

WID Information

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RESEARCH NOTES

The article is drawn from a study on "Accomplishments of the IRRI Program on Women in Rice Farming Systems"¹. By Teodora O. Amoloza, WID Associate and Associate Professor of Sociology & Director, International Studies Program, Illinois Wesleyan University.

Introduction

This study assesses the accomplishments and impact of the Women in Rice Farming Systems (WIRFS) program since it was instituted at the International Rice Research Institute (IRRI) in 1985. IRRI is an autonomous, nonprofit agricultural research and training center located in Los Banos, Laguna, Philippines. Its goal is to improve the well-being of present and future generations of rice farmers and consumers, particularly those with low incomes. One of the identified strategies in pursuing its goal and objectives is the participation of women in research and development. In 1989 IRRI explicitly recognized the role of women in rice farming enterprise when it stated in its strategic planning document that IRRI " ... will continue to promote the integration of women's concerns into all research projects in IRRI and in national programs. ... technologies that reduce the burden of rural women without displacing their income-generating capacity will be developed" (IRRI, 1989, p.21).

Partly as a result of a conference of biological and social scientists and policy makers convened in IRRI in 1983 to discuss women's role in rice farming, a Project Design Workshop on WIRFS was

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held at IRRI in April, 1985 resulting to the establishment of the WIRFS network. It aimed to undertake research/action projects in five general areas, namely: women and technology development, women and extension, impact of technologies on women and the household, complementary studies, and sensitization. The ultimate aim of this collaborative work is to *institutionalize women's concerns within agricultural research and extension rice farming systems.*

Findings

This paper evaluates whether the WIRFS Program has accomplished its goals and objectives. Specific questions raised in the assessment and the research findings are summarized below.

A. Has WIRFS contributed to our understanding of the roles of women in the agricultural enterprise? to the constraints they face? to their concerns and needs? Has WIRFS recommended options for improvement of rural women's working conditions?

Diagnostic studies at initial key research sites of the WIRFS network showed the significant role women play in the farming system. They contribute from 33% (Indonesia) to 80% (India) of the labor for crop establishment, from 13% (Philippines) to 80% (India) for crop care and from 22% (Philippines) to 86% (Vietnam) for crop processing. Comparatively, women's contributions to rice farming are highest in India and Vietnam and lowest in the Philippines. Overall, from 35% to 52% of exchange/wage labor is provided by women; they also participate in animal raising, contributing from 1/4 to over 1/2 of the labor. In addition to working in the rice farm and raising poultry and livestock, they also raise other grain crops, vegetables and legumes, contributing from 2/5 (Thailand) to close to 4/5 of the labor (Nepal) (IRRI, 1991).

WIRFS research also showed that women's role in farming systems, the constraints they face and their needs are also influenced by their socioeconomic status, e.g., belonging to a lower caste in India or being landless. Thus, technologies developed should take into consideration the particular circumstances of women in a given area. Hence, WIRFS research also identified the different constraints to women's productivity in rice farming systems and recommended strategies to address these constraints. WIRFS social scientists showed that not only can they diagnose and criticize existing social conditions but they can also suggest implementable solutions so that identified problems can be solved.

B. Has WIRFS tapped the technological/technical expertise of various units at IRRI and other institutions to devise innovative technologies addressing women's needs? Were women encouraged to participate in the testing and evaluation of new technologies?

Among the various rice farming activities, women are predominantly responsible for transplanting, weeding, harvesting, threshing and manual paddy processing. WIRFS social scientists worked with agricultural engineers at IRRI and the Philippine Rice Research Institute (PhilRice) in the development, testing and evaluation of tools, equipments and small machineries with a women users' perspective, namely the ultralite transplanter and upland weeder, drum seeder, panicle thresher/huller, micro rice mill, rice flour mill, processing equipments for glutinous rice, and rice husk stove. They also worked with biological scientists to develop high-yielding glutinous rice variety and other technologies which expand women's opportunities, for example, more efficient seed management practices and mushroom culture. These technologies have been evaluated and endorsed by women.

Some of these technologies are still being further refined.

C. Did women adopt the "women-friendly" technologies developed? Did the adoption of these technologies result in a better life for women and their families? In what ways?

The dissemination of the *ultralite transplanter* and the accompanying training component is being done through the Regional Network in Agricultural Machinery based in Los Banos, Laguna, Philippines. Using this equipment, one woman can cover 40 square meters in one hour while manual transplanting would require four hours (Paris, 1993). The growing scarcity of male farm labor in Davao del Norte, Philippines called for the development of farm machinery which can be used by women. The *drum seeder*, developed in 1993, was successfully tested and adopted by local farmers with the support of the local government. The drum seeder is very useful for farm women who need to be released from the drudgery of farm labor to attend to their other responsibilities. Two persons can seed one hectare of rice in 8-10 hours; not only is this time efficient, it is also the least expensive method of planting. Yield of rice paddy using the drum seeder is highest compared to transplanting and direct seeding methods. Since the drum seeder ensures neatly laid out rows of plants, it also reduces the labor in weeding. The *Swiss hoe weeder* was also enthusiastically received by women farmers.

Among the "women-friendly" technologies introduced, the *micro rice mill* has had the greatest impact. Whereas it takes one woman half a day to hand pound five kilograms of rice, the micro rice mill can process 50 kilograms of rough rice in one hour. Women favor the micro rice mill because of its portability and ease of operation and cited a number of benefits derived from this machinery, namely, reduction in time used to transport the paddy to the village, elimination of the necessity of queuing at the town rice mill, avoidance of the drudgery in hand milling rice and generation of income for the women's association. In areas where the micro rice mill had been introduced, women organized themselves into associations to manage and operate the micro rice mill (IRRI, 1994). They provide milling services to the other rice producers in the community, earn profit which they use for low interest loans to members, thereby giving women access to agricultural credit. Thus, a latent function of the introduction of the micro rice mill in the farming community is increasing the status of women by empowering them to manage a cooperative, make decisions and have control of the income generated from operating the machinery.

Designing the rice husk stove to make use of one of the by-products of rice processing is a very environmentally conscious endeavor. Not only will it help alleviate the problem of fuelwood shortage, it will also help reduce the amount of improperly disposed of rice husk. Field testing by rural women indicated that a family of five members uses about 40-50 kilos of rice husks per week. Comparatively, they would use about 30 kilos of wood which they would have to chop for about half a day. Hence, a well-designed rice husk stove has a very good potential for adoption.

D. Has WIRFS identified other opportunities for women to harness their potentials and increase their productivity?

Swine and poultry production are important sources of income for rural families but they are faced with the constraint of scarce feed supply, high cost of commercial feeds, lack of capital and lack of technical knowledge in swine and poultry production. In the Philippines, Indonesia, Bangladesh and

Thailand, village experiments were conducted to upgrade the local breeds of poultry and to more efficiently manage feed for swine using rice and non-rice residues and byproducts (Paris, 1993).

Since collection of animal fodder and fuel wood were identified as mostly women's activities (84% done by Nepalese women) and the most time-consuming activities (4.5 hours per day for both activities in Nepal, 3-4 hours per day collecting animal fodder in India), multipurpose tree species were introduced in a couple of villages in Nepal and were grown in the homesteads. Some women became interested in raising these trees for cash or for their goats, others for fuelwood supply. In India, experiments were conducted to increase the production of fodder within the homesteads for livestock raising (IRRI, 1994).

Mushroom production using rice straw as substrate is another potential income-generating enterprise for rural women. Twenty rural women from the Philippines were given training in mushroom production at IRRI who then experimented on using different crop residues e.g. rice straw, dried banana leaves, rice bran and water lily, as substrate (IRRI, 1993)..

E. Has WIRFS effected the dissemination of information to women farmers? to agricultural research practitioners?

WIRFS scientists have also aggressively pursued the dissemination of knowledge to women farmers as part of its strategy to enhance the productivity and potential of rural women. Twenty five WIRFS cooperators were brought to IRRI to receive training on integrated pest management, seed management, agricultural engineering technologies and improved cropping systems and forage crops. Another 25 women farmers were given training on seed management to give these women who customarily store and preserve seeds technical guidance to ensure good quality seed stocks. WIRFS women cooperators from the same place were given training on how to process soybeans to different food products. Soybean is a crop which can be grown after rice, however various soybean preparations are not known. Hence, its role in the Filipino diet has not been fully explored.

Once the WIRFS program took-off in the Philippines, in-country workshops were organized in a number of countries in the WIRFS network, namely Indonesia, Thailand, India and Bangladesh. These topics focused on methodology for conducting gender-sensitive research, on the role of women in farming systems research and in technology development. A total of nine in-country workshops were held from 1988 to 1990 ranging from one day to 11 days. In addition, during the same period of time, five countries hosted international workshops on similar topics .

WIRFS not only used formal venues for disseminating information to other researchers. It also hosted women researchers from Vietnam, Lao People Democratic Republic, India and Nepal. They were given training on integrating the gender variable in research proposal, formulating and designing questionnaires, computer data analysis, and preparing case study based on an action research.

F. What has been the institutional impact of WIRFS on IRRI? on national agricultural research systems? on the scientific community?

Without doubt, WIRFS has had a tremendous impact on IRRI. The presence of the WIRFS program at the institute and its demonstrated crucial role in research prompted IRRI's planners to explicitly

make a commitment to promote the support of research with a gender perspective (IRRI, 1989). Thus gender sensitive research and training are now conducted by IRRI in Vietnam, Indonesia, Philippines, Nepal and India. Altogether, WIRFS has either conducted or been involved in at least 21 studies on socioeconomic factors and gender concerns.

WIRFS activities have also drawn the interest and support of the Philippine national agricultural research systems, including the Department of Agriculture, the National Commission on the Role of Women, the Philippine Council for Agriculture and Resources Development and PhilRice. National agricultural research agencies in Vietnam, Indonesia, Thailand, Bangladesh, India and Nepal support research on gender issues (IRRI, 1994, 1995).

WIRFS has also taken steps to encourage the continuing participation of women in rice research and national development. In recognition of the role played by women in rice research, WIRFS has instituted a biennial award for outstanding young women rice scientists.

Conclusions

Examination of the accomplishments of the WIRFS program shows that it has come a long way since its inception in 1985. It has increased our understanding of the role of women in farming systems and at the same time recommended technology options to meet women's concerns and needs. It has been instrumental in identifying the needed "women friendly" technologies and has enlisted the support of agricultural engineers and biological scientists in the development, testing and evaluation of these innovations. It has also identified other opportunities for women to harness their potentials and increase their productivity while at the same time reducing the drudgery of their work. There is concrete evidence that the adoption of these innovations resulted in a better life for women and their families. WIRFS has also been effective in sharing gender-sensitive methodologies for research to other agricultural practitioners and in disseminating technical information to women farmers. It has also gained grounds in sensitizing national agricultural research centers, national and local government agencies and IRRI itself to gender issues in research and development. WIRFS took steps to ensure that the social, economic and political situations of male and female agricultural workers are taken into consideration in the development and introduction of new farming technologies. But the real test whether WIRFS has succeeded in its ultimate aim to *institutionalize women's concerns within agricultural research and extension programs on rice farming systems* will come when research at various agricultural research agencies are evaluated in the future. If without the advocacy of WIRFS, these institutions continue to incorporate gender consciousness in their research programs then we can truly conclude that attention to women's concerns and needs in the agricultural enterprise has been institutionalized.

WOMEN IN INTERNATIONAL DEVELOPMENT ACTIVITIES AT UIUC

Three GRID students successfully completed requirements for their doctoral degrees:

Consolata Kabonesa, Ph.D., Human and Community Development Dissertation entitled: 'HIV/AIDS Epidemic: Perceptions and Responses of Individuals Regarding HIV Infection and Prevention in Rural Uganda'.

Grace Malindi, Ph.D., Human and Community Development Dissertation entitled: 'Gender-Based Adoption of Agricultural, Health and Family Planning Technologies by Individuals within Rural Households: The Malawi Case'.

Rosintan Panjaitan, Ph.D., Agricultural Communications Dissertation entitled: 'Impact of Credit and Extension on Women Participants in the Small Farmers Development Program: A Gendered Case Study in Lombok, Indonesia'.

GRANTS, RESEARCH, STUDY AND TRAINING/INTERNSHIP OPPORTUNITIES

The Margaret McNamara Memorial Fund will award five nonrenewable grants for the academic year 1998-99. The purpose of the grant is to support the education of women from developing countries who are committed to improving the lives of women and children in their home countries. Previous fields of study included agriculture, architecture and urban planning, civil engineering, education, forestry, journalism, nursing, nutrition, pediatrics, public administration, public health, social sciences and social work. Applications must be requested in writing from The Margaret McNamara Memorial Fund, 1818 H. Street, NW, Room G-1000, Washington, D.C. 20433. **Deadline for request for applications: January 15, 1998. The deadline for completed application: February 2, 1998.** The recipients are announced about April 15, 1998.

Internships for Young Women in Disarmament, Development and Human Rights are offered annually by Women's International League for Peace and Freedom (WILPF) for young women who wish to learn about the work of an international women's peace organization in the aforementioned areas in the context of the United Nations. The internship begins in mid-January, ending in mid-December. **Deadline for applications: May 15 of each year** for the following year's programme. For more information and applications contact: Women's International League for Peace and Freedom, Case Postale 28, 1211 Geneva 20, Switzerland; phone: +4122 733 61 75; fax: +4122 740 10 63.

African Women's Scholarship, YMCA Dorothy Mann Scholarship Program for African Women who will return to Africa upon completion of their education. The fund was established to assist African women in the community who plan to return to Africa for employment, but who want to

further their education while still here. Academic period: January-May 1998. Maximum scholarship: \$ 400.00. Applications may be picked up from the Dr. Dorothy Mann Scholarship at the YMCA at the University of Illinois, 1001 S. Wright St.; Telephone: 344 0721. **Deadline for submission of completed application: December 12, 1997**

CONFERENCES AND CALLS FOR PAPERS

Conference on the World of Women's Information. The International Information Centre and Archives for the Women's Movement will host and organize this international conference scheduled to be held in Amsterdam, the Netherlands, from 22-26 August 1998. This conference will further develop concrete ways of making women's information available, visible and accessible, and connect local sources of women's knowledge to global women's information networks in order to create a sustained and intercultural exchange of information throughout the world. For more information write to Know How c/o IIAV, Obieplein 4, 1094 RB Amsterdam, The Netherlands; phone: +31 20 66 50 820; fax: +31 20 66 55 812; e-mail: knowhow@iiav.nl; URL: <http://www.iiav.nl>.

"Speaking Out: Women, Poverty, and Public Policy." The University of Wisconsin's 23rd Women's Studies Conference will be held on October 29-31, 1998 at the University of Wisconsin-Eau Claire. The goal of this conference is to reignite responsibility, activism, and commitment around the issue of poverty and welfare reform. Proposals are requested on the following topics or related issues: The Realities of Poverty, How Academics Can Contribute, Looking at Specific Programs, Making A Difference, Frameworks for Analysis, Women and Social Analysis, Emphasis on Particular Groups, Specific Poverty Issues. Proposals are **due by February 15**. For guidelines, contact Anne Statham, Women's Studies Consortium, UW-Parkside, Box 2000, Kenosha, WI 53141-2000; fax (414) 595-2183; email anne.statham@uwp.edu.

RESOURCES/PUBLICATIONS

WIN (Women's International Net) is a monthly electronic magazine devoted to three purposes: 1. Furthering the knowledge of women's issues worldwide; 2. Bringing together women from all over the world for dialogue and greater mutual understanding; 3. Tapping new sources of talent in writing and enabling women from different countries to express their views and situations. Web site: <http://www.geocities.com/Wellesley/3321>. For subscription, submission of articles or comments write to winmagazine@geocities.com

Funding Opportunities for Programmatic Research: Mexico, Brazil, Nigeria and India. The MacArthur Foundation Population Program which addresses the complex and evolving challenge of global population growth is currently emphasizing activities in four focus countries: Mexico, Brazil, Nigeria and India. Five interrelated areas are funded: Women's Reproductive Health and

Reproductive Rights; Population, Consumption, and Environment; Men, Sexuality, and Reproduction; Communications and Popular Education; and the Fund for Leadership Development. Individuals interested should write to the Foundation. Address: Richard Kaplan, Grants Management, Research and Information Office, 140 South Dearborn Street, Chicago, IL 60603, U.S.A.; phone: (312) 726 8000; fax: (312) 920 6258; e-mail: 4answers@macfdn.org; web site: <http://www.macfdn.org>.

Gender and Development - Rethinking Modernization and Dependency Theory by Catherine V. Scott. The study applies a feminist critical reading to develop modernisation and development theory further, including conceptualization of tradition and gender in modernisation theory; the nature and role of the state in Africa; modernisation theory in practice at the World Bank; Marxism, masculinity and dependency theory; and challenges to dependency in the context of Southern Africa. It is important reading for advanced students and scholars of development and Third World Studies. Lynne Rienner Publishers, 1996. Paper, 149 pages. ISBN 1-55587-664-1. US\$16.95 Order through: Women, Ink. 777 United Nations Plaza, New York, NY 10017, USA, Tel: (212) 687-8633, Fax:(212)661 2704, e-mail wink@igc.apc.org.

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