This section reports the *Agriculture-Nutrition Advantage* project's results. The results are grouped into four categories that define a framework for change: (1) creating effective leadership networks; (2) advocating for policy change; (3) operationalizing an agriculture-nutrition linked, gender-informed approach; and (4) mainstreaming the approach to promote sustainable change. Because the project viewed gender as a means to improve links between agriculture and nutrition, gender-related results are reported in each of the four categories.

The results illustrate the range of accomplishments and the potential to make significant inroads toward reducing hunger, improving nutritional well-being, and contributing to poverty reduction. The main results are supplemented with lessons learned (see boxes) as reported by team members upon reflection of their experiences at the conclusion of the project.

Creating Effective Leadership Networks

Policy and program changes stem from a dynamic, iterative process fueled by advocacy that helps to define the problem, suggests solutions, and builds consensus around issues that have political relevance. Most often, "policy champions" or opinion leaders are needed to promote change, frequently through networks of change agents.

Such agents must have access to key audiences, be trusted and viewed as objective sources of information, and have experience working with policy structures and programs. They also must have credible evidence that is grounded in local realities; demonstrate that their recommendations are feasible and relevant; and show how their audiences will benefit from the proposed change (Rogers 1962; Porter and Hicks 1994; Michelsen 2003).

After three years, the *Agriculture-Nutrition Advantage* project had active, informed and skilled networks of more than 30 leaders in Ghana, Kenya, Mozambique, Nigeria, Uganda, and the United States who were promoting greater use of a gender-informed approach that links agriculture and nutrition as a means to reduce hunger and undernutrition in a timely and sustainable fashion.

Country-specific results: Having learned from the evidence, their participation in skill-building sessions, and exchanges with colleagues and communities, the *Agriculture-Nutrition Advantage* teams applied their knowledge and skills to achieve these results:

► All teams either developed expanded leadership networks beyond their initial core members, or strengthened existing forums. Examples of the former include Ghana's National Coordinating Committee, the national steering committee

What Was Learned About Gender Capacity Building?

Gender methodologies can be the bridge that links agriculture and nutrition, but only if they are well understood and used by all. All the participants in the gender analysis workshop had attended gender awareness-raising workshops but had little to no training in using gender analysis as a research and planning methodology. In the workshop, they learned about the elements of gender analysis and applied them in a series of hands-on exercises. The practical use of this research and planning methodology prompted some to have an "ah-ha" moment – as one participant declared, "Now, I understand what I can do in my work to identify and address gender-related issues."

A Personal Testimony to Lessons Learned

A Nigerian team member, Mrs. C.N.N. Nnonyelu of the Department of Rural Development, Federal Ministry of Agriculture and Rural Development, shared how the project changed her thinking about nutrition and agriculture. Reflecting on her previous frustration with nutritionists who promoted vitamin and mineral supplements to reduce malnutrition in Nigeria, Mrs. Nnonyelu said she felt this approach was an insult to Nigerian farmers and agricultural specialists. She learned from the Agriculture-Nutrition Advantage project that food supplies were not always sufficient to reduce malnutrition. Good nutrition, she realized, also depends on sound health and care practices, and both supplementation and food-based strategies have roles in reducing undernutrition. She now is a strong proponent of a linked approach in her ministry.

in Uganda, and the ICRW/IFPRI Technical Advisory Committee; examples of the latter include the Food and Nutrition Committees in Nigeria and SETSAN in Mozambique.

- ▶ In Uganda, 30 persons from policy institutions, line ministries, university and research organizations, NGOs, and donor agencies actively advocated for integrating nutrition into the Poverty Eradication Action Plan based on the knowledge they gained from the *Agriculture-Nutrition Advantage* leadership network.
- ▶ Members of the Ghana team are using what they learned about gender in a new project⁷ to reduce incidence of low birth weight infants by strengthening development programs that aim to improve women's nutrition and economic and social status throughout their lifecycle.
- ► Community members in the Kabarole District, Uganda, learned more about health and nutrition from weekly radio programs that drew on the *Agriculture-Nutrition Advantage* team's expertise and commitment.

Advocating for Policy Change

"Advocacy" has various meanings. It can mean voicing concerns, beliefs, and recommendations to powerful people or institutions in order to stimulate change on behalf of others or oneself. It also can mean arguing in favor of a cause, idea or policy. The *Agriculture-Nutrition Advantage* project incorporated both meanings in building a network of articulate, knowledgeable, and skilled advocates.

Although the project's team members actually had been functioning as advocates, they initially did not see themselves as such because they thought advocacy was something pressure groups did, not technical specialists. In fact, technical specialists

can be effective advocates. In workshop settings and through one-on-one technical assistance, the teams learned about the role of advocacy and about advocacy strategy development and implementation.

The country teams developed advocacy plans, applying what they had learned about the change process and the role of advocacy. The plans included a problem definition based on the evidence; an analysis of the policy context (identifying facilitating and constraining factors); and a map of the decision-making landscape. The teams formulated an advocacy objective, identified their key audiences, and developed a set of activities, including a communication strategy and messages that would allow them to achieve their expected outcomes.

Although each team's plan was specific to its particular audiences and issues, their communication strategies had common elements such as use of the media and the Internet; PowerPoint presentations; PROFILES (a powerful analytical tool that can illustrate costs and benefits of investing in nutrition, see Figure 6)8; articles in development journals and newsletters; and informational briefs. The teams leveraged their influence by attending international conferences

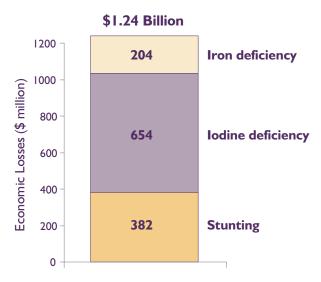
What Was Learned About Leadership?

It takes more than passion or personal commitment. It took time and effort to build the leadership networks and work together. It also took time and technical support for the leaders to become fully conversant in the project's approach, even though they intuitively grasped the linkage concept and its benefits. The initial investment made by the Agriculture-Nutrition Advantage project generated momentum for this process.

⁷ The Nutrition and Gender Initiative, implemented by ICRW.

⁸ PROFILES was used by the Ghana, Mozambique, Nigeria, and Uganda teams.

Figure 6: Total Value of Losses: 2000-2005



In Uganda, the team used PROFILES to illustrate the economic costs of nutritional problems. They also showed that investments of \$62 million in nutrition programming between 2000 and 2010 could yield economic benefits valued at \$447 million, a 7:1 benefit-cost ratio.

and meetings, serving on advisory committees, and providing input to key development documents, such as the 5th World Report on Nutrition, the draft report for the Millennium Development Goal's Hunger Task Force, and the USAID Agriculture Strategy Paper.

Country-specific results: All country teams prompted changes in knowledge and action at the policy level, such as:

- ▶ In Kenya, six parliamentarians and six CEOs from key organizations were educated about why, in the face of apparent plenty, hunger and undernutrition was still a critical and, for some, a growing problem. This prompted the parliamentarians to introduce a motion to legislate action for greater investment in indigenous food groups, typically grown, processed, and sold by women, as a means to reduce food insecurity in Kenya, and to shape the creation of a National Nutrition Act.
- ► Convinced of the project's approach, UNICEF and the World Bank joined the project in Ghana by supporting the development of district plans and community-based interventions in nine districts that used a linked, gender-informed approach to reduce micronutrient deficiencies.
- ► The Nigerian team's participation in the Nutrition Partners Forum helped catalyze the launch of the Nigerian National Food and Nutrition Policy. More than 100 million Naira

(approximately US\$77,000) of the 126 million Naira requested by the Ministry of Agriculture was released to train agricultural extension agents in nutrition. This was the first time, in the team's memory, that agricultural resources had been allocated to support nutrition-specific activities.

▶ In Uganda, team advocacy efforts contributed to the incorporation of nutrition into the revised Poverty Eradication Action Plan, and nutritional status was included as a monitoring indicator. The Food and Nutrition Security Strategy and Investment Plan, which had been primarily agriculture-oriented, for the first time included support for nutrition-specific activities — a critical development to making agriculture-nutrition

linkages. In addition, the Plan for the Modernization of Agriculture's Food Security Subcommittee was renamed the Food and Nutrition Subcommittee, an important semantic shift indicating a stronger commitment to the linked

"I think Kenya has some of the best academic papers on how hunger, poverty, and disease can be eradicated. What is lacking is the practical connection with the common women and men in the village."

—Prof. Christine Mango Member of Parliament Butula, Kenya

approach endorsed by the *Agriculture-Nutrition Advantage* project.

Operationalizing an Agriculture-Nutrition Linked, Gender-informed Approach

An obvious criterion for success was the extent to which project-supported activities led to changes in policies and programs. In other words, did the activities move people to take action? The teams achieved remarkable success at the national policy level. Similar successes occurred at the agency and community levels. In fact, the teams noted that the closer they got to the household and community levels, the easier it was to stimulate action because it was easier to *see* what could be done, and community members needed less convincing than policymakers to take action.

What Was Learned About Advocacy?

The approach must be relevant to dominant policy issues. The agriculture-nutrition linked, gender-informed approach is logical, effective, and feasible for improving nutrition. Still, policymakers are more open to listening and taking action when the approach is tied to key policy agendas, such as poverty reduction. Advocates also must be nimble and have mastery of their facts to take advantage of opportunities that arise on a moment's notice, and they must have allies in key places to alert them to those opportunities.

To operationalize the project approach within planning and implementing agencies, the teams used a number of strategies. One was to train agency staff on how to use gender analysis and how to link agriculture and nutrition, while another was to place technical specialists within institutions where they could educate and motivate others. For example, the Mozambican project nutritionist was seconded to SETSAN and provided technical assistance on how to operationally link agriculture and nutrition. Also in Mozambique, the gender specialist worked with the Ministry of Agriculture to mainstream gender into its work, which led to the integration of health and nutrition in its field operations.

At the community level, teams in Ghana, Mozambique, and Uganda worked with implementing agencies and community members to design community-based activities that linked agriculture with nutrition and were informed by gender. They used learning strategies, such as farmer-to-farmer training, exchange visits between women farmers involved in different interventions as a means of sharing technical skills and knowledge, and demonstration plots to train men and women farmers in food crop production

"It is now obvious that the secret of finding solutions lies in combining good qualities of men and women to, at least, work together if they cannot walk together!... Good nutrition of children cannot be left to women alone..."

—Mrs. Mukankusi Kabale District Uganda strategies and skills. They provided health and nutrition information to educate and stimulate action, and supplied the means such as seeds, planting materials, and, in the case of Ghana, money (\$28,000 to the four target districts for training and purchase of

agricultural inputs) to enable farmers and other community members to act on the knowledge they gained in the educational sessions. They also applied gender principles such as involving all community members – men and women, boys and girls – creating the opportunity for all to participate in and benefit from the project-supported activities according to their needs and interests.

Country-specific results: Results at the institutional and community levels include:

- ► The Nigerian National Food and Nutrition Committee revitalized its activities, with plans to do the same in 12 states.
- Nigeria's Ministry of Health and Ministry of Agriculture developed a joint goal linking agriculture and nutrition.
- ▶ The Ghana team trained 60 technical specialists, including 10 district officers and five regional officers from four districts, in gender, gender analysis, behavior change communication strategies, and agricultural production practices.
- ▶ Eighteen principals and deans of agriculture in universities, agricultural and cooperative colleges, and tutors in health schools in Ghana acknowledged the need to link agriculture and nutrition and integrate gender to improve agricultural productivity.
- ► Three communities in Kabale District, Uganda, requested support for nutrition-related services, like growth monitoring and access to nutrient-rich food crop inputs, through the local councils and National Agricultural Advisory Service (NAADS).
- ► Farmers in targeted areas in western Uganda adopted and produced nutrient-rich food crops, such as orange-fleshed sweet potatoes, and increased the amount of land they used to cultivate such crops.

What Was Learned About Operationalizing the Approach?

Sustainable change must involve communities as well as organizations. Change happens best through a mix of exchanges both vertical (e.g., technical organizations and communities) and horizontal (e.g., farmer-to-farmer); and outreach efforts should be made through all possible channels including markets, schools, mosques, and churches. Further, communities are eager to learn through education and communication, but must have the means and opportunity to act on that knowledge. Thus, organizations must find the means to ensure this happens.

Mainstreaming the Project Approach to Promote Sustainable Change

Sustainability is an inherently dynamic, indefinite and contested concept (Mog 2004). It is sometimes used to mean having sufficient financial resources to maintain systems, processes or learning. It can refer to an individual's internalization of learning so that it becomes an unconscious and integral part of what one does. At an institutional level, it can mean developing curricula so each new cadre of students receives the same education and skill building. According to Mog, a sustainable approach provides for continuous learning, adapting, and innovating. It involves participation and community organization; capacity building; use of local knowledge, skills, and initiative; and is diverse, dynamic, and responsive to external forces.

The Agriculture-Nutrition Advantage project used "sustainability" to refer to factors that would ensure that the results of actions taken and changes made are maintained over time. Because written documents formalize agreements and provide guidelines for others to follow over time, the project considered the following to be parts of a

sustainable change process: education and training curricula; manuals for design and implementation of linked, gender-informed programs at the community level; and formal public documents that allocate resources to support activities linking agriculture and nutrition.

Although mainstreaming the knowledge and practice of a linked, gender-informed approach into existing systems and organizations can be time-consuming, the leadership networks were able to get others to take action in a relatively short time because the leaders worked in key organizations and were recognized as experts in their fields. Efforts to mainstream the approach were enhanced by building on and linking to others' ongoing or previous work – the team in Ghana, for example, built on prior gender training of Ministry of Agriculture staff.

Country-specific results: Examples of the teams' successes in mainstreaming the project's approach include:

- ► The Nigeria team developed two manuals to guide the training of trainers and the design and implementation of linked, gender-informed community-based interventions.
- ► The Ghana team developed a planning manual that was used to design food-based interventions in 40 communities.
- ► Education and training schools in Ghana issued guidelines to modify their agricultural curricula to reflect the country's nutritional problems and needs.
- National agricultural research institutions in Mozambique (INIA), Nigeria (IITA), and Uganda (NARO) integrated nutrition into their research agendas.
- ► The Ministry of Agriculture in Nigeria integrated nutrition into agricultural research, development, and extension.

What Was Learned About Mainstreaming the Project's Approach?

Agriculturalists and nutritionists must learn from each other. Nutrition can broaden the scope of what agriculture can do to improve economic and social development, such as making nutrition relevant in poverty reduction strategies that rely on agriculture as an engine of economic growth and development. But nutritionists need to better understand agricultural objectives and build on them, just as agriculturalists need to do the same vis-à-vis nutrition. Agricultural curricula and research agendas need to give more attention to how markets, employment, income, and post-harvest technologies affect, and are affected by, gender and nutrition. Finally, to increase the effectiveness of consumer marketing and public information campaigns, both agriculturalists and nutritionists (the latter in particular, as they traditionally have been less involved) need to be accessible to provide reliable, high-quality information.