforts be undertaken in the United States to educate women about development and the needs of women in the developing world.

#### IV. Respect for Local Culture and Resources

Participants urged that more attention be given to local customs, culture, and food uses in developing programs and projects. They stressed the fact that women are especially harmed when programs and projects ignore local conditions that often designate specific tasks to women--a factor often not considered by development experts. They linked this need for attention to local situations to the importance of incorporating and enhancing local resources and introducing appropriate technologies, including women and their knowledge wherever and whenever possible.

#### V. Coordination of Activities in the National Development Thrusts to Provide for Integration of Projects to Overcome Poverty, and Those to Alleviate Discrimination Against Women

Projects and programs, while designed to achieve specific objectives, must take into account the whole of the environment in which they are operating. Thus, there is a need for interdisciplinary studies and project teams, a need for general education, including advocacy education in all training projects, and an awareness of the overall impact of all women, families, ethnic groups, and on developing alternative structures, such as cooperatives.

#### VI. U. S. Policy Changes are Needed in Order to Meet the Needs of the Poor at Home and Abroad

The conference focused special attention on the need to separate military and food aid and to reduce military spending in favor of development spending.

These themes and others were echoed by the ad hoc groups and individuals. A group of Third World women at the conference pointed to the links between the present international economic order and the poverty of women in their countries and urged support of efforts to create a new international economic order. They also urged greater involvement of Third World persons, especially women, at all levels in all development projects. Of particular importance, these women stressed that projects aimed at women must take into account the fact that women are part of the family unit. The situation of women cannot be improved at the expense of the family as a whole, though in many instances it is also essential that women's status within the family be improved. Third World women also cited the need for input from women from Socialist countries.

Women actively engaged in research submitted a series of resolutions reinforcing those submitted by the workshops. They, too, cited the need for researchers to work in interdisciplinary teams, open to women, and sensitive to cultural differences. Numerous individuals rose to recommend that more women be involved in the planning and evaluation of projects. In the open discussion that followed, participants elaborated on previous recommendations and presented new challenges. A number of women cited the need for a conference organized by Third World Women. One participant, citing the background paper by Elise Boulding, urged that facilities be made available for Third World and U. S. grass roots women to plan and organize their own meeting inviting experts and elite women of their own choosing perhaps including more food producers. Another participant challenged all present to examine some of their assumptions about development and its consequences, e.g., will reduction of workload and education mean women will have a voice in decision making? Many women cited the necessity of political action on the part of women if beneficial change is to occur. Dr. John Fischer, Conference Coordinator for the sponsor, the Consortium for International Development, summarized the conference. Acknowledging that the conference would have benefitted from the participation of more Third World representatives, he noted that funding had been the limiting factor; and that we must also keep in mind that a few of those invited had not been able to leave their countries to attend--a situation he hoped would soon change. He noted that the strongest theme running through every session was the need for change, and he pointed to the struggle involved in bringing about change. He ended his comments by citing the need for the United States to listen to messages from the Third World with respect to agenda and priorities.

## WORKSHOP DISCUSSION QUESTIONS

### A. What is the Problem?

These questions are merely suggestive. Your group may decide to use some, none, or all of them. We do suggest that you make an agenda at the beginning of each meeting.

1. What is the cost to women, in human terms, of the lack of sufficient food for all?
2. How are women currently participating in food production and distribution systems
  - at the local level in America, in the 3rd World?
  - at the national level in America, in the 3rd World?
  - in the international agencies?
3. What kinds of constraints are currently limiting the provision of food for all? How may the uneven distribution of women within food systems be affecting the provision of food for all?
4. What kinds of evaluations are most appropriate in insuring that attention is paid to individual human needs, to insuring that food reaches all people?
5. What should be the style of interaction between American and Third World agencies in planning and evaluating projects? What can we learn from our past mistakes in this area?

### B. What Can We Do?

These discussion questions are merely suggestive. Your group may decide to use some, none or all of them. We do suggest that you make an agenda at the beginning of each meeting.

1. What kinds of interpretation does this issue need?
  - who should we be talking to?
  - what should we be saying?

2. What should be the role of women in decision making and program planning
  - within the donar agencies?
  - within developing countries?
  - on technical assistance teams?
  - within private voluntary agencies?
  - within Title XII universities?
  - within the research community?
  - within international agenices?
3. What can be done to educate current program planners to the needs and capabilities of women within food systems?
4. What projects and types of programs should the following emphasize?
  - donar agencies
  - private voluntary agencies
  - Title XII universities
  - the research community
  - the private sector
  - women's organizations
  - U.N. agencies
5. What can be done as a follow-up to the conference?
  - by indivuals
  - by small groups
  - by organizations

DISTRIBUTED RESUME FORM

PLEASE RETURN TO GROUP LEADER ON TUESDAY

NAME: \_\_\_\_\_  
(PLEASE PRINT)

WORK ADDRESS: \_\_\_\_\_ HOME ADDRESS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

WORK PHONE: \_\_\_\_\_ HOME PHONE: \_\_\_\_\_

TRAINING: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

LANGUAGES SPOKEN: \_\_\_\_\_  
(GOOD/FAIR/POOR)

LANGUAGES READ: \_\_\_\_\_

DEVELOPING COUNTRY EXPERIENCE: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

BACKGROUND IN FOOD/NUTRITION/WATER: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

BACKGROUND IN WOMEN'S ACTIVITIES: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I GIVE MY PERMISSION TO CIRCULATE THIS INFORMATION: \_\_\_\_\_

SIGNED: \_\_\_\_\_

GROUP A RECOMMENDS THAT:

1. This conference be evaluated by a committee of conference participants, including Third World Women in significant numbers.
2. Efforts be made to develop evaluation and research institutes within universities in the United States and in Third World Countries, which will include a women's post to evaluate projects in relation to impact on poor women within the respective country, and that the women affected be involved.
3. Economic literacy programs for women be created to develop a wide range of political/economic alternatives to specific situations.
4. Since Title XII concerns famine prevention and freedom from hunger, purely technical projects not be the only component of Title XII-funded research, but that social, political, and economic consequences also be considered in assessing the impact of development programs, with a monitoring system established to assure it.
5. Every country be encouraged to send program planners to the local level to gather data, assess the needs and capabilities of women, and utilize women as members of planning and decision-making committees for project design.
6. Each country disseminate material/information gathered through research in a form easily usable and understood by persons involved in decision making at all levels.

GROUP A PARTICIPANTS (Partial):

Rapporteur: Beryl Burt

Group Leaders: Ann Seidman and Sookja Ro

Discussants:

Donald Leeper  
Sookja Ro  
Horatio Jarquin  
Bruce Anderson  
Esther Winterfeldt  
Maria Angela T. Barroso  
Amy Jean Knorr

Carolyn Barnes  
Gretel Pelto  
George Harvill  
Beryl Burt  
Otto Schaler  
Nancy Robinson  
Ann Seidman

GROUP B RECOMMENDS THAT:

1. Effective non-governmental agencies be identified and utilized more fully in developing countries and by development agencies.
2. Third World countries use resources within the community, e.g., teachers brought up within the countries who have an empathy for the community and its citizens. For teachers, additional seminars and workshops may be necessary as support. Local answers for local problems are necessary, and local values must not be overlooked. Volunteers may be used through schools, churches, and other institutions. Mass media programs of education and information could emphasize national pride in local foods, cultures, etc.
3. Local units assess traditional technologies, and whenever appropriate use and improve this knowledge rather than bring in inappropriate exogenous technologies. New technology should also be assessed in the light of present-day needs.
4. Developing countries and aid organizations identify and apply an incentive system consistent with local values to motivate local people to develop programs and projects.
5. Local community development activities generate local income whenever possible.
6. Development agencies recognize that direct input from local community into project planning, implementation, and evaluation is absolutely critical; therefore, channels to accomplish this must be provided.
7. Agricultural stations provide field days for women's education.
8. Development agents seek workable means of sensitizing local people to their power potential.

GROUP B PARTICIPANTS (Partial):

Rapporteurs: Laura Beane and Marion Marshall

Group Leaders: Cynthia Anson and Miranice Sales

Discussants:

Martha A. Whiting  
Mary Edwards  
Marion Marshall  
Elizabeth Cummings

Jeannette B. Carson  
Djoko Pitono  
Ray Rignall  
Fu Chi Tan

Discussants (continued):

Odunola Aremu  
Hilda Kokuhirwa  
Laura Beane  
Miranice Sales  
Suzanne Ferry

Stanton Dreyer  
Maria Luiza Barbosa Nogueira  
David Rupert  
Cynthia Anson  
Myra Dinnerstein

GROUP C RECOMMENDS THAT:

1. Women support one another to reach a level of collective strength.
2. Women work for attitude changes which would encourage the use of products from their own country.
3. Development programs be responsive to known motivating forces (incentives).
4. Food be better used, bartered, and wasted less.
5. U. S. aid handouts should be avoided, since they often hurt countries.
6. Self-reliance should be encouraged since it is the natural instinct of people.
7. Women receive more education concerning:
  - a. national and international economics, and
  - b. financial decision making at the community and national levels.
8. Women receive more education concerning:
  - a. water conservation measures, and
  - b. politics and economics of water distribution.

GROUP C RECOMMENDS FURTHER THAT:

1. A committee be formed involving the Third World (appointed or voluntary) to work up an evaluation sheet and mail out to all participants so each person may have input into the final evaluation paper, and results be returned to each participant.
2. Short-term recommendation:
  - a. University participants return to their universities and encourage awareness of the need for scientific study of women/food/water through seminars, news media, group discussion, etc.
  - b. Participants, especially members of organizations, communicators, use whatever means available to them to make known the conference and especially the substance of the conference.
  - c. Encourage women to seek policy-making positions, and then in turn become supportive of other women becoming strong policy decision makers now and in the future.

3. 1982-92:

a. The U. S. adopt a national nutritional policy based on sound scientific evidence and work toward elimination of poverty pockets in the United States.

b. Agriculture policy in the United States be organized to meet the needs of the consumer and the farmer, rather than be the result of ad hoc legislation.

c. Urge Public Law 480 to be administered for real relief, rather than to reward our friends and punish our enemies of the moment.

4. 1992-2000:

a. To the United Nations Center on Multi-National Corporations-- control multi-national corporations so that their penetration of least-developed countries shall be more socially constructive, such as building health services, schools and other host government priorities.

b. Attempt to reduce military expenditure, both on the part of the developed and developing countries, so that money spent on the military can be directed to humanistic needs, such as food and water.

GROUP C PARTICIPANTS (Partial):

Rapporteur: June Gibbs

Group Leaders: Helene B. Kadane and Jacqueline A. Braveboy-Wagner

## Discussants:

Janet Poley  
Vicki Marcarian  
Mary Burton  
Helen Bratcher  
Helen Strow  
Irma de Ibarra

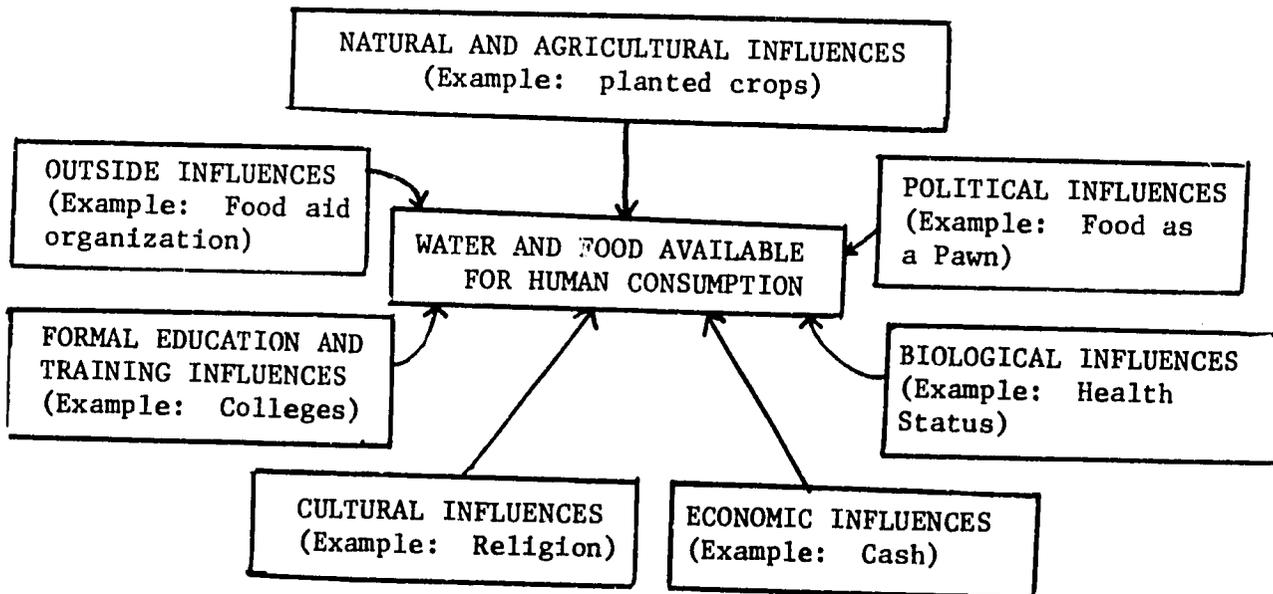
Margaret D. Doyle  
June Gibbs  
Entisar Sabbagh  
Helene B. Kadane  
Frances Johnson  
Jacqueline A. Braveboy-Wagner

GROUP D RECOMMENDS THAT:

1. To national governments and international organizations:
  - a. Establish a national food center (LDC and DC) using a multi-disciplinary approach to:
    1. Conduct research on the roles of women in all aspects of food production, distribution, consumption, storage, preservation, household management, and community services.
    2. Provide advice on nutrition policy.
    3. Collect more accurate statistics on morbidity and mortality.

Influences Causing/Preventing/Relieving Malnutrition

The national centers should examine the factors that affect the nutritional status of individuals, considering food and water available for consumption. Each influence is multi-factorial, and one example of each is provided in the following diagram:



- b. Orient education for boys and girls at all levels toward agriculture, nutrition, marketing, and home management information and skills.
- c. Remove barriers that prevent education for anyone.

- d. Implement the International Women's Year proposal on overcoming sex role stereotypes, for example, reduce stereotyping in the media, textbooks, curricula, and classroom and employment practices.
  - e. Remove barriers to women's right to own property and receive credit.
  - f. Assure all women a dependable and adequate diet.
2. To Women's organizations:
    - a. Develop local groups for training, etc.
    - b. Develop regional problem-solving systems for difficult daily tasks.
    - c. Develop national and international networks.
  3. To Non-Governmental organizations:
    - a. Advise governments.
  4. To Training/Education Agencies:
    - a. Provide information to family units.
    - b. Assure that both men and women be on training teams.
    - c. Quantify goals; specify time frame.
  5. To Economic policy makers:
    - a. Assure equal pay for equal work.

GROUP D PARTICIPANTS (Partial):

Rapporteur: Sandra Anderson

Group Leaders: Maryanne Dulansey and Miniroo Esmaili

Discussants:

Simini Meydani	Melinda Cain
Maria-Teresa Castano	Sonya Salamon
Maria V. Forero	Hadley B. Smith
Chris Winters	Mila Brooks
Barbara Schick	George Warner
Sandra Anderson	Susan Bliss

## Discussants (continued):

Saadet Sarica  
Betty Elliott  
Patricia Swan  
Coralie Turbitt

Lora Langworthy Miller  
Pam Sandoval  
Maryanne Dulansey

GROUP E RECOMMENDS THAT:

1. To development practitioners: That an integrated, multilevel approach to intervention in regard to food and water be directed to the individual, the family unit in its various forms, the local voluntary associations and the agencies of the host government.
2. To development practitioners: That food aid programs be provided in such a way as to complement host country initiatives in production, marketing and consumption.
3. To the aid donor agencies and educational institutions in the host country: That attention be directed to both the education of women and the entry of women as professionals and para-professionals into decision-making positions in areas of food, health and nutrition in the host country.
4. To AID: Support the development of indepth social science evaluation measures to show:
  - a. the impact of food programs on the well-being of families in general and on women in particular, and
  - b. the impact of women's participation in such programs.
5. To U.S.-supported agencies: That interdisciplinary social science components be instituted in the formulation and evaluation of all projects as to their impact on women.
6. To donor agencies and specifically private voluntary organizations: That a coordinated effort be directed in regard to projects on food and women within host countries.
7. To Title XII Universities: Sponsor issue-oriented seminars to examine the impact of food exports to the Third World on the well-being of women and men in those societies and on the well-being of the United States farm community.
8. To Conference Participants from Third World Countries: That conferences on women and food be organized with participation of local Ministries (Health, Agriculture, Community Development, Local Government, etc.), representatives of donor agencies, PVOs, universities, women's organizations, religious bodies and interested individuals for the purpose of exploring the problem of food and nutrition in its various aspects and to recommend solutions; and that a search be instituted to find funding for such conferences.
9. To the organizers of the conference: That feedback on the conference be shared with all participants.

10. To the Title XII Board: That half the Board be composed of women.

GROUP E PARTICIPANTS (Partial):

Rapporteur: Helen Henderson

Group Leaders: Ramona Marotz-Baden and Peter Hayward

Discussants:

Pia Montoya	Jim Thomas
Helen Henderson	Muriel Martinez G.
Mary C. Rainey	Patsy Graves
Sharmila Fernando	Donald R. Yeaman
Mary Darling	Peter Hayward
Ramona Marotz-Baden	H. W. Dodge
Donal D. Johnson	Susan Johnson

GROUP F RECOMMENDS THAT:

1. Educational projects for women be stressed and include, but not be limited to:

- a. Increasing self-awareness generally and in primary (K-3) grades of school,
- b. Formal education,
- c. Professional development,
- d. Skill development,
- e. Literacy,
- f. Nutritional education, particularly of nutrients in local diets known through baseline studies, and
- g. Non-formal education.

2. Increased participation of women in development projects at all levels, including, but not limited to:

- a. Identification,
- b. Design,
- c. Implementation
- d. Evaluation, and
- e. Follow-up.

We stress the importance of the involvement of host-country women.

3. All appropriate development projects be designed to increase women's access to improved income, preferably using traditional and indigenous means of production in recognition of the fact that one of the major barriers to improving the status of women and basic nutrition is absolute and increasing poverty of women.

To be directed toward:

AID,  
 UNDP and other specialized UN agencies,  
 World Bank,  
 Asian Bank,  
 InterAmerican Development Bank,  
 African Development Fund,  
 Voluntary Agencies, and  
 OPIC

4. Development projects be increasingly targeted toward women. Suggested areas of concentration include, but are not limited to:

- a. Appropriate technology
- b. Indigenous food projects
- c. Alternative projects, such as cooperatives, and
- d. Increasing the efficiency of traditional production systems.

Projects should be:

Collaborative  
Interdisciplinary, and  
Include women at all levels.

To be directed to Funding Agencies.

5. Funding preference to be given to indigenous food projects, in recognition of the availability of local food products and their adequacy to provide a nutritious diet.

6. Individual Third World countries be encouraged to develop national nutrition and agriculture policies which would provide adequate diets for women and children using indigenous foods. These policies would dictate use of national resources to provide an adequate nutritious diet from locally available foods.

To be directed to:

International Aid Agencies,  
Organizers of international forums,  
Private agencies,  
AID, and  
USDA.

GROUP F PARTICIPANTS (Partial):

Rapporteur: Ann Bunzel Cowan

Group Leaders: Sandra Voll and Grace McCullah

Discussants:

Keith McFarland  
Bonnie L. Kittle  
Sandy Voll

Dorothy Fischer  
Victoria Thompson  
Eleanor Ramsey

## Discussants (continued):

Bonnie Ann Stewart  
Aureline D. Buck  
Gail House  
Edna Bay  
Ann Cowan  
Amara Betanco  
Bonita Wyse  
Grace Finne  
Marca de Sousa

Mary Aloyse Doyle  
Mary Jean McGrath  
Phyllis C. Barrins  
Barbara Howell  
Yvonne Wise  
Grace McCullah  
Constance J. Freeman  
Carol Parr

GROUP G RECOMMENDS THAT:

1. Development agencies integrate women into top administrative positions, and AID place needs of women in high priority as it implements its funded programs.
2. Women's agencies and organizations, with agency funding, develop an international women's network system for the purpose of:
  - a. Sharing skills to insure the involvement of women at all levels of decision making in member countries
  - b. Educating each other on common problems
  - c. Seeking joint solutions to problems, and
  - d. Promoting the world plan of action, which emerged from the IWY Conference in Mexico City.
3. To Title XII University Deans:
  - a. Include women on Title XII project planning committees,
  - b. Include information on alternative/multiple development strategies in courses, and
  - c. Provide greater opportunities for independent study and travel abroad as an integral part of training for development planning and international skills acquisition.
4. Universities include the role of women in analysis and evaluation in education programs, information analysis, and exposure to a variety of alternate development strategies, such as, socialist and quasi-socialist.
5. Research relating to the Third World problems be done in the Third World and with Third World involvement in design and implementation to a far greater extent than is now being done.
6. To AID: That any programs which directly or indirectly aid the activities of multinational corporations that extract food resources be discontinued.

GROUP G PARTICIPANTS (Partial):

Rapporteur: Frances Miller

Group Leaders: Dessima Williams and Mary K. Simmons

**Discussants:**

Dessima Grenada  
Mary K. Simmons  
Frances Miller  
Catherine Cloud  
Cary Fowler  
Marvis Knospe  
Olive Twining  
Patricia Rengel

Jeanne North  
Jessma Blockwick  
Pauline Paul  
Marjory Brooks  
Alison Hughes  
Joyce R. Mortimer  
Marina Fanning

GROUP H RECOMMENDS THAT:1. To all donor agencies:

Existing and new programs be reviewed on a project-by-project basis to evaluate their impact on women, and changes made as needed to insure women an equitable share in the program benefits.

2. To any university or agency which administers an international program:

Decision makers be made aware of the roles of women. Training or orientation of anyone working in international programs should include women teaching about the concerns and impact of such programs on the women in the countries involved. (This type of training or orientation should be conducted by women).

3. To top-level decision makers:

Planners, administrators, and in-the-field personnel should be sensitive to the cultural patterns and socialization processes of the recipients of individual projects.

4. To administrators of donor agencies and governments:

Women in development projects should be designed to provide the capability for self-sufficiency in the specific development sector within the recipient's country.

GROUP H PARTICIPANTS (Partial):

Rapporteur: Linda Dietrich

Group Leaders: Mary Neville and Cao Van Than

Discussants:

GROUP K RECOMMENDS THAT

1. The results of this conference be publicized, possibly with funding from Ms. Fraser/A.I.D.
2. Project proposals differentiate between physical and social constraints and include consideration of both in proposals.
3. Project designs and evaluation be based on real knowledge of the local situation gained through village-level and/or baseline studies.
4. Evaluation component be included in projects and studies from the beginning and evaluations be based on baseline data.
5. Foreign aid reinforce local self-reliance whenever possible.
6. Priority be given to nutrition education. This should include: breast feeding, weaning foods, home improvement (kitchens, waterplaces, and bathrooms), vegetable gardening, and small-scale animal breeding. Nutrition education should be directed not only to women but also to men, since they are in an important position in matters of food provision for the family. Nutrition programs must be such that they can be easily adopted by low income groups.
7. A project be started to gather examples of attitudinal changes that have occurred as by-products of development projects to be used by new projects which seek to affect attitude changes directly.
8. In-country women with knowledge of subject matter be included at every level of project formulation.
9. Donor agencies follow Affirmative Action guidelines and put women in visible and responsible positions as role models in developing countries.
10. Radio and television programs be developed to teach nutrition at an understandable level in local languages.
11. Village-level training identify community structures (institutional arrangements) through which women can work for change, not just teach basic techniques and practices. For example, it should describe the structure, procedures, and policies of the Ministry of Agriculture, as well as providing planting information.
12. Communication in programs at every level be made effective in planning, dissemination, and evaluation.
13. Economic studies take account of the non-market value of women's work in the household.

14. New projects complement traditional support networks for women, not destroy them.

15. Aid be in the form of technicians who will work with people in the fields and not only experts to sit in offices and generate reports.

GROUP K PARTICIPANTS (Partial):

Rapporteur: Nancy Ferguson

Group Leaders: Margaret Hickey and Ratiba Saad

Discussants:

Norma L. Munguia	Gordon Johnson
Ratiba Saad	Fatima Huraibi
Milo Cox	Julie Weissman
Estrella F. Alabastro	Nancy Ferguson
Andrea Mohn	Denise Soffel
Carolyn Niethammer	Margaret Fogam
Mallica Vajathron	Mary Futrell
Doann Houghton-Alico	Margaret Hickey
Teresa Areas Cabrera	Kathleen Rhodes

GROUP M RECOMMENDS THAT:

1. Development agencies consider the health care impact of development projects.
2. U.S.A.I.D./World Bank/UNESCO develop a system to facilitate exchange of information on infant feeding practices for Third World countries.
3. Development agencies consider the use of technical consultants from Third World countries for work in development projects in other Third World countries.
4. Development agencies involve knowledgeable, community-based persons in all facets of the planning and implementation of projects in Third World countries.
5. Development agencies engage women and men in development teams because projects impact on both men and women.
6. Aid donors/World Bank/WID/AID/UNESCO:
  - a. Document existing food networks and roles of women in food systems in each of the Third World countries,
  - b. Make this information accessible through appropriate dissemination processes, and
  - c. Consider this information in the planning and implementation of all projects.
7. U.S. aid should not be politically oriented, and only rarely withheld because of a country's political persuasion.
8. The U. S. State Department develop a broad-based constituency to support development efforts by AID.
9. International agencies give advice and technical assistance to facilitate local efforts to solve problems.
10. All aid projects be directed primarily toward encouraging local food production, and money be seen as the facilitator of local incentives, rather than a solution in itself.

GROUP M PARTICIPATIONS (Partial):

Rapporteur: Douglas Caton

Group Leader: Margaret Valadian

## Discussants:

Mrs. Florence Oblo	Ruth Baldwin
Susan B. G. deGraft-Johnson	M. R. Maldauado
Nancy Garcia	Ligia Martinez
Kathleen McFarlan	Beatriz de Ramirez
Mary Roodkowsky	Maria T. L. Ginne
Charles W. Basham	La Rose Ketterling
James H. Wood	S. Alvarez de Beceluli

GROUP NWOMEN FROM DEVELOPING AND UNDERDEVELOPED COUNTRIESI. Statement about Women and Development:

1. We recognize the programs for women in development are valid and necessary, but the biggest problem is one of poverty and lack of economic power. We want to make clear to the Conference that, while we can, and do, support programs specifically for women, we want to emphasize that:
  - a. The real problem of development is poverty for some created by uneven distribution of resources, nationally and internationally, and
  - b. The woman in the Third World is an integral part of the family, and cannot be separated from men, women and children. The family must be held as a unit.
2. We also recognize that in some countries women are awarded second-class status. We do not condone this second-class oppressive status, and support programs to raise women to an equal status with other sex and groups in the home, in the marketplace, and in the society at large.

II. Response to the Conference:

1. We applaud the effort of this conference as the first step in bringing Third World women together with First World women to work for an improved national and international social order.
2. We were disappointed with the small number of Third World persons present at the conference.
3. We believe that we should hold another conference to reflect Third World inputs at a broader level, e.g., food producers.
4. We are disappointed with the conspicuous absence of persons from socialist countries, e.g., Cuba, Mozambique, Tanzania, Sri Lanka. We believe that we can and should learn from a variety of ideological perspectives and development strategies.
5. We believe the conference, regrettably, has adopted a very narrow view of the real problem of malnutrition.
6. We believe that this conference has failed to define the role of women in food production.

III. Recommendations:

1. The intended audience of development programs should be an integral part of all the phases of a given project.
2. We support the inherent principles of the New International Economic Order (NIEO). The LDC's should benefit from the international trade system, and we recognize the NIEO as a medium through which this international benefit should come. We support and want to fight for NIEO with our brothers.
3. That more Third World persons should be integral parts of the project teams providing aid to developing countries, so as to draw on Third World development expertise throughout the world.

GROUP QRESEARCH INTEREST GROUP

Ten participants of the Conference have met and make the following recommendations:

TO: Title XII Universities, donor agencies, and conference participants

GIVEN: that women worldwide are responsible for assuring the nutritional health of their families,

GIVEN: that women and particularly Third World women take a major responsibility in generating income for their families and thus secondarily to support their nutritional needs,

GIVEN: that women in the Third World play a predominant role in the production, distribution, and processing of food for their families' consumption,

WE RECOMMEND THAT:

1. Women be the specific subject of, and participants in, research efforts leading to projects and policy changes associated with food and nutrition.
2. Because of the multiplicity of social and economic factors bearing on food production, distribution, and consumption, research be conducted by interdisciplinary teams of researchers.
3. A systematically-integrated approach be directed towards the collection and analysis of data and search for development alternatives.
4. This research approach include both micro and macro levels.
5. Research and project planning, implementation, and evaluation involve collaboration between research teams and the people involved--at all levels: national, regional and local.
6. A principle of reciprocity be observed by:
  - a. Placing copies of research materials in the host country.
  - b. Utilizing indigenous language speakers at a higher level of participation or providing language training for project personnel. Both linguae francae and local languages must be considered, depending on the length of the project.
  - c. Providing some benefits to collaborative personnel towards their own professional development.

- d. Making research results available to the people involved in a form accessible to them.
7. Methodologies be developed to take account of differing cultural perceptions among researchers and subjects, and that local alternatives be considered in any generation of solutions.

Research carried out according to these principles is itself a development process and an essential form of mutual communication. It develops a common capacity to analyze and master situations and provides a broader perspective that incorporates the views of all participants.

SUBMITTED BY:

Cynthia Anson  
Edna Bay  
Gary Nabhan  
Entisar Sabbagh  
Ann B. Cowan

Peter Hayward  
Jeanne Foote North  
Joyce Mortimer  
Helen Henderson  
Mary C. Rainey

GROUP RCID FACULTY REPORT AND RECOMMENDATIONS

Nineteen individuals from the CID universities met and unanimously approved the following resolutions:

We recommend to the CID Board of Trustees that:

1. A task force be initiated, composed of women from each CID university to explore the role of women and of families in projects relating to food and water in the Third World;
2. That at least one representative from the task force be appointed to the CID Board of Trustees;
3. That one of the charges of the task force be to perform an impact assessment of the effect on women and families of each CID project.

HUNGER PROJECT RECOMMENDS THAT:

The people of this conference commit themselves to work towards the elimination of hunger and starvation within two decades.

submitted by Kathleen McFarland

STATEMENT ON THE EFFECTS OF FARM POLICIES ON THE FARMER AND CONSUMER

Susan Ferry, Utah State University: Home Economics

The cheap food policy of the United States is forcing the American farmer off the land. The time is near that, because of this policy, the problems of the U.S. and the world food problems will be beyond solution. The U.S. consumer must be educated to pay more, or the farmer will be driven off the farm and, in turn, the countries that seek U.S. aid will suffer along with the American people.

The consequences of this policy lead to an unsatisfactory outcome for the farmer and the population as a whole, and is a poor model for export.

## ETHIOPIAN WOMEN'S WELFARE ASSOCIATION: STATEMENT

The Ethiopian Women's Welfare Association thanks the Consortium for International Development (CID) for the invitation to participate in the Conference: "The Role of Women in Meeting Basic Food and Water Needs." The Association greatly regrets that no delegate is able to attend the Conference, but the officers would like very much to present the following statement:

The primary purpose of the Association since its founding in 1934 has been to help Ethiopian families to solve some of the problems they face. Realizing that women share in the great responsibility for the development of a nation, the EWWA focused its attention on women, i.e., local midwives, the promotion of education in its six elementary schools, the Adult Education School for Women and, finally, women's programs in its 33 Branches located throughout the country.

Many programs have recently been referred to the concerned Ministries, and the Association is now concentrating solely on women's programs. Understanding that the main cause for women's oppression is their economic dependence, the Association has taken economic liberation of women as its main objective. Economic development will diminish poverty, which is the main problem women and their families have to face. We consider that other problems such as poor health, poor nutrition and little education are, in many cases, a consequence of poverty. We therefore concentrate on economic development, of which our new Adult Education Program is an integral part.

Previously, the Association programs focused on many problems, such as poor nutrition, which affects the physical and mental growth of the children, which they pass on to their children as adults. We tried to solve some of these problems by providing milk to the mothers and children who came to our MCH clinics, and we taught them about better foods. We introduced fafa, a low-cost Ethiopian food for infants and children, and taught women how to prepare and use it. In our food and nutrition programs, we worked in close cooperation with the Ministry of Health, the Ministry of Education, the Ethiopian Nutrition Institute (which also provides us teaching material), W.H.O., U.N.I.C.E.F., and others.

At the Adult Education School for Women, nutrition was one of the main subjects. Education was given on Ethiopian food, with information

on how to prepare and cook it in a nutritious manner. Non-Ethiopian food was also introduced insofar as it could serve as a supplement to the traditional food and was available at reasonable prices. Nutrition is a very important subject in the new curriculum of the present Women's training center.

We discovered that even though we educated the women in Addis Ababa and the EWWA Branches about nutrition, their condition and their families' condition did not change much. Infants and small children gained some weight when we provided them with milk and fafa, but the weight immediately went down when we had to stop these programs due to lack of supply. Another problem was that after the women got to know about proper food via the educational programs, they became very unhappy and frustrated when they could not afford to buy the proper food. Fafa and carrots are cheap in absolute terms, but are too expensive for those who are extremely poor. The women felt guilty because they knew why their children were sick and dying, but were unable to solve the problem because of poverty.

For the above reasons, therefore, the Ethiopian Women's Welfare Association is absolutely convinced by their practical experiences that a problem such as poor nutrition can be solved only if poverty is battled first. Feeding programs need to be combined with economic development programs. Then money will be available for the families to buy proper food, and educational programs can provide advice on what should be bought, according to typical local circumstances such as living area, climate, etc.

To promote economic development, the Ethiopian Women's Welfare Association is very actively involved with the production and marketing of Ethiopian handicrafts, using the skills the women already possess. The EWWA is also studying the potential for the production of certain items imported from abroad which could be produced on a small-scale, at the local level.

The Ethiopian Women's Welfare Association sincerely hopes that battling poverty by the above-mentioned activities will be the right method, and by them the Association hopes that its efforts will make a great contribution to the country.

The Ethiopian Women's Welfare Association fully supports the Women and Food resolution endorsed at the Rome World Food Conference in 1974, as mentioned in the announcement for the conference to be held in Tucson, Arizona.

AN ILLUSTRATIVE DEVELOPING COUNTRY STRATEGY FOR MEETING BASIC FOOD/  
NUTRITION NEEDS

John L. Fischer

Coordinator of African Programs, CID  
Agricultural Economist  
University of Arizona, Tucson  
Conference Initiator and Interpreter

SUMMARY OF  
AN ILLUSTRATIVE DEVELOPING COUNTRY STRATEGY  
FOR MEETING BASIC FOOD/NUTRITION NEEDS

John L. Fischer

The developing countries cannot provide access to the basic human needs for anywhere near all of their people very soon unless new approaches to development are utilized. The resources that would be required are just not available.

The Basic Human Needs (BHN), or Basic Services, approach is being proposed as an alternative approach. It differs from a strategy pursuing a "growth with equity" goal in that the people themselves are regarded as the principle resource for their own improvement. The BHN approach makes the goods and services people need to enhance the quality of their own lives the focal point for the national planning/policy-making process, and producing those goods and services the engine for economic growth.

The OECD and several other international agencies are now pushing the BHN concept very hard; but many developing country leaders are being very cautious about embracing it. The vagueness about how the BHN bundle of goods and services is to be produced and delivered and whether the approach is economically viable are critical issues for which satisfactory solutions have not been provided. This paper provides an illustrative strategy which is responsive to the critical issues; thus, should be more acceptable to developing country leaders. Priorities for activities and policy/project guidelines are provided.

The strategy makes meeting basic food/nutrition needs (includes readily-accessible, clean drinking water) the first and highest priority national thrust. The reasons are: hunger and malnutrition are so widespread, affecting about one billion people; a high percentage of the poor--those bypassed by previous strategies--are affected; most countries have the natural resources required; and food production/distribution readily lends itself to becoming a self-generating engine for economic growth.

The guidelines for preparing or revising a country strategy begin with the existing institutional and physical situation as the base, and then, utilizing only the resources and institutions readily available, move step by step forward toward the goal of all individuals in society having a reasonable opportunity to meet their daily food/nutrition needs.

Activity priorities in the strategy are:

FIRST---REVISING AND DEVELOPING POLICIES AND INSTITUTIONS WHICH WILL INVOLVE ALL PEOPLE, ESPECIALLY THE POOR, IN THE PROCESS OF ECONOMIC DEVELOPMENT, STRESSING FOOD PRODUCTION, PROCESSING, AND MARKETING FOR LOCAL CONSUMPTION.

Developing proper policies and institutions must be given top priority in terms of time and effort because without them, no other investments and initiatives in development will yield lasting benefits of the type desired. Developing appropriate policies and institutions includes, but is not limited to:

1. National food/nutrition assessment and policy planning: Nothing is likely to be accomplished without a plan. Included is goal setting, stock taking, and policy formulation leading to adequate daily diets for all individuals in the country. A willingness to apply human rights/human needs principles to food must emerge;
2. Decentralization of planning and program implementation: Of vital importance is national and local machinery wherein government practitioners and the people may consider the current and prospective food situation and prepare projects and initiate activities which will reach those bypassed to date. The strategy embraces a regional and area approach;
3. Additional national investment in the agri/rural sector: Food production, processing, and marketing for local consumption in the areas where the bulk of the hunger prone are located is called for. To do the job will require:
  - a. Improving national agri/rural sector and food industry assessment and management capabilities. Specific policies, programs and projects are needed to reach clearly identified clientele, ranging from workers to commercial farmers;
  - b. Creating special programs directed toward the subsistence subsector, where the bulk of the hunger prone are found; and
  - c. Shifting selected agri/rural sector development activities, including input production, food processing and marketing services which will generate personal income, to those areas where the poor are located, urban or rural.
4. Creation of policies and institutions to meet the food needs of those in society who cannot become viable buyers or providers of their own food needs; and
5. Revision of the educational system to insure it serves basic human needs objectives.

SECOND---EXPANDING NATIONAL CAPACITY TO DEVELOP, ASSESS, AND DISSEMINATE: (A) FOOD/NUTRITION INFORMATION, AND (B) APPROPRIATE TECHNOLOGIES, WITH PRIORITY TO FOOD PRODUCTION AND MARKETING THAT REQUIRE LOW-COST INPUTS, CONSERVE ENERGY, AND ARE SIMPLE TO MANAGE.

The basic food/nutrition needs of large numbers of people are not being met because so many families lack the means to buy or grow the food they need, or do not know what they, as individuals, can do that will make a material difference. Increasing knowledge and the introduction of technology appropriate to their physical, social, and economic conditions are required. Therefore, the strategy calls for:

1. Research and development institution building: Interdisciplinary, fully participatory national food/nutrition assessment and dissemination of information is required, as is the development of appropriate technology for small farmer/pastoralists, for the local food industry entrepreneur, and for community and household food managers;
2. Creating effective outreach (extension) systems, and
3. Relieving the trained personnel constraints.

THIRD---BROADENING ACCESS TO NEEDED INPUTS, INFORMATION, FINANCING, AND MARKETS FOR FOOD PRODUCTS, ESPECIALLY FOR THE SMALL FARMER AND SMALL PASTORALIST.

The poor in the agri-rural sector have not had adequate access to inputs and supportive services they need if they are to become more productive. Providing the inputs and services presents great opportunity for local industry and trading, and job opportunities in the urban areas. The strategy to broaden access calls for:

1. Special programs and projects for those in the subsistence subsector,
2. Increasing input availability,
3. New credit programs, and
4. Greater emphasis on marketing/storage/processing, especially at the local level.

FOURTH---CREATING SUPPORTING PHYSICAL INFRASTRUCTURE.

Infrastructure is recognized as a constraint to people meeting their basic needs; however, using it as a catalyst for development without projects and policies specifically designed to impact upon those in need of help, i.e., bypassed in the past, is rejected. The strategy provides for an integrated approach, including:

1. Improving the transportation system, especially rural roads, with priority for facilities which stimulate flows and sales of food making a material difference to food-short persons,
2. Increasing input production locally,
3. Creating national storage systems (central storage), and
4. Orderly development of water resources.

AN ILLUSTRATIVE DEVELOPING COUNTRY STRATEGY  
FOR MEETING BASIC FOOD/NUTRITION NEEDS

John L. Fischer\*

I. INTRODUCTION

A. The Objective of the Paper

In May 1977, the Agency for International Development (AID) made a grant to the Consortium for International Development (CID) to provide partial funding for a Conference on Women and Food, e.g., the role of women in meeting basic food/nutrition needs in developing countries. As a point of departure, the Conference was to include three\*\* workshops to review issues and consider courses of action to apply in the implementation of the U.N. World Food Conference Resolution on Women and Food (Rome, 1974).

From the very beginning, the Conference planners recognized that for the Conference to make a significant contribution in the developing countries: (1) their strategies for development had to be revised, and (2) projects which impacted on those people not getting an adequate diet, and involving women as both resources (inputs) and as beneficiaries had to be prepared. If this were to happen, there had to be Conference follow through, and it was unrealistic to believe what was needed would just "happen." Therefore, the AID grant called for the preparation of a brief illustrative developing country strategy for meeting basic food/nutrition needs of all people, taking into account the role of women.

The resulting "illustrative strategy" set forth in this paper is not a prescription for any developing country. The idea is rather to provide guidelines for strategy development, policy formulation and project proposals which will have a significant impact on hunger-prone people. The major objective of the paper is to provoke discussion and

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\*/ Special appreciation is extended to Ms. Frances Brigham Johnson for many helpful suggestions and constructive criticism. Viewpoints expressed in the paper are the full responsibility of the author, and do not represent official policies of AID or CID.

\*\*/ Conference planners anticipated an attendance of 40 to 50 at most; therefore, planned three workshops. Actual attendance exceeded 250, and ten workshops were held.

dialog concerning national goals, and project and policy options to achieve them. In a sense, the illustrative strategy "points the direction" a developing country may have to proceed if it wishes to provide full opportunity for all people to meet their basic food/nutrition needs.

The approach used in presenting the illustrative strategy is to first describe the international development environment (Part I, B & C), focusing on the "new" approaches to development; then show the situation many developing countries face, i.e., present a more-or-less "typical" situation (Part II); and finally, insofar as possible, use Parts I and II as the foundation for applying the general conclusions of the Conference. Wherever practical, problems are identified and suggestions made for both the developing countries and development organizations.

B. The Basic Human Needs Concept: Background, Rationale and Problems

During the First Development Decade, most developing countries, with international aid agency support, pursued development strategies which concentrated their efforts on achieving rapid economic growth, generally with highest priority going to industrialization.<sup>1</sup> The planners and policy makers involved believed that increasing employment and income in industry would benefit all people, and governmental services would be extended to include rapidly increasing numbers of people as economic growth occurred. Goods-producing, and service sector institutions were modeled on those in the developed countries.

By the early 1970's, it had become painfully clear that the strategies pursued by the developing countries during the First Development Decade were not raising the level of living of large numbers of people. It is discouraging that half, or more, of the people in developing countries are still little, if any, better off than they were in 1960.<sup>2</sup> The bulk of the people in the Third World are contributing little to national development, and many have become heavy burdens to themselves, their families, communities and societies. Some three-quarters of the developing world population is still not receiving minimum acceptable levels of basic food and nutrition or education and health services.<sup>3</sup> In the Tucson Conference on Women and Food, Calloway, Cox, Estrella, Howell, Ibarra, Sarica, Schick, this writer, and others documented the rather sad state of development in general, and food/nutrition in particular, in the developing world.

Looking to the future, many (if not most) developing countries will be unable to provide ready access to the basic human needs for anywhere near all of their people very soon unless there are major breakthroughs in approaches to development. The problem: "the resources are just not there."<sup>4</sup> The answer to the basic human need situation in the developing world is not to pursue strategies which accelerate or intensify what was being done in the 1950's and 60's. New approaches to development are required.

While the current situation is indeed critical, the new approaches which are needed may already be known. There are areas where in the past few years the people themselves have become the principal resource for their own improvement, and good progress is being made. The incidence of malnutrition among large numbers of the populace is apparently being reduced, and improved health services and education extended to greatly increased numbers of people. The experience is limited, but there is good reason to believe it is possible for the people themselves to become a self-generating force for economic growth and development with minimal initial program expenditures and long-term total costs within the financial capabilities of their respective communities and nations.

The approaches which appear so hopeful are what are called the "basic human needs" (or "basic services") approach, and the "integrated rural development" approach. The Tucson Conference was, in a sense, convened to explore the potential and the problems of these approaches, with special emphasis on the food/nutrition situation and the role of women in improving it. Both approaches generally involve women more fully as a resource in the development process than did earlier approaches, and there is considerable evidence indicating they also impact more favorably on women as beneficiaries.

Based on the above rationale, i.e., the recognized inadequacies of earlier era strategies and the hopeful signs appearing in some countries and areas, the World Bank, the Organization for Economic Cooperation and Development (OECD), the United Nations, and several other international organizations are now strongly encouraging developing countries to make the basic services approach the hard core of their development strategies.<sup>5</sup> A 1976 General Assembly of the United Nations resolution explicitly:

(1) "Urges the developing countries to incorporate the basic services concept and approach into their national development plans and strategies; ...and

(2) "Urges the international community to recognize its responsibility for increased cooperative action to promote social and economic development through its support of basic services at the international and at the country programming level."<sup>6</sup>

The United States Agency for International Development (AID) has not moved as aggressively as has OECD, the World Bank, or the United Nations family of agencies in encouraging the adoption of the basic human needs (BHN) approach. However, in recent months, AID has funded an increasing number of basic services type projects. AID staff, especially some involved in policy development and coordination, have recognized that the development community is indeed faced with inadequate progress toward generally accepted measures of success in socio-economic development in the developing countries, and they are participating actively in the search for new approaches to development, including much emphasis on evaluating and refining the basic human needs concept. The

works of D. M. Leipziger and N. H. Lewis (unpublished in-house report entitled, "A Basic Human Needs Approach to Development"), and Paul Streeten ("The Distinctive Features of a Basic Needs Approach to Development," mimeo, 1977), are especially relevant.<sup>7</sup>

The private development agencies and organizations are generally involved directly with people in developing countries at the grassroots level, so they are aware of the great need for basic needs and services, and support the approach. However, they have not traditionally taken an especially active interest in monitoring or guiding national level planning or policies.

Encouragement from OECD, the World Bank, the United Nations family of agencies and others has not led to the wholesale utilization of the basic human needs approach by developing countries as an alternative to what they have been doing. Most developing countries are proceeding with extreme caution, and a few developing country leaders appear to be hostile toward it.

One reason for developing country caution vis-a-vis the BHN approach is the variation in thinking among scholars and policy advisors concerning what the concept encompasses is so great it is confusing. In general, about all that can be said at this time is that all advocates follow the general principles outlined in the "basic human needs approach" first developed by representatives from labor, industry and government at an ILO conference in 1976.<sup>8</sup> In it, the ultimate goal of developing country policies and projects is no longer the achievement of maximum aggregate economic growth, but neither is it growth with appropriate concern for equity, which many developing country planners and policy makers have viewed as a logical alternative to their earlier strategies. Rather, the 1976 conference called for the provision, through income generation, transfers, and public services, of a "basic human needs" bundle of goods and services to the populace. How the bundle was to be produced and delivered was left vague and uncertain, and remains so to the present.

A second reason for developing country caution is the people in strategic positions in terms of the allocation of scarce governmental budget resources (Ministries of Finance and Planning Commissions) are not yet convinced the basic services approach is economically viable in the long run. They suspect that the approach will generate tremendous increases in demand for governmental funds to provide social services, and it has not yet been demonstrated it can generate sufficient income to pay for them. Having been "burned" by community development programs creating demand for services beyond the capability of governments to pay for them in an earlier era, they are, quite logically, very cautious. In their judgement, the basic human needs approach has moved from an abstract concept to a policy issue before it reached a stage of conceptualization which logically permits them to embrace it wholeheartedly. How BHN are to be paid for remains an open question.

The developing country concerns about the BHN approach cannot be ignored. They are legitimate. In the preparation of the illustrative

strategy beginning with Part III, the concerns are confronted and overcome.

One potential for overcoming many of the developing country concerns about the BHN approach is to make extensive use of what has come to be called the "integrated rural development" (IRD) approach in implementing it. IRD is, of course, limited to the rural areas, and it differs from the basic human needs approach by stressing the coordination of activities, including major emphasis on productivity-increasing activities, along with improving services.<sup>9</sup> A good IRD project would include the productivity-increasing element which some critics fear is likely to be shortchanged in the BHN approach, and has kept some developing country planners and policy makers from wholehearted acceptance of it. In Tanzania, Pakistan, and several other countries stressing basic human needs, after considerable experimentation, top priority is now given to increasing productivity, especially in agriculture. In commenting on a Tanzania project, Weaver and Blue note, "The emphasis of the social services component is on increased productivity, with these services oriented toward things that will increase agricultural yield and which can be paid for by the villagers themselves."<sup>10</sup> In the discussion which follows no attempt will be made to definitively differentiate between the BHN and IRD approaches because they are so compatible; however, that differences do exist is recognized. The internal rates of return on projects which combine productivity increasing rural development activities with the provision of basic services are more likely to be favorable, thus the projects be bankable with the World Bank, and possibly other external funding sources.<sup>11</sup>

### C. Women's "Special Place" in Meeting Basic Food/Nutrition Needs

The failure of women to be relieved of much of their traditional drudgery, and the fact they have received disproportionately fewer benefits from economic growth than men in the developing countries were factors of considerable importance in reaching the conclusion the First Development Decade strategies were inadequate; hence, encouraged the development of the BHN approach. In the First Decade strategies, "women power", i.e., women as a resource, was not given adequate attention. Women have always played a very important, but unrecognized role in producing food and local marketing. The success of any developing country's strategy to eliminate hunger and malnutrition may hinge on whether it utilizes the energies of women, the hitherto largely hidden, but dynamic force in so many Third World survival economies. With each passing day, an increasing number of development strategy leaders are concluding it will be only by the full participation of women in food production and marketing that the world can hope to eliminate poverty and hunger in the near future.<sup>13</sup>

## II. THE FOOD/NUTRITION SITUATION IN DEVELOPING COUNTRIES--A SYNTHESIS

The Tucson Conference reports and other sources of information reveal the food/nutrition situation varies greatly among the developing countries, but two things they generally have in common are: (1) they are poor, and (2) many people in them are not meeting their daily dietary needs.<sup>13</sup> According to a recent World Bank report cited in a paper distributed before the Conference, almost a billion of the world's people suffer some degree of mal- or undernutrition, and most of them live in the developing countries.<sup>14</sup> The Third World's population is literally exploding, and many new mouths to feed are added each day. Poverty, misery, and despair blankets from half to three-quarters of the typical developing countries' inhabitants. In many countries, life in the countryside, where 2/3 or more of the people live, has become too wretched to endure, and millions of people are abandoning the rural areas to head for the slums of the cities--seeking jobs that do not exist.

The Conference papers and discussion demonstrated that while we know much about famine and malnutrition, there is also much we do not know.

What do we "know"? We can generalize that the people most susceptible to famine, under- and malnutrition are: (1) rural residents with inadequate agricultural resources, and (2) recent poor migrants to the cities from the rural areas. We can also generalize that the risk from starvation tends to be a periodic phenomenon, usually associated with food or forage crop failure, which is weather based. We also know that post-harvest losses of food are high, and no one would starve if the money to buy food were available.

The rural sectors where hunger and malnutrition are common are generally characterized by systems where, utilizing a minimum of purchased inputs and relying on conventional wisdom-based technology, the typical rural family works a small tract of land or herds a few livestock.<sup>15</sup> The family spends many days of labor to produce a total food supply which will, under the best of conditions, provide only a meagre subsistence. The family that produces the food consumes most of it; therefore, the system may be, and generally is, referred to as the "subsistence subsector." There is little opportunity for off-farm employment to process or handle food.

Where rural people face the more serious food/nutrition problems, production is highly dependent upon weather and Acts of God. When drought, flood, or pestilence strikes, less than subsistence requirements are available, and people suffer. Frequently, the labor requirements for the subsistence crop are concentrated into a critically short period; therefore, production cannot readily be increased. In many areas, women provide most of the labor, and in some areas they are the key production decision makers as well. In vast areas, rapid increases in population and ecological degradation are reducing the resource base per family very rapidly; hence, the number of people on the very edge of survival is increasing. In these areas there may be large numbers of landless rural

people with few job opportunities.

Dual economics are emerging in many developing countries--a "modern economy" and a "traditional economy." Wages and salaries in the "modern economy" are high (relatively), and people who break into the "modern economy" have real incomes many times greater (sometimes ten to fifteen times) than those in the "traditional economy." The "modern economy" is generally urban based. The skills required to break into the "modern economy" are not those most rural folk have, and the number of jobs are very limited.

The dual economy concept can be applied to agriculture too. Dualistic agricultural economies have been emerging in most of the developing countries--a commercial subsector and a subsistence subsector.<sup>16</sup> The commercial subsector is often export based; however, in some cases it is providing much of the food for urban consumers. Yield per hectare, production per person/year of labor, and return to investment in the commercial sectors are frequently, perhaps generally, satisfactory. Development strategies of the First Development Decade tended to concentrate effort on the commercial subsectors.

In the urban areas it is the poor who go hungry. Many, and probably most, of the poor are recent rural-to-urban migrants; however, we cannot be certain of this. The crux of their food/nutrition problem appears to be the availability of more adequate basic services in the urban areas amid a lack of employment opportunities. Rushing to the cities without the skills required to get a job in a modern, progressive, commercializing and/or industrializing economy, the new arrivee is likely to be disappointed. Many live in slums which in developing countries tend to be new settlement areas--in contrast to developed countries where they are decayed areas.

In spite of all the problems the slum-dwelling, recent migrant family faces, the total family is likely to be better off than had they remained in a rural area. Education for the children and health services for all members of the family are likely to be much more readily available in the urban areas--even for the poorest of the poor. If the family was landless before migrating to an urban area, i.e., dependent upon labor only, it may find food cheaper to purchase in the city because of developing country policies designed to hold urban food costs down. Returning to the countryside is not a promising option for very many of the urban poor.

Five key terms highlight the developing country food/nutrition situation, and are extremely important in terms of strategy development. They are: (1) "majority," (2) "productivity," (3) "income," (4) "access," and (5) "technical and managerial skills."

The majority of the developing country people are dependent upon the agricultural sector, and a vast majority therein are in the subsistence subsector where productivity of the human resource is very low. In addition to those who have access to land in the rural areas, there are the

landless poor, struggling to find jobs where few exist, and often living an almost animal-like existence, largely on family, village, or some other form of welfare. Real income is extremely low, and the numbers of people affected are so great the average level of living in the nation cannot be satisfactory. The majority of those who have access to land lack access to production increasing inputs and supplies, and marketing services. Almost all--the landed and the landless--lack the skills and knowledge needed to become more productive. Low productivity is thus the first-order cause of rural, thus general, poverty; and this, in turn, is linked directly to malnutrition and famine.

The urbanite on the thin edge of survival is equally likely to be in a family where the productivity of potential earners is very low. The problem may be unemployment, underemployment, or employment in an occupation where the reward for work is low. Lacking income, people are unable to buy the food they need. Food is produced largely in response to a money incentive, and it flows to where the money is.

The other side of the food/nutrition situation is that those farm, pastoral, or urban families with access to resources, capital, and markets; and who have the managerial and technical skills needed, are productive, have generally obtained reasonable incomes, and face no serious food/nutrition problems.<sup>17</sup>

Finally, we know that meeting the food/nutrition needs of all people will not be easier in the near future. Most developing countries face continuing population explosions. Inadequate diets and hunger are related to high fertility and the large families typically associated with poverty in the developing countries. Family planning, which is considered only peripherally in this paper, definitely has a place in food/nutrition strategies.

What do we not know? Within the framework of the above generalizations, there is much we don't know. Many developing country planning agencies have very little hard data on what and how much people eat, especially in the rural areas. Knowledge into the specifics of who goes hungry and why is very scarce in most developing countries (as well as developed countries). All of the data needed to prepare a sound national plan for nutritional improvement are rarely, if ever, available.

Knowledge and experience concerning how people can feed themselves more adequately in specific locations, and how a nation can design self-help projects which will reach large numbers of people and still be within the administrative and financial capability of developing countries is very scarce. Where we have micro-studies available, we do not know how far we can extrapolate from them, because local conditions vary so greatly. Few, if any, developing countries have progressed to the point where they have adequately identified the hunger prone without further assessment and study to prepare a strategy which, building on the natural and institutional resources available, will move the country step by step forward to a condition where all people will have a reasonable opportunity to meet their daily dietary needs.

Developing countries vary greatly in terms of resources and infrastructure; therefore, they differ greatly in terms of their potential to take corrective action for food/nutrition problems. In view of what is required to take even meagre steps forward, the developing countries can be classified into at least three categories.<sup>18</sup> In category A we could place that large body of poor states that need only the will, time and technology, rather than large concessional capital transfers, to make progress. (Included in this category would be the OPEC countries, those nations whose development can be based on oil or other key natural resources, and nations such as Taiwan, South Korea, Mexico, and Brazil, which are developed enough to attract foreign investment and remain financially solvent while borrowing on regular commercial terms). In the countries in this category, most of those people not meeting minimum acceptable level food requirements could conceivably be turned into paying customers for food in the foreseeable future.

In category B we could list those developing countries that have some natural resources, basic economic infrastructure, and enough trained technical personnel and administrators to permit them to achieve self-sustaining economic growth in a decade, but in the meantime would need much financial help and special treatment by the First and Second Worlds. The ingredients in a sound strategy for development for countries in this category may be quite different from those in category A, or category C, which follows. For example, heavier emphasis may need to be on infrastructure, financed by grants or on very favorable concessional terms.

In category C we could list those countries which were rather cruelly, yet perhaps accurately, described by Time magazine<sup>19</sup> as being the "basket cases" of the world. These countries generally have few exploitable natural resources, including soil, water, and climate; minimum infrastructure; and technically-trained personnel and able administrators are very scarce. They will find it extremely difficult, if not impossible, to achieve self-sustaining economic growth and development in the foreseeable future, and they will need much assistance from external sources for many, many years. The bulk of the people in these countries will not likely become cash paying customers for all their food for many years.

There is little unity among the nations in categories A, B, and C, with the exception of a state of mind. Among them there is much frustration on the part of leaders and scholars who find it easy to be antagonistic toward the First and Second Worlds. They recognize their countries need help, and they want it; yet they have not been able to articulate their needs clearly, or to develop strategies for development which will make growth and development self-sustaining while providing all, or even the vast majority, of their people with minimum acceptable levels of basic needs and services. An illustration of the unity in "state of mind" can be seen in the Third World women's statement to the Tucson Conference, while the frustration and lack of unity surfaced in the workshops and planning sessions. The Third World is definitely not monolithic.

As we look to the future, with the exception of the few developing countries with substantial mineral resources, the natural resources upon which economic development must be based are soil, water, and climate. Fortunately, in the developing countries the agricultural potential is substantial, and agriculturalists generally agree that almost all developing countries could meet their domestic food needs from local production.<sup>20</sup> The people of the developing countries can feed themselves.

Since the 1973-74 World Food Crisis, national planners in developing countries and aid agencies have placed increased emphasis on the physical problems constraining food production. There are many, many physical and biological constraints to increasing food production, and the revision in priorities is at least partially appropriate; however, individual and family food deficits and low incomes, even in rural areas, are not due solely, or perhaps even primarily, to inadequacies in quality and quantity of resources, or lack of general knowledge concerning how to increase production.<sup>21</sup> Slow progress in reducing the number of people who do not have reasonable access to adequate daily diets in the developing countries is due primarily to socio/economic environments which are not conducive to higher productivity on the part of the vast majority of the people, especially the rural folk--and women in particular.

What we do not know, and the variation in developing country situations do indeed represent serious problems for developing country planners and policy-makers, but they do not justify delaying action. The knowledge needed to start is available. In many countries, experimental programs and flexibility in projects will be appropriate, but to delay--to do nothing--invites risk of disaster so terrible, the people of no country should be subjected to it. The time for developing countries to start preparing strategies for meeting the basic food/nutrition needs of all their people is NOW.

### III. THE NEW STRATEGY--PRECONDITIONS AND PRIORITIES

#### A. The Foundation

A strategy for meeting national basic food/nutrition needs must be an integral part of a greater strategy, i.e., the overall national development strategy. There is competition for limited resources, and all national leaders and development practitioners recognize that mankind does not live by "bread" alone. However, to go no further leads to an erroneous conclusion, because without "bread," mankind does not live at all! The crucial question is, "Where does food fit into the overall development pattern?"

A sound strategy for development in any specific country will recognize the complexity of interactions among basic human needs (which may be physical or culturally generated); and the resource base, modes of production, knowledge, and supporting infrastructure/institutional availability. Given the magnitude and range of human needs in the developing countries, and the resources available, an overall strategy based on "food first" makes very good sense. (Discussed in greater detail in Sections B, C, D & E). The problem then becomes a matter of developing a strategy--or we could call it a sub-strategy--for meeting the food/nutrition needs. In the balance of this paper, it is the latter strategy (or sub-strategy) which is discussed.

If a strategy for development is to be successful, it must begin with the existing situation and, utilizing only the resources and institutions available, move forward step by step toward a definable goal. Of greatest importance is the matter of priorities, i.e., putting first things first. Policies, programs and projects to implement the strategy must be planned and implemented. They must be based on incentives which are known to produce the desired results, or relax constraints that exist at all levels, i.e., deal with the entire system. Experience to date indicates that to do otherwise is to invite failure.

For any nation to become really serious, i.e., give more than "lip service" to developing a strategy which will create conditions wherein all people in the country have reliable access to adequate diets at costs within their and their nation's means, two preconditions are probably necessary. Achieving them will need to be the first order of business in many countries. The preconditions are:

(1) National leaders accept the proposition that all people are entitled to reliable access to adequate diets at costs within their means, as well as to incremental gains in other factors contributing to improved quality of life, and

(2) The government is willing to specify that economic growth based on meeting basic human needs is the goal for the national planning and policy making effort.<sup>22</sup>

Once the preconditions are met, where to start? Since all developing countries have a national plan and some form of planning/policy guidance mechanism, the preparation of a new strategy logically must start with them as the base. This means that in each country there will be a different base. The question then becomes, "How do we move forward from that base?" In the balance of this section, priorities for activities are listed and discussed.<sup>23</sup>

B. FIRST PRIORITY: Revising and Developing Policies and Institutions which will Involve ALL People, Especially the Poor, in the Process of Economic Development, Stressing Food Production, Processing and Marketing for Local Consumption<sup>24</sup>

Food/nutrition is the logical first priority basic need to be tackled because of its importance to human dignity, health and welfare; the numbers affected; and the opportunities producing and distributing food present in terms of generating income and providing for self-sustaining growth.

Beginning with the current plan and planning/policy making mechanism, first priority in terms of emphasis and timing must be given to developing policies and institutions to involve the poor and others bypassed in the past in the process of economic development. Without the proper policies and institutions, other investments and initiatives are not likely to yield lasting benefits of the type desired. For example, rural roads (infrastructure) are vital to development, and some must be built; but unless national policies and institutions serve the needs of the poor, the primary beneficiaries will be large farmers and pastoralists, land owners, and relatively well-to-do businessmen.

In the countries where the macro-policies are not right, the poor are unlikely to capture significant benefits such as improved food/nutrition or basic services from economic growth, even in the second or subsequent rounds of the income flow. At present, "leakage and trickle up" effects from institutional factors favor the upper middle income groups in most developing countries. Programs and policies must be deliberately directed to meeting the needs of specific groups, including women.

C. SECOND PRIORITY: Expanding National Capacity to Develop, Assess, and Disseminate: (1) Food/Nutrition Information, and (2) Appropriate Technologies, with Priority to Food Production and Marketing that Require Low-Cost Inputs, Conserve Energy, and are Simple to Manage

Food/nutrition problems include eating too little, too much, the wrong food, or unsanitary food/water. People err because of lack of knowledge, for cultural reasons, or because they cannot afford to do otherwise. An attack on two fronts is required.

First: food/nutrition information dissemination. It is illogical to expect people to feed themselves properly if they do not know what

are their bodily needs. In food/nutrition, the "wisdom of the ages" cannot be relied upon. Information on (1) the nutritional content of foods, and (2) daily needs must be developed and disseminated.

Second, people must have the means to produce or buy their food. The poor are poor largely because they are not very productive or realize little return for their effort. (See Part II). They are not productive due to poor health (little energy and sickness), and failure to utilize production increasing technology. Technology transfers, which have been an integral part of all known developing country strategies to date, have not helped much, and in many cases may have hurt those who are now the poorest of the poor. Too much of the technology transferred to date has not been appropriate for their cultural and physical environments. The emergence of the dual economies (see Section II) is a symptom.

The revised national strategies will place major emphasis in terms of investment and programming on those industries and sectors which produce goods and services needed by the rank and file citizenry, i.e., better nutrition; and on means of production which will increase productivity and sales, thus, the real incomes of those in need.

Much of the technology needed to achieve the above objective, i.e., appropriate technology, is known, but it is not readily available to the poor and hunger prone. And, there are many mistaken ideas about what is needed. For example, appropriate technology is not old-style, 1930's vintage technology, as some technicians who have not thought the problem through tend to think. Appropriate technology will utilize the best and latest insights science has to offer--adapted to the socio/economic situation in question. Much more than technology transfer is required.

Given the variation in needs, resources, and institutional capabilities among and within the developing countries, each country, and at least each major region within the country, will likely need some type of organization to be concerned with appropriate technology development and adoption. The countries which achieve self-sustaining growth while meeting the basic human needs of the population the soonest may well be those which create an integral system for bringing on stream a continuous flow of appropriate technology.

D. THIRD PRIORITY: Broadening Access to Needed Inputs, Information, Financing, and Markets for Food Products, Especially for the Small Farmer and Small Pastoralist

Limited use of purchased inputs and supportive services is a major constraint to increasing food production and distribution in all developing countries. Fertilizer utilization per hectare for comparable soils and crops in the developed countries is low, credit use is modest, and the fact such a high percentage of agricultural production is on a subsistence level is illustrative of the low utilization of marketing

institutions in the developing world. The situation varies by crop and by area, and in some countries producers in the commercial subsector (often for export) have relatively good access to the inputs and services needed to increase production, but the vast majority of the farmers and pastoralists do not.

In most developing countries, technologies which would increase the productivity of the small farmer/pastoralist are not utilized because they do not have ready access to the inputs or services required. Technology adoption and access to inputs and services must be approached as linked activities. Most of the women farmers in the Third World are affected by the "access problem." Previous strategies have tended to ignore or deliberately destroy local traders and purveyors of services who have traditionally served the poor and the small farmer.

The small farmer/pastoralist group requires priority in the new strategy because their families are so often malnourished, and increasing their productivity can generate the economic growth which is so badly needed. There are many opportunities for local people to produce and sell needed inputs and perform marketing functions for the group.

#### E. FOURTH PRIORITY: Creating Supporting Physical Infrastructure

Although substantial progress has been made, infrastructure remains a serious constraint to people meeting their basic needs in most countries. Little progress can be made without strengthening it. Unfortunately, infrastructure construction is very tempting to developing countries because it is easy to manage and highly visible. The problem is that infrastructure construction without the programs implicit in B, C, and D above will contribute little to improving the food/nutrition situation. Many white elephants can be cited from past programs. An integrated approach is required.

In Parts IV through VII of this paper, the steps necessary to implement each set of priorities are outlined.

IV. REVISING AND DEVELOPING POLICIES AND INSTITUTIONS WHICH WILL INVOLVE ALL PEOPLE, ESPECIALLY THE POOR, IN THE PROCESS OF ECONOMIC DEVELOPMENT, STRESSING FOOD PRODUCTION, PROCESSING AND MARKETING FOR LOCAL CONSUMPTION<sup>24</sup>

A. Introduction

Revising and developing policies and institutions which will impact on those bypassed by previous development strategies, and in the process make proper food and nutrition available for all people, will require a multifaceted attack. The first step must be to properly define the problem. Next, a mechanism for getting the job done must be established. Finally, the needs and the resources available to meet these needs must be meshed. Of crucial importance is the ordering of activities.

In the balance of this section, the steps required to accomplish the above are discussed, and where appropriate, policy and project guidelines provided. Also, suggestions are offered for aid organizations. The steps are:

B. National Food/Nutrition Assessment and Policy Planning

The goal of providing a reasonable opportunity for all people to meet their basic food/nutrition needs cannot be achieved without plans for getting the job done. Recommending how resources are to be allocated and policies changed is the function of the planning organization, commission, or similar unit in most, if not all, developing countries.

Inadequate identification of food/nutrition/water problems has been a major constraint to the development of policies and projects which would make it possible for more people to meet their food/nutrition problems. Therefore, a revised strategy will call for proper identification of the problems.<sup>25</sup>

It must be recognized that planners and policy makers in developing countries are at widely different levels in terms of understanding the basic nature of their country's problems. Some have much good data available--others almost nothing. Some inadequacies common to all countries (although some planning agency and aid organization leaders would be reluctant to admit it) are:

First---Insufficient knowledge concerning what people currently eat and do not eat, especially the poor and those in the countryside, and precisely how they get their food. (Plans and policy proposals tend to be prepared in the capitol by people with relatively little contact with local people, especially the poor.)

Second---Difficulty of viewing food/nutrition in sufficiently broad terms. (The result is that efforts to improve nutrition have frequently concentrated on improving knowledge, while the people affected have insufficient purchasing power to

buy what was needed; or to concentrate on increasing the consumption of one or more of the four food groups or a vitamin, in contrast to tackling the total problem).<sup>26</sup>

Third---Macro-oriented planning organizations which tend to base plans on unrealistic assumptions concerning the resources and managerial talents which can be brought to bear, and the use of incentives which are not especially meaningful to those who must make decisions to guarantee plan success.<sup>27</sup>

Given the above, how can a developing country "get moving" in terms of developing a sound food/nutrition strategy? The appropriate first step is an assessment, or in some cases re-assessment, of the food/nutrition situation.

Assessments can be made in a number of ways; however, it is unrealistic to believe very many, if any, countries can achieve a satisfactory assessment of the national food/nutrition situation for the purpose of backstopping revision in the national strategy without a national conference, workshop, or other special evaluative effort which focuses specifically on food/nutrition in its broadest sense. (Research findings, sector analyses, project review papers and development assistance papers prepared for earlier strategies will be useful, but they will not be adequate).

The special effort may be more effective if it is linked directly to the Five Year or other national planning process; however, there are risks in doing so. If the assessment is an integral part of the ongoing planning process, the focus on food/nutrition may be diluted. A wide range of governmental ministries and general directorates, and representatives from the private sector--business, voluntary agencies, etc.--must be involved, and it may be more difficult to insure their full participation if the assessment is a part of the standard plan preparation procedure. The national leadership's commitment is vital.<sup>28</sup>

While the assessment may start at the national level, if it is to produce satisfactory results, it must confront local level and micro situations.<sup>29</sup> Regional and subsector assessments must be an integral part of the national assessment.

Must new methodologies be developed? Innovation is needed, but national governments do not have to start from scratch in searching for methodologies for the food/nutrition assessment, or for sources for technical assistance from the international community. The FAO has developed an assessment system which is promising. Costa Rica, with USAID assistance, has utilized a commodity systems approach which is promising.<sup>30</sup> AID's nutrition, agriculture sector analysis, rural development, and other units have had much experience which could be directed to the task. The food wheels distributed at the Conference, and included as Annex 1, may be helpful in guiding the thought process concerning how food requirements can be met. (The wheel helps identify where investment may be required to meet basic food needs.)

Two vital points concerning the assessment are: (a) all factors involved in food/nutrition must be included (economic, social and political considerations are as important as are the physical and biological considerations), and (b) people with specific knowledge concerning local conditions, including how people currently get their daily food supply, must be involved.

Given that all countries must begin with far-from-perfect knowledge, the initial assessment should be expected to recommend a means for increasing the knowledge and data base needed to constantly improve national plans and projects, i.e., a mechanism for the continuous assessment of the food/nutrition situation and policy guidance. Using terminology understood in the developing countries, the national planning capability must be improved. (The term "planning" includes goal setting, stock taking, and policy formulation). A recommendation from the Tucson Conference called for the establishment of national centers for food/nutrition, but with the firm warning they must be broad guaged and concern themselves with social, economic and political concerns, as well as the physical needs of people. The roles of various segments of the private sector, as well as governmental agencies, must be given full consideration.

In some cases, sophisticated research will be the logical next step after an initial assessment, but in most developing countries it will not be. Assembling and compiling relevant data which will improve the judgements upon which strategies are based, and for project preparation, will be the more common need. This calls for local data, and the participation of local people.

In summary, the assessment should accomplish the following:

1. Estimate as accurately as possible what all people of the country eat and drink at present, and how they get it.
2. Determine the four W's of hunger:
  - a. Who does not have an adequate diet,
  - b. Where do those who do not have adequate diets live,
  - c. Why are those with inadequate diets not getting what they need?
  - d. What would be required in terms of commodities, facilities, and incentives for all people to meet an assumed minimum daily diet, including the need for clean drinking water?
3. Estimate in broad, general terms how those not meeting daily requirements might meet them through their own efforts, and if this is impractical, by what other means?
4. Project food needs ahead five, ten, and twenty-five years.

Suggestions for aid organizations: While it is the responsibility of the developing countries to take the leadership in providing all their people with a reasonable opportunity to meet their daily dietary needs, international aid organizations can increase their utility by preparing guidelines and formats for assessment procedures, assembling teams of experts with the breadth and special skills required to guide national assessments and making them available upon request to developing countries, and training both developing and developed country experts.

### C. Decentralization of Planning and Program Implementation

Once the food/nutrition assessment is underway and reasonably accurate estimates of what is needed and where the hungry are located are available, the next step is to begin to relate the needs to the management of the natural and other resources available. This calls for preparing projects and programs to get the food needed produced, processed and distributed. The question is, "What type of planning approach is the best bet if the objective is to involve the poor and disadvantaged whose food/nutrition needs are not being met?"

For very many of the poor to participate in and benefit much from development activities probably means that most developmental activities must occur fairly close to where they are currently located, and rely largely on resources already under their control. As the U.N. report cited earlier in this report indicated, the resources are simply not available from either aid or the developing country central governments to provide basic human needs for a rapidly expanding proportion of the world's poor using current strategies and planning approaches. The poor must help themselves. Their labor and skills are the key resources available to produce their basic needs. This calls for locally oriented natural resource development and management for the purpose of meeting the needs of the large numbers of people found in the various local areas.<sup>32</sup>

Area planning is an approach many countries can use to advantage in a strategy designed to eliminate food/nutrition inadequacies. Area planning can be done under the guise of integrated rural development (IRD) projects, as was done in the Costa Rica project discussed in the Tucson Conference, or through other means. A strong point in area planning's favor is that it generally forces planners to recognize food is a problem local people can do something about, and agriculture a basic industry around which developmental activities can be centered. One desirable result is that more resources generally will be allocated to the rural areas where most of the poor and hunger prone are located, and to the agricultural sector, which provides them their livelihood.

Area planning, especially when done at the provincial and country levels, enhances the opportunities for including local people (includes women) in the planning and project implementation process. International experience indicates people will become more productive when the objective is to produce something they need and want, and area planning gives them the opportunity to be heard.

Planning for development on an area basis is, of course, not new. The record to date is encouraging, but falls far short of 100% success. Some new dimensions have been added in recent IRD and other approaches which offer promise. In the past, many area-oriented development efforts have been pilot projects which governments thought, if proven successful, would be repeated elsewhere. Two problems which have discouraged spinning off and spreading the approach are: (1) special institutions (frequently autonomous) have been established which cannot logically become national in scope, and (2) funding has been beyond the capability of the national government to provide on a nationwide basis. These errors are to be avoided.

Policy/project guidelines are:

1. Decentralize the planning and administering of food and rural development activities, with priority given to an area approach (to projects or programs) which directly involves local people in the planning and administration process,
2. Make a "people orientation" the key theme in the planning process,
3. Stress the development and proper utilization of resources readily available at the local level, including the managing of food and water in communities and households, and
4. Utilize self-help activities that can "pay off" with minimum assistance from the central government, or external aid organizations.

D. Additional National Investment in the Agri/Rural Sector, Especially in Food Production, Processing, and Marketing for Local Consumption

A strategy based on meeting basic food/nutrition needs will require increased investment in the agri/rural sector in developing countries for four specific reasons: (1) More food is needed to improve nutrition and meet the needs of the increasing population, (2) The bulk of the poor, hence hunger prone, in developing countries live in the rural areas and are dependent upon agriculture or food industries for a livelihood, and the most efficient way to improve their lot in life is through food related activities, (3) Foreign exchange is needed, and in most countries agricultural exports are one of the few opportunities to earn it, and (4) Since urban employment cannot increase rapidly enough to provide greatly improved job opportunities for the net national increase in population, in a decade the rural population of most developing countries will be greater than it is today, and this calls for special, new agricultural programs which will cost money.

In revising their strategies, developing countries must face two conditions quite different from the developed country experience: (1) They cannot increase productivity of the human element in agriculture and narrow the rural-urban real income gap significantly by substantial

reductions in farm population and increasing the farm size as has been done in the U.S. and Europe, and (2) The need for food will increase sharply as a result of rapid population growth and economic development. Developing nations (with aid organizations' assistance) must avoid the pitfalls inherent in attempting to model their food and agri/rural institutions upon those in Europe, the United States or other developed countries. They must chart new courses, take new initiatives, and above all, do more than talk. They must make a commitment in terms of increased investment to programs that impact on the poor, and get food produced and distributed to those who need it. This calls for making available the resources and services needed by those who produce and handle food in general, and by the poor in the agri/rural sector in particular.

Can we expect developing countries to make the sacrifice and increase investment in food production/distribution and the agri/rural sector? The answer is "yes," because doing so is not a sacrifice! That food production, handling and distribution is the major source of gross domestic product and the predominant employer of people; and the rural areas the home of most of the poor in developing countries is common knowledge and a topic of much discussion. What is not so commonly known and less frequently discussed is that given the developing country food/nutrition situation, development in the agri/rural sector represents a great economic growth potential. Increased productivity, hence generation of income on the part of the masses in the agri/rural sector, can not only lessen famine risk and improve diets, but also create a demand for urban produced industrial goods and services, thus stimulating and accelerating the rate of overall economic growth and development. Increased investment in food production, processing and handling in the rural areas should not be viewed as a necessary evil, as some developing country and aid organization personnel have viewed it, but rather as an opportunity the developing countries should be exploiting.

If additional investment in agri/rural sector development is to be effective in terms of meeting the new food/nutrition goal, the following are required:

1. Improving the Capability of Each Country to Prepare Economically Viable Projects, Programs and Policies Which Reach the Subsistence Sub-Sector and the Hunger Prone.

If the pace of development in terms of increasing proportions of the world's people meeting basic food requirements is to be accelerated, and the scarce, limited resources of developing countries and aid agencies not wasted, then each nation must be capable of producing sound overall strategies for improving food production/distribution. This calls for the full development of the agri/rural sector, and each nation must, in its own way, prepare a national plan to implement the strategy. (The plan must include projects and policies capable of achieving national goals). The planning agencies in the national governments, and the planning directorates in the operating Ministries are in the strategic position. They must be reoriented and strengthened.<sup>34</sup>

The preparation of improved plans requires:

a. Sector Analyses: Good planning requires an assessment of food/nutrition needs (see above), and much more. Inventories of both resources and institutions (including an objective determination of their capability) are required, as is an understanding of linkages within agriculture and to other sectors, and orderly forecasts of costs and impacts from alternative courses of action. This calls for good data--especially concerning food needs and producer responses to alternative incentives and market projections. Properly designed sector analyses will provide the needed information.

b. Food Policy and Agri/Rural Sector Goal Reconciliation: At the present time, developing country national plans generally call for increasing agricultural production and efficiency, and achieving national food self-sufficiency. Food self-sufficiency is often viewed primarily in terms of market demand, largely ignoring the needs of those who do not or cannot pay for food. **Are these adequate sector goals?** The answer is, "rarely, if ever."

In most developing countries, food and other agricultural production could be increased very rapidly and production efficiency improved in terms of land and purchased input use if national agricultural programs concentrated on a few farmers with adequate land, access to capital, and managerial talent. The current national food and agriculture sector goals could be reached, but at tremendous social cost in terms of further income distribution skewing, and probably increases in the number going hungry and malnourished as well. "Producing more" or "national food self-sufficiency," without economic analyses demonstrating they represent wise resource use and achieve widespread distribution of the benefits from development, are not satisfactory national or sector goals. Efficiency versus equity is a major issue. Whose production of food is to be encouraged is a vital question for both the developing countries and aid organizations providing assistance to them. The strategy development process must produce sector goals and objectives consistent with the overall national goals. If the national goal is to meet the basic food/nutrition needs of all people, then the agriculture and other sector plans must reflect it.

c. Identification of Constraints: Physical resource constraints exist everywhere: most developing countries have available a very limited supply of technically trained personnel; capital is limited and its opportunity cost high; and institutions have many inadequacies. Strategy preparation will take constraints into account, and develop programs and projects which avoid or alleviate them while insuring that the benefits accrue to a wide base of the population.

Managerial skills are scarce in most developing countries; therefore, a good strategy calls for project designs which involve minimum complexity in decision-making in implementation, while bringing forth large increases in benefits in relation to the requirement for technically

trained personnel. Since capital is traditionally a limiting factor, programs and projects should be examined to determine whether the use of capital proposed obtains increases in production or other benefits greater than for other uses.

d. Balance Between Programs to Meet Short Term and Long Term Needs: In many developing countries, great potential exists for increasing food and agricultural production from investments in irrigation development and other activities which yield a favorable benefit/cost ratio, but the benefits occur mainly in the distant future. Unfortunately, in many of these same countries, capital is scarce; and for this and other reasons, the desperate need is for activities which will increase productivity rapidly. A sound strategy for development will provide balance between projects and programs which yield high benefits and meet pressing short run needs, and those that develop the long run capability of the country.

e. Projects and Policies Directed to Specific, Identified Clientele: Developing country strategies and the plans to implement them have possibly gone astray more seriously as a result of inadequate clientele identification than for any other reason. All rural people do not face the same limitations, nor will they respond to the same incentives.<sup>35</sup> If scarce governmental and private resources are to be used wisely, projects and policies need to be based on a better understanding of the clientele.

The following groups of production units, i.e., clientele, can be identified in all countries:

Group 1--The inaccessible subsistence<sup>36</sup> farmer or pastoralist and his/her family who lack adequate land and capital resources to rise much above a subsistence level. People in this group are uneducated, know little about proper diets or sanitation, and farm or raise animals by age-old methods. Some authorities estimate that as many as one-third of the production units in the developing countries are managed by women, and most are in this group. The members of the group may be organized into villages with some aspects of production under family management, and other aspects communally managed, e.g., a "village agriculture" system. They may be nomadic and organized into clans or other units.

From a practical standpoint, it is extremely difficult to help this group, and projects with a bankable internal rate of return, or even a benefit/cost ratio greater than one, are hard to prepare. Without good planning and effective project management, governments can spend much with little to show. Yet, these are the people most susceptible to famine and malnutrition; they face the greatest risk of becoming displaced by progress; and past governmental programs have done the least for them. They must be a major target group in revised strategies for development.

If the incentive and opportunity are provided, easy-to-deliver, minimum management programs costing little and with modest benefits may be possible. Generally, the program will stress self help. An improved variety of sorghum, millet or other crop might increase the family food

supply, a better rooster improve their poultry flock, simple range control increase offtake, a sanitary water well improve health, reducing post harvest losses stretch the food supply, or a cooperative lower the costs of the few items they buy.<sup>37</sup> The key problem in program and project design is keeping costs below benefits.

Group 2--The subsistence farmer/pastoralist family which will remain primarily in the subsistence subsector, but who can be reached by relatively low cost programs which develop limited technical and managerial skills. The major difference between this group and those in Group 1 is accessibility. If farmers or pastoralists in this group have available land resources that will enable them to develop a small cash crop of livestock enterprise, they can increase the surplus they produce for the market, thus their cash income. There are many people in this group in the developing countries, and with well-designed and efficiently administered projects, they can become productive enough to lead very dignified, satisfying lives. They especially need new types of policies and institutions which provide better access to the supportive services listed in sections V & VII below. Package programs in integrated area development projects can yield good benefit/cost ratios.

Group 3--Farmers or pastoralists with limited resources, who, if offered the opportunity via supervised credit, marketing programs and training opportunities, can become the operators of small commercially-oriented operations. The numbers of people in this group are great and they are scattered throughout most economies. Group-oriented activities should yield very favorable B/C ratios if they are properly managed, and well designed one-on-one credit and extension projects yield B/C ratios greater than one.

From the national macro-economic viewpoint, people in Group 3 can be efficient, producing for the world market, and feeding large urban areas while generating acceptable family incomes for themselves. They can furnish the foundation for a high-level, market-oriented agri-industrial economy in the future.

Group 4--Large-scale commercial farms or ranches. These may be classified in three subgroups: private, public, and cooperative. They employ many of the landless in rural areas, and given proper policy, can contribute substantially to a nation meeting a basic food/nutrition needs goal. They can attract capital from external sources, supply both world (export) and urban markets with food at reasonable prices through efficient production, train local people, provide employment for the landless poor, and accumulate capital.

A project (or policy) that will induce a large farm in Group 4 to produce more will likely have no effect on the subsistence farmers who make up Group 1, and by the same token, a project aimed at benefitting Group 1 may be irrelevant to Group 3 or 4.

In the development of the revised national strategies, all groups may have a role to play. Some developing countries need foreign exchange

and food for their urban areas badly; therefore, commercial farming by Groups 3 and 4 may properly be given attention and encouraged as one part of their strategies. The goal of increased agricultural production for export and to feed urban centers can possibly be met most effectively and quickly by concentration on them. Also, increased production there increases the tax base, and provides the opportunity for the government to do more for others. However, the strategy must recognize that the need for extending the opportunity to increase productivity to the large numbers of the rural poor in Groups 1 and 2 is not likely to be met by projects utilizing incentives to which Groups 3 and 4 are known to be responsive. For example, subsidizing fertilizer imports will have no impact on a poor subsistence farmer who uses no fertilizer. Lowering institutional credit costs will have no beneficial consequences for those who do not borrow from institutions. The revised strategy will bring forth a balanced program, with policies and projects responsive to the specific needs of clearly identified clientele.

In addition to the farm production units discussed above, there are workers, often landless, and tradesmen/services purveyors in the agri/rural sector who have been bypassed by past development efforts, and are either hunger prone or have an important role to play in improving the food/nutrition situation. If the revised strategy is to succeed, their needs and the incentives to which they respond must be determined, and programs and projects targeted directly to them prepared.

Opportunities for increasing employment in the rural areas, and elsewhere, through the provision of inputs and services to small farmers is discussed in Parts V - VI. These programs are the heartwood of the new strategy. They are based on the principle that additional employment in food marketing/processing and the provision of inputs/services to farmers/pastoralists can provide the income to purchase some, if not all, of the food needed to meet the basic needs of large numbers of people.

In preparing a strategy for meeting basic food/nutrition needs, opportunities to export farm commodities, thus generating both personal income and foreign exchange; and to provide jobs and income through commercial agriculture--Groups 3 and 4 above--must not be ignored.

Aid organizations can contribute by: (a) Encouraging developing countries to increase their capability to plan for the full development\* of their agri-rural sectors as integral parts of a strategy to meet basic food needs for all people, and (b) Providing technical assistance to increase the capabilities of national planning and policy-making organizations, including project preparation, with highest priority to food production for local use and related activities.

## 2. Concentrating First on Increasing Food Production and Security in the Subsistence Sub-Sector

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\*/ Full development will include smallholders, pastoralists, laborers, the landless rural poor, women, commercial farmers and all others.

Rapid progress cannot be made in increasing the opportunity for all people to meet their basic food/nutrition requirements and in the process raise the national average level of living in most developing countries unless the problems of the agrarian subsistence folk are attacked directly, and quickly. The bulk of the poor in many developing countries are to be found in the subsector, and the need for food is often great. Therefore, the logical starting place in a revised strategy is with food production among subsistence farmer/pastoralists.

The first concern of families in the subsistence subsector will likely be their food and water supply. Programs and projects of the type shown above for Groups 1 and 2 are appropriate. Sound program development will recognize that while subsistence farmers and pastoralists can improve their quality of life through increased production of products for home consumption, the economic development process is basically a matter of shifting farm/pastoralist families up the spectrum from subsistence to commercial. As integrated area development and other types of projects are being prepared, opportunities for local entrepreneurs (including women) to exchange, market, store, and process (mill) food must be explored. Constraints to the proper functioning of local markets will be removed. In many cases, national policies which are centralizing marketing will need revision. (See section VII).

Policy/project guidelines: Countries will make the hard core of a major program improvement in subsistence agriculture to the extent of each family producing enough food to meet family requirements and a marketable surplus for cash income for the family and to contribute to the food needs of the non-farm population, thus fostering the economic development process.

Aid organizations can be of great assistance by providing and helping mobilize technical assistance that will be needed to meet the basic food/nutrition needs in the subsistence subsector.

### 3. Shifting Agri/Rural Sector Activities to the Areas Where the Rural Poor Reside<sup>38</sup>

The margins between current productivity and long run potential productivity of the land resource is of great importance in preparing a strategy for agri/rural development. Some lands are undeveloped in relation to potential, and others are already being over-exploited in relation to long term human and livestock carrying capacity. In some locations the productive capacity of the land resource is being permanently modified by mismanagement and erosion. Permanent, irreversible environmental damage is occurring.

Modern systems of soil classification include a factor defining appropriate (optimum) management systems for each classification category. The applicable management systems are based on use potential, and if utilized systematically can provide guides to maximizing the long term productivity of the land, and presumably farm and national incomes too.

(The latter is generally, but not completely, accepted by economists.) Soils with higher use potential will normally respond favorably to more intensive use of productive inputs such as labor, capital and management per unit of land. Soils with lower use potential may respond favorably to initial intensification, but limitations to increasing yields due to low rainfall, etc., are soon encountered, so only extensive application of inputs is economically and technically justified. In the developing countries, to date most developmental efforts have been concentrated on the higher potential areas, and they have involved intensive use of inputs, capital and management. This is not where the poor are found, and the intensive use of inputs, capital and management needs questioning. Major revisions in strategy are thus in order.

In preparing a national strategy, note must be made of the fact low income and rural poverty are often more prevalent in those areas which are overpopulated in relation to the natural productive potential of the land, and these areas coincide with the most severe rates of erosion and environmental damage. Illustrative areas are:

The Sudan and arid regions of Africa, where rainfall levels are less than 600 millimeters per year: These areas contain about six million persons, and the absolute poorest of the poor apparently are to be found in them. Rainfall levels are too low and unreliable to support extensive cash crop production, and the sale of live-stock represents the predominant source of cash revenue. Because export-oriented development programs of the past have bypassed this zone, infrastructure is meagre, the extension services are very rudimentary, and input/marketing services nil.

The mountain enclaves of Africa, Latin America and Asia with severe income and environmental problems: Many of these enclaves were once dependent upon forestry. Population pressure on the land excludes significant production of cash crops, and erosion has become a very serious problem.

Dry "Marginal lands" settled because of population pressure on higher potential lands, such as in Kenya, the highlands of Ethiopia, or areas in Peru and other Latin American countries. Settlers in these drier areas control only small acreages, and the humid area technology and institutions available to them lead to seriously low income, periodic famine, and ecological degradation.

The slash and burn areas of the world, where population growth is shortening fallow periods and soils are degrading rapidly.

In past strategies, developing countries generally gave preference to projects and activities where conditions of usage were known to be substantially below potential, providing high return development possibilities, primarily because they provided the greatest potential for technical and economic viability. A basic dilemma developing countries must face as they begin to develop a strategy to provide food for all is

that the land in the areas where the more serious income and hunger problems are found are, from the standpoint of natural fertility and land use potential, generally not so good and may be marginal. The only way to prevent disaster in some of the areas will be through extensive conservation and drastically altered resource management techniques, such as restricting the numbers of livestock.

Modifying the land use system will be required in most of the areas where the poor reside. This will require inputs in private and public management which in the least advantaged and most fragile or damaged areas may not be justified by short-term economic or financial returns, especially if the capability of the government to deliver a coordinated program to the field is low.

How can the revised strategies best confront the above complex issues? First, they simply will concentrate more attention on those areas where the poor are located, while recognizing food production and GNP could more easily be increased in other areas, and balance in programming among areas is required. Second, they will provide for institutional approaches (project management/coordination/implementation organizations and agencies) which are less management intensive, emphasizing group and bottom-up, self-help activities. (This may call for greater reliance on private and voluntary organizations already operating in the respective countries).

Aid organizations can be of greatest benefit by assisting in the development and testing of alternative institutional approaches. Also, since the expected rate of generation of tax revenue and other income sources to government in the most seriously affected low income areas is likely to be low, aid agencies could provide grant funding for an extended period and offer longer project terms and delayed phaseouts.

#### 4. Consideration of Quality of Life Issues in All Agri/Rural Projects and Activities

Most developing countries face some form of "cities crisis." Rural living provides few amenities, and if people are not to race to the cities at the earliest opportunity, quality of life in the rural areas must be improved. Improving it can be the incentive needed for increasing productivity, thus the engine for development. The new strategy will make the provision of social services and increase productivity equal partners.

Of utmost importance is the fact that a significant percentage of the rural population suffers from an inadequate supply of safe water and damage from malnutrition in the form of inadequate calorie intake or acute protein deficiencies at critical life periods. Adequate water and food for the rural masses are thus logical high priority activities.

In many countries it is now known local people will work very hard and increase their productivity to improve the local water supply. They respond very emphatically and quickly to programs providing technical assistance and credit for the purchased supplies which are required.<sup>39</sup>

The Tucson Conference surfaced many opportunities for improving nutrition at low cost. Many could be utilized in projects designed to impact on Groups 1 and 2 in Table above. Where maize is a major ingredient in diets, introducing the high lysine varieties may be helpful; however, other low cost solutions, such as consuming ordinary maize plus grain legumes, may exist and be better. Vegetable gardening and increased use of fruits offer promising opportunities in many places. Improvement in the productivity of village poultry flocks, sheep and goat flocks and swine herds could contribute to meeting the protein deficiency. Areas dependent upon root crops face special problems due to limited amounts of protein, vitamins, and minerals in the product.<sup>40</sup>

Opportunities for raising incomes through local food processing and marketing need additional attention and will be discussed in Part VI. While providing basic needs, they simultaneously offer opportunities to further monetize the local economy and integrate it into the national structure.<sup>41</sup> Improving home management holds great potential.

Studies indicate rural people are willing to work hard and become more productive in order to educate their children and obtain improved health services. Acquiring these services can be the incentive needed to increase and improve food production and distribution.

In preparing a revised strategy, the above and other opportunities have to be examined on an area by area basis for the purpose of guiding project and program preparation.

Aid organizations can encourage projects which have a direct linkage to quality of life improving facilities, and provide assistance to well-planned studies to determine low cost, self-help oriented methods for improving nutrition, and delivering other basic services.

#### E. Developing Policies and Institutions to Meet the Basic Food/Nutrition Needs of Those in Society Who Cannot Become Viable Producers or Buyers of Their Food

While the revised developing countries' strategies will stress people meeting their own food/nutrition needs by either producing them or buying them in the marketplace with the proceeds from work and entrepreneurship, there are some in all societies who cannot logically be expected to do so. A nation following a "right to food" policy must make provision for them. The initial assessment should identify who they are, where they live, and determine why they cannot become a self-supporting part of the food production/distribution complex.

In this paper there is no intention to pursue the non-market and non-subsistence oriented aspects of food production and distribution in detail, except to indicate that insofar as possible policies should increase productivity and income generation in the long run. Food for work programs in the public sector and food during training are illustrations of good programs. Infant and youth feeding programs to provide sound

bodies and strong minds in adulthood are justified. The institutional cost must be held in check so that funds for investment in the key food and other productivity increasing activities are not constrained.

There is a role for international food aid; unfortunately, it can very readily become self-defeating and destructive. It must not be permitted to reduce the incentive to produce food or solve basic economic problems in any area.

Aid organizations can contribute by giving priority to providing food to people being trained or resettled, infants, and others whose productivity is being enhanced by getting the food. Food aid during the transitional stage in resource conservation and development programs (as in the Sahelian area), and to alleviate famine during drought or other unusual conditions is very appropriate. AID should carefully review PL 480 purchases by developing countries and insofar as possible insure that both the initial distribution and currency reflows contribute to increasing the food supply and improving its distribution.

F. Revising the Educational System to Insure it Serves Developmental Purposes, with Emphasis on Food/Nutrition

It is generally accepted in the development community that developing country educational systems do not adequately serve development goals. The Tucson Conference emphatically supported the contention with reference to food/nutrition and the role of women.<sup>42</sup> A revised strategy for development will call for analyses of the role education is playing, and find ways to make it more effective. Following are policy/project guidelines:

1. Increase food/nutrition/health training in the elementary schools,
2. Revise the general reading materials used in elementary schools to make them convey improved nutrition and agricultural practice information,
3. Provide additional practical literacy programs,
4. Offer agricultural training for both boys and girls,
5. Reorient science courses to nutrition, agriculture, and management skills,
6. Increase emphasis on vocational training and practical living, and
7. Eliminate the linkage between schooling (includes higher education) and guaranteed governmental employment.

V. EXPANDING NATIONAL CAPACITY TO DEVELOP, ASSESS, AND DISSEMINATE:  
(A) FOOD/NUTRITION INFORMATION, AND (B) APPROPRIATE TECHNOLOGIES, WITH  
PRIORITY TO FOOD PRODUCTION AND MARKETING THAT REQUIRE LOW COST INPUTS,  
CONSERVE ENERGY, AND ARE SIMPLE TO MANAGE

A. Introduction

Little progress can be expected in terms of reducing the incidence of hunger and malnutrition without revising the institutional structure. Attention must be focused on the need, i.e., food/nutrition, and on practical means for meeting that need.<sup>43</sup> The steps required are:

B. Research and Development Institution Building: Stress Nutrition and Food Production/Storage Technology for Small Farmer/Pastoralists and Processing/Marketing for the Local Entrepreneur/Cooperative

Relatively few countries have done an adequate job of assessing their food/nutrition situation, and neither have they used the limited resources available to them to best advantage in relieving hunger and misery. This calls for revising and strengthening the relevant research and development institutions.

Food/nutrition information development and dissemination needs priority attention on several fronts. First, many people in the Third World do not understand dietary needs. To many "food is food." If these people are to help themselves, they must first know what is needed. Then, they must receive help in determining how the need may be met. In most developing countries, there is a derth of knowledge concerning the content of local foods. Relatively little effort has been expended on programs which learn (and teach) how to balance or supplement diets with foods within the peoples' grasp.

Improved technology is either already known, or can be developed, which will contribute to raising productivity (raising income), increasing the food supply, reducing storage loss, and improving food distribution and nutrition. Technology transfer and development are thus logical parts of a national strategy to meet the food/nutrition needs of all people.

Research has been done in developing countries for many years, and in many, if not most countries, proven technology upon which to initiate programs for development exists. However, numerous knowledge gaps exist, and what is known will not carry programs forward very far. The key problem is that existing national systems are frequently not directed to solving the more critical problems local people face. Relatively little attention has been given to nutrition and home management. In agriculture, export crops have received major attention and mixed farming/livestock systems almost totally ignored. Economic and social analyses of impacts are rarely available. Marketing and processing, especially at the village level, has received scant attention. Proven packages of practices profitable for small scale dryland farming (crops produced on stored soil moisture) are lacking, as is knowledge concerning which irrigation systems and methods for applying water are best.

Research to date has generally been oriented toward macro economic issues such as the question of "how to produce more," especially per hectare and/or per head, when the questions needing equal, and in most countries higher priority are: (1) "How to increase the productivity of the low income, hunger prone family, especially those in the agri/rural sector?", (2) "How can households manage what they have better?", and (3) "How can inputs and services (includes extension and marketing) delivery to small and hunger prone farmers and pastoralists be made economically viable?"

Past programs of the aid agencies are subject to relatively severe criticism. The programs were well intentioned, but they often transferred technology which was adapted to conditions in the United States, or other western developed countries, i.e., labor--scarce and expensive; capital--plentiful and low-cost; energy--cheap and plentiful; management--capable of fine tuning operations; and infrastructure--extensive, flexible and responsive to new needs. These conditions do not exist in developing countries, and research attuned to the local conditions is needed. Aid agency advisors frequently brought their developed country peer group interests and priorities with them, and did not attune the research program to the many local needs.

Mechanization has been under attack lately, but it should not be shunned per se. Selective mechanization may appropriately be utilized to eliminate sheer drudgery, to break constraints caused by seasonal labor peaks, or to increase production and thus yield benefits beyond labor and other power saved. (The introduction of flour mills and water systems to reduce women's drudgery are illustrations). Also, mechanization which would increase or accelerate the date at which projects may become productive may justify its use. Research and development projects to determine appropriate mechanization are badly needed.

Specific projects needing priority attention are those which determine how the poor can meet their daily food/nutrition requirements, why local entrepreneurs and existing cooperatives are not functioning more effectively, the returns/costs from various production systems and production packages for small farm/pastoralist situations, and projects which demonstrate new technology appropriate to the technical-cultural milieu, i.e., in general, labor-intensive, simple, low cost, low risk, profitable, and easily integratable into an input and services (includes marketing) delivery system which will reach small farmers and pastoralists or otherwise directly benefit the poor.

Policy/project guidelines call for: (1) Creating a mechanism for continual assessment and policy guidance in food/nutrition issues. (A center or coordinating mechanism will be required. See section IVB above), and (2) Strengthening applied research capability in national research organizations, with priority attention to nutrition and local food production, and emphasis on testing and creating technology adapted to subsistence subsector conditions.

Aid organizations can be of greatest assistance by providing training for adaptive research, and insisting that much more of the research intended to foster development, such as through AID's Title XII, be

conducted in the developing countries. Analyses of social impacts from all research findings should be required.<sup>44</sup>

### C. Creating Effective Outreach (Extension) Systems

Developing nations are aware of their great need for adapted extension programs. The Tucson Conference indicated most of the information needed to initiate food/nutrition programs was available, and major attention should be given to adapting it to local conditions and widespread distribution. The dissemination of food/nutrition information discussed in B above is an extension function. All channels are to be used.

AID has had long experience in assisting in the development of extension services in developing countries. At one time, every country receiving assistance from the United States had an extension project. Efforts, in the early 1950's, included substantial attention to locally oriented, self-help activities, including home economics programs. Many of these earlier projects would appear to be what the Tucson Conference was calling for, but they were phased out and cancelled. The earlier thrust may have been premature, or the evaluation procedures which led to reduction in projects of this type faulty. If the latter is the case, caution must be exercised to insure history is not repeated.

While developing countries are turning to all aid donors for assistance with outreach programs, based on past experience and the availability of resources, the U.S. is possibly still in the best position of all aid donors to provide the assistance which is required. The U.S. may have a very special role to play.

The developing countries and aid organizations must avoid the temptation to model programs after those in developed countries. The revised strategies should recognize: (1) Outreach (extension) may be provided by a multitude of organizations, including cooperatives, and it may be wise to link extension to the provision of inputs or services; (2) The U.S. and European organizational structures are not especially good models for developing countries; (3) Extension institution building alone is not a satisfactory catalyst for economic development in the agri/rural sector; and (4) Almost everything that can be recommended to improve the productivity of poor people requires functional literacy.<sup>45</sup>

Policy/project guidelines call for adapting institutions to individual country situations, emphasizing food/nutrition education and increasing the productivity of the human factor in the subsistence sub-sector. Extension efforts in food production will be linked to the creation of effective delivery systems for inputs, marketing and other services which are required for small producer projects to be successful, and the technology being introduced adapted to the smaller, poorer farmer/pastoralist (see VIB for project illustration). Functional literacy programs will be based on nutrition and agricultural subject matter.

### D. Relieving the Technically-Trained Personnel Constraint

In all developing countries, technology development and testing, dissemination of information, and the management of food/nutrition programs

are constrained by trained personnel problems. First, the quantity of personnel available in many skill areas is grossly inadequate; second, the quality of training is a problem; and third, the trained person-power that is available is frequently not used to capacity because of administrative weaknesses and budgetary limitations. All three problems must be attacked.

Curricula in formal training institutions are commonly slanted toward law, the arts, and the theoretical aspects of science and agriculture. In many places, home economics is given low status. Agricultural curricula are generally weak in practical training, in the managerial arts, and in the social sciences. Plant sciences and animal sciences are frequently not taught in an integrated manner. Livestock training stresses animal health and slights animal nutrition, forage production, management, etc. Graduates expect to be employed by governments, and a self-help philosophy is not firmly embedded in them. Most governmental cadres will require additional training (or upgrading) in order to be able to perform effectively in their assigned duties in food/nutrition and agri/rural development.

The failure of developing countries to utilize existing trained personnel to the fullest extent is commonplace. Inadequate budgets and failure of supervisors to understand what technically trained young people can and should contribute are serious problems. Looking ahead, in most developing countries trained people are resources which cannot be wasted, and the problem cannot be attacked only through training, but also must include projects designed to improve both middle level and higher level administration.

Policy/project guidelines call for: (1) Policies insuring full participation by women and minority people, (2) National surveys and analyses of training needs, (3) Improvement in the practical and clinical aspects of programs (existing curricula are most likely to require strengthening in nutrition, practical food processing and handling, dry-land farming, agricultural economics, rural sociology/rural institutions, ecology/resource (range) management, program (project) development and planning, staff/project management, and statistics and sample methods.), and (4) Quality middle level (non-professional) and undergraduate training programs for appropriate numbers of government cadre and persons for the private sector.

Aid organizations may be of great benefit by: (1) Assisting in the establishment of regional training centers for selected high volume specialities at both undergraduate and graduate levels, (nutrition and home economics are examples), (2) Providing technical assistance in administration and management, (3) Developing U.S. university service programs catering to specific training needs for highly specialized (low volume) subject areas under the auspices of Title XII (food processing, range management, and agricultural administration are examples), and (4) Assisting with in-service training activities which do not remove government cadre, such as extension personnel, for long periods from the services they perform and are critically needed.

VI. BROADENING ACCESS TO NEEDED INPUTS, INFORMATION, FINANCING, AND MARKETS FOR FOOD PRODUCTS, ESPECIALLY FOR THE SMALL FARMER/PASTORALIST AND LOCAL TRADESPEOPLE/ENTREPRENEURS

A. Introduction

One school of thought among development practitioners holds to the proposition that lack of access to reasonably priced inputs and marketing services is the strategic causal force for low productivity on small farms, hence rural poverty. The small farmer/pastoralist traditionally "buys" his inputs and services from local sources, and few developing countries have offered much help to local purveyors. (Many current developing country strategies call for replacing present local purveyors of services and sellers of goods with nationalized agencies).

Recent evaluations of agri/rural sector development strategies by international development organizations are not conclusive concerning how high a priority needs to be placed on improving access. However, improving access is of special importance to women. Where women farmers are found, they rarely have equal access to productivity increasing goods and services. Where women are involved in trade, it is generally at the local level, and as indicated above, many current strategies are squeezing out the local traders.

In the past, many access projects have not been especially successful. During the past decade, much has been learned about how to manage them. Past failures are not an indication of what the future could hold.

Implementing the strategy calls for:

B. Special Programs and Projects for the Subsistence Subsector

Where there exists a technology that is applicable to small producer conditions and profitable for them to adopt, the key constraint to their realizing the benefits is a lack of access to agricultural institutions, inputs, marketing services, and infrastructure. The small producer constraint incorporates at least four components:

1. The knowledge to do a better job with the resources currently available to him or her, and to use new inputs,
2. The timely availability of proper agricultural inputs (fertilizer, improved seeds, pesticides, water for livestock, animal health services, supplementary feed),
3. The credit to purchase the inputs, and
4. The markets and/or storage facilities to dispose of the surplus production at protected prices which minimize risk.

While it is desirable to view these components as one "package", rather than discrete elements independent of each other, usually one component of the package constitutes a more critical aspect of the small producer access constraint than others. This varies by type of agriculture (crop or livestock), ecological potential, and socio-economic characteristics.

Projects and programs to improve small producer access face many problems. A major one is past efforts to reach them have not always been economically viable; therefore, Ministries of Finance and Planning Organizations have not been particularly supportive. Several reasons can be given for small producer programs not yielding higher benefit/cost ratios. First, and in the judgement of the author of greatest importance, success depends upon governmental agencies delivering a coordinated program to the field, and in most developing countries this has been beyond the capability of existing organizations.<sup>46</sup> Second, while some increased production may be consumed by the producer family, for much progress to be made requires a surplus for sale, and stable markets have not been available. Third, credit has traditionally been extended on a one-on-one basis, and for extremely small producers, such an approach is inefficient and impractical. Fourth, extension workers have tried to operate on a one-on-one basis, and their impact has been small in light of the cost. The revised strategy must overcome these four important problems by developing appropriate projects.

Experience to date in projects to improve small producer access indicate the following increases probability for effectiveness and success:

1. Dealing with farmers in groups (including villages), rather than individually, so as to make better use of extension assistance, credit, marketing and supplies (multi-purpose local cooperatives as suggested by McGrath may offer great hope if properly organized and supported),
2. Using the production package approach (which is an effective means of obtaining high overall returns from technical and project management inputs),
3. Extending credit through a multi-purpose organization that also handles marketing (therefore, is in a position to collect loans),
4. Making needed inputs readily available at the right time, and
5. Protecting markets sufficiently to induce a subsistence survival oriented family to produce for it while avoiding excessive demands on the national treasury.

Special note should be taken that while we talk of "small farmer programs" and special efforts to reach the subsistence subsector, the heartwood of the thrust is a delivery system for inputs, information, and services.

Policy/project guidelines: (1) Pilot projects based on points 1-5 above will be designed and tested (the projects will increase productivity of those in the subsistence subsector); (2) When pilot projects have been proven successful, they will be spread nationwide; (3) Cooperative systems which serve the small farmer/pastoralist needs will be established (see McGrath's paper, Tucson Conference); and (4) Policies and programs which will increase the efficiency and effectiveness of local entrepreneurs (including women) will be implemented.

#### C. Improving Input Availability and Pricing

Fertilizer and other purchased inputs are costly and scarce for most farmers in the developing countries. With the possible exception of very large farms, the delivery system is not effective.

Problems in delivering agricultural inputs to small producers include ministerial jurisdictional problems, financing (including the release of foreign exchange to purchase them abroad), absolute restrictions in the supply (larger farmers bid them away from small farmers), and lack of local distribution facilities. These problems must be overcome, and programs of the type discussed in B above are promising.

In many developing countries, the resourcefulness and resources of the private sector are being ignored or discriminated against in the provision of inputs; yet the quickest and most effective way for government to leverage its limited resources may be through proper regulation and encouragement of the private entrepreneur.

Policy/project guidelines: In addition to the new, special programs to deliver inputs to the subsistence sector through special projects and programs indicated in B above, special attention will be given to developing cost effective distribution systems which will include private enterprise for physical inputs and services to all producers.

#### D. New Credit Programs

Availability of credit is a serious constraint in some areas but not in others. In most areas the institutional arrangement for distributing credit to smallholders is a problem, as is the lack of technological packages of proven effectiveness which justify credit use. Where women farmers are found, they are often prejudiced against. Credit programs designed to serve as a development catalyst used largely in isolation have not been successful. In many countries credit programs have proliferated, and coordination and consolidation would be helpful.

Policy/project guidelines call for: (1) Pilot projects (experimental efforts) utilizing group lending, and multiple purpose cooperatives at the local level, which may be the only viable method to deliver the credit poor households must receive if they are to become more productive; and (2) Creation of effective credit institutions for all segments of agriculture.

### E. Greater Emphasis on Marketing/Storage/Processing Systems

Post-harvest losses are high in developing countries. Improved marketing, storage and processing of foods could contribute greatly to reducing famine and malnutrition while generating income in rural areas and among the urban poor. Meeting the needs of the subsistence sub-sector, i.e., moving very small and subsistence farmers a step or two up the developmental spectrum and involving them in production for the market should receive first priority attention. The reasons for the priority are: (1) The subsistence subsector folk are the poorest of the poor, and in most countries represent the largest single group of people susceptible to famine risk and permanent malnutrition, and (2) Increasing their productivity through involving them more deeply in the market economy generates great demand for other goods and services, thus stimulates economic growth and employment in the urban areas. (Note should be taken that the program thrusts in B, C & D above include marketing/storage components).

Second priority is assigned to processing and handling food in the urban areas. Many of the marketing services and much of the processing currently performed on developing country produced food products which are exported could be performed in the developing countries.

How to proceed? The first step is to recognize that marketing is an especially important constraint to increasing the productivity of small producers. The system is complicated, costly, and, in the eyes of the small producers, unreliable. Increasing reliability (or stability) is the key word. Many countries are approaching the vulnerable stage when production first exceeds local consumption requirements. The system for assembling, shipping, etc., to distant, often foreign, markets is almost totally lacking. Guaranteed prices and assurance that a local organization will buy increased production are requisites for rapid transition of small producers into a market oriented economy. Commercial storage in higher risk areas, when coupled with national and regional storage policies, could do much to alleviate periodic weather-caused famine while providing the market reliability so badly needed.

Cooperatives are emerging as the primary local component of most small producer access systems, including marketing. Multipurpose cooperatives handling agricultural inputs, credit, and providing marketing/storage and extension-type services may be the only workable, economically viable institutional arrangement available.<sup>47</sup> Private enterprise has a role to play, but as with inputs, is frequently ignored or deliberately constrained.

Policy/project guidelines call for: (1) Creating a national capability to evaluate marketing, storage, and processing systems, (2) Emphasizing marketing programs designed to increase small farmer/pastoralist access, with highest priority to those that are integral parts of small farmer/pastoralist projects and integrated rural area projects, and (3) Testing alternative local cooperative arrangements with a view toward integrating the best into a national system.

Aid organizations can be of great help by providing assistance for the many studies and analyses needed, directing foreign investment toward the opportunities, and increasing capital assistance.

## VII. CREATING SUPPORTING PHYSICAL INFRASTRUCTURE

### A. Introduction

Whether infrastructure is required is not an issue. All developing countries need additional infrastructure. At issue are: (1) When is it to be constructed?, (2) How much effort should be devoted to it?, and (3) What is needed?

### B. Improving the Transportation System, Especially Rural Roads

While the whole transportation system in most countries needs attention, lack of rural roads is the major infrastructure constraint for the rural poor, therefore needs to be given top priority. Few developing countries have even the trunk roads which are required for productive rural economies, let alone the secondary (minor) or farm-to-market roads. It is costly and sometimes impossible to deliver basic services to rural areas because of the poor road system.

Rural development is highly dependent upon transportation. The economic development process applied to agriculture involves shifting people from subsistence up the ladder into the commercial sector. Increasing productivity calls for utilizing increasing quantities of purchased inputs and producing additional products for the market. The inputs must be moved in by truck, cart, donkey, etc., and the product moved out. Extension and basic service workers must be mobile.

Policy/project guidelines: (1) Road construction and other infrastructure construction will be supportive of rural development and basic services activities, i.e., no attempts will be made to use road construction as a catalyst for development in isolation from other programs, and (2) Where possible, road construction will be through local programs, using labor intensive means.

Aid agencies should re-evaluate their policies vis-a-vis road construction. Road construction is a high profile activity--requiring off-shore procurement of many commodities, and relatively easy to manage. It long has been an aid agency favorite. Aid agencies need to determine whether the "greatest good for the greatest number" is being accomplished by current policies.

### C. Increasing Input Production

The input problem in developing countries involves: (1) distribution, covered in Part VI, and (2) production. It is paradoxical that crop yields in developing countries are low, while natural resources which will support increased production are available, but unexploited, in many. (The rock phosphate deposits in West Africa are examples).

Policy/project guidelines: Inputs needed to increase food production, using appropriate technology, will be produced from local raw materials whenever economically practical.

Aid agencies are in position to provide the technical expertise needed to guide decision making. Also, substantial capital outlays will be required.

#### D. Creating Central Storage Systems

The recent world food crisis and the Sahelian drought demonstrated dramatically the need for central storage and, more specifically, the development of storage systems throughout the developing countries. The marketing system cannot function effectively without adequate storage facilities, and in some areas reserves to tide people through several years are needed. In many cases, the storage system should be regional, thus involving several countries. The construction and operation of a system of the scope and magnitude required is more than what is involved in increasing access to a market, which is covered in Part VI, E and B.

Policy/project guidelines: Storage requirements and optimal locations need to be determined, and when sound plans and policies have been prepared, the facilities constructed. Aid and other international organizations have an extremely important role to play because of the size and scope of the problems faced. Technical assistance to studies and analyses is badly needed.

#### E. Orderly Development of Water Resources

In this paper, meeting the highest priority water resource need--readily accessible clean drinking water--has been approached as a part of the food/nutrition problem. In most of the rural and the low income areas of the cities, the provision of clean drinking water should be assigned absolute top priority in the thrust to make basic human needs readily accessible to all people. A substantial part of the educational/information effort discussed in Part V should be devoted to water, and area plans and projects (see IV) should include provision for it.

The rivers and streams of the developing countries are often untapped and underutilized, thus are a resource available for development. The potential is tremendous, but so are the problems. Some projects will involve minor infrastructure and relatively low investment, but many must be very large. Salinity and other problems are appearing in old projects, and they must be revised. The economic feasibility of much of the needed development is unknown, but given current high construction costs there is a strong possibility many projects would yield low internal rates of return.

Revised national strategies will: (1) Place top priority on all people having ready access to an adequate supply of sanitary water for domestic use, (2) Provide for analyses of alternative irrigation systems and methods of system (project) management, (3) Stress the more promising smaller, simpler projects, and (4) In cooperation with neighboring nations, provide for the development of the major, multinational rivers.

VIII. NOTES AND REFERENCES

1. Numerous reviews of earlier strategies for development are readily available. The author, in "The World Food Crisis and the New Look in Agricultural Sector Development Strategies," attempted to set the stage for the Conference on the Role of Women in Meeting Basic Food/Nutrition Needs in the Developing Countries, Tucson, Arizona, January 9-11, 1978, page to . (For papers and information on the Proceedings, write WiD, AID, State Department, Washington, D.C. 20523, or Women and Food (CID), 211 Alumni Building #40, University of Arizona, Tucson, Arizona 85721). Also, see Morawitz, Twenty-Five Years of Economic Development: 1950-1975 (IBRD, 1977).
2. Many studies support the conclusion. See Morawitz, ibid; D. D. Caton, and R. K. Van Haeften, A Strategy Paper for Integrating LDC Rural Women into their National Economies, (AID, 1974), page 21; and N. al Haq, "Basic Needs: A Progress Report," mimeo (IBRD, 1977).
3. Several estimates of worldwide food/nutrition and other basic needs shortfalls are available. Shlome Rentlinger and Manrelo Selowsky, in a paper on Malnutrition and Poverty: Magnitude and Policy Options, (IBRD, 1976), estimate 1.4 billion people have some calorie defects in their daily diet--of whom 930 million suffer daily deficits of 250 calories or more. Haq, op. cit #2, reports approximately one billion people do not receive an adequate daily diet, meet minimum sanitary drinking water or basic health and education requirements. FAO distinguishes between undernutrition (too little food for good health) and malnutrition (physical impairment due to quality or quantity of food intake). FAO estimated there were 455 million undernourished during 1973-74.
4. UNICEF, A Strategy for Basic Services, (New York, undated), p. 6.
5. See Maurice Williams, "The Development Challenge of Today--Meeting the Basic Needs of the Poorest Peoples," OECD Observer #89, November 1977; Aspects of National Development Policies in the Context of a Basic Needs Approach, DAC Group of Experts Meeting, October 1977; and Basic Human Needs: An Emerging Approach to Hunger and Poverty, (Bread for the World Newsletter Insert, Nov. 1977.)
6. Resolution adopted by the United Nations General Assembly, December 21, 1976.
7. Unpublished AID documents, possibly available upon request to the authors.
8. ILO, Employment, Growth and Basic Needs, (International Labor Organization Office, Geneva, 1976).

9. Lawrence Moore, "The Concept of Integrated Rural Development--An International View," Report of International Seminar on IRD, Ministry of Food, Agriculture and Rural Development and FAO/UNDP (Islamabad, 1973), p. 55; and John L. Fischer, "The Key-note Address: Integrated Rural Development Programmes and Projects in a World Facing Food and Poverty Crises," Proceedings, CENTO Seminar on Integrated Rural Development, Islamabad, 1975 (CENTO Secretariat, Ankara, 1975) p. 38-59.
10. James H. Weaver and Richard N. Blue, An Approach to Integrated Rural Development: A Case Study of the Kigoma Region of Tanzania, unpublished American University Development Studies Program report, November 1976, p. 4.
11. John L. Fischer, "Planning and Implementing Social Services: An Integral Part of Rural Development," Proceedings and Papers of the Regional and International Economic Development Planning Conference, (Virginia State College, Petersburg, 1975) p. 90-95; and Du Wulf, "Do Public Expenditures Reduce Inequality," Finance and Development, Vol. 11, #3 (Washington, D.C., 1974) p. 10.
12. For an example, see John J. Gilligan, The Role of Women in the Economic Life of the Third World, Partners of the Americas, 1977 Convention, Santo Domingo, Nov. 1977.
13. The Synthesis risks overgeneralizing in an effort to provide a base for Part III. It is based on papers and presentations to the Tucson Conference, and supplemented by the author's experience in nine developing countries and by cited references.
14. Williams, op cit. #5.
15. Numerous sources for the conclusions are available. See Africa Bureau Agricultural Development Strategy Statement with Policy Guidelines, A Task Force Report, AFR/AID (Washington D.C., May 1977) p. 2-3; and John L. Fischer, "Food and Agriculture in the Decade Ahead," Beef Cattle Science Handbook, Vol. 13 (Agri-services Foundation, Clovis, California 93613, 1976), p. 5-11.
16. Conference presentations and papers directly related are Caton, Fowler, Howell, Cox, Sarica, Barnes, Littlefield, Knospe, Leeper, Stavrakis, North, Huggard, Burke, Finne, Fischer, and others. Also, see John L. Fischer, Looking Ahead with Turkey, USAID/Turkey, and P/R/C, Ministry of Agriculture, (Ankara, July 1974), and Report to USAID Director on Rural Development Prospects, Thailand, USON/Thailand and University of Arizona, (Feb. 1974).
17. This section draws heavily from the AID Africa Bureau strategy, op. cit. #15, and earlier works of the author.

18. A special report entitled, "Poor Vs. Rich: A New Global Conflict," in Time, Dec. 22, 1975 issue, classifies the Third World countries into similar categories.
19. Ibid.
20. While there is general agreement, it is by no means unanimous. For each developing country to be self-sufficient in food would mean some were not utilizing their resources to greatest comparative advantage, or least comparative disadvantage; therefore, may not be a desirable goal.
21. The generalization does not mean given the current state of the arts, we know how to increase production and manage soil and water resources on every hill or in every valley of the world. Tucson Conference presentations supporting the generalization include Calloway, Cox, Caton, Cloud, Stavrakis, Fowler, Schick, Johnson, Harrison, Huggard, Alabastro, Ibarra, Sarica, Burke, Finne, Scott, and others.
22. Most national leaders proclaim people are entitled to improved life quality, but few are specific in terms of the "right to food." When a government accepts #2, it will have moved a step forward from making rapid economic growth with equity the national goal. It will now make meeting the basic human needs and services the growth industries, i.e., use them as engines for economic growth. Priorities, policies and projects will be quite different from what they would be if the government was merely attempting to re-shape a First Development Decade strategy because income redistribution has become necessary in order to provide an acceptable degree of public order and harmony.
23. The priorities are extracted from Conference papers and discussions and other sources including AID Africa Bureau Task Force, op. cit. #15.
24. The Third World Women's and Ethiopian Women's Organization statements, and the Fraser, Scott, Calloway, Graves, Burke, Howell, Huggard, Williams, Cox, Caton, and Dreyer presentations support the priority assignment.
25. Conference presentations by Calloway, Schick, Alabastro, Ibarra, Graves, Sarica, Fowler, Mallaca Vajathron, Cox, Harrison and Poyner are especially relevant to this point.
26. Calloway's and Schick's Conference presentations stressed this point.
27. Cox's and Stavrakis' presentations make this point. Also, see John L. Fischer, "Why Projects Fail to Come Up to Expectations," CENTO Seminar on Agricultural Planning, Tehran, August 28-Sept. 2, 1971 (CENTO Secretariat, Ankara, 1971) p. 106-113.

28. see Gilligan, op. cit. #12. Conference presentations from Scott, Finne, Calloway, and Graves are especially relevant.
29. See Barnes, North, Cloud, Stavrakis, Burke, Dreyer, Calloway, and Marguerite Lewis presentations.
30. Calloway has been involved in the FAO/UNDP's efforts and alluded to them. Also, see Knospe and Leeper Conference papers.
31. The purpose of the estimate is to provide perspective. Accuracy at levels required for program or project preparation is desirable, but not mandatory at this time.
32. Conference presentations especially related to this section include Fraser, Littlefield, Leeper, Barnes, McGrath, Finne, Stavrakis, Graves, and Huggard.
33. Conference presentations by Fowler, Sarica, Graves, and others are especially relevant.
34. This section draws heavily from previous works of the author in a CENTO-sponsored Seminar on Agricultural and Rural Development Planning, and the Agri/Rural Strategy Task Force, Africa Bureau, op. cit. #15.
35. Op. cit. #27, Fischer, p. 106-108.
36. The Term "subsistence," as used in this report is a relevant one. It is recognized no totally subsistence economies exist--all sell a little something and buy salt, etc. Subsistence is defined to include those whose economic activities are directed predominantly toward production for home consumption, including expanded families and others in the group in groupistic cultures.
37. Much of the Conference discussion centered on this group. Papers or presentations by Cloud, McGrath, Barnes, North, Finne, Rignell, Graves, Dreyer, Scott, Stavrakis, Fowler, Alabastro, Ibarra, Sarica, Schick and Huggard are very closely related.
38. Special appreciation is extended to Dr. Don Ferguson, Africa Bureau, AID, for helpful insights on material covered in this section.
39. Rignell, Whiting, Tinker, Barnes, North, and Huggard Conference presentations are relevant to this point.
40. See Lewis, Cloud, North, Stavrakis, Barnes, and Huggard's papers. Also, Graves' presentation stressed the need for improvement in root crops.
41. See Caton and Leeper.

42. See Conference recommendations on education, Summary Report.
43. See Calloway, Third World Women's statement, and recommendations, Tucson Conference Summary Report and Proceedings.
44. See Carol J. Pierce Colfer, "High Roads Bypass the Poor," Development Forum, Nov.-Dec. 1977; and Tucson Conference recommendations on research, Summary Report and Proceedings.
45. See McGrath, Cox, Fraser, Burke, and Huggard Conference presentations.
46. It is unfortunate that aid organizations have not concentrated on the problem, often preferring to attempt to overcome low levels of performance by additional technology transfer.
47. See McGrath.