The Relationships Between Gender Roles and Approaches in Two Rural Areas in Southern Gour in Jordan

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Abstract: The research study focused on exploring the relationships between gender roles and delivery strategies in two areas in southern Gour in Jordan. The researcher used qualitative research and participatory rural appraisal techniques to gather data over a three-month period. The researcher investigated the roles of men and women in agriculture and natural resources and the level of importance of chosen delivery strategies according to gender and area. The roles of women in both areas are related to household tasks, the processing of agricultural products and childcare, while those of men in both areas are associated with production agriculture, as well as with marketing agricultural products. Men and women in both areas favored hands-on delivery strategies that included a social component. The results of this study cannot be generalized, as they varied according to gender and area, but researchers and extension personnel may utilize participatory rural appraisal techniques employed in the study in other areas to determine culturally appropriate delivery strategies and extension topics, fostering greater functional success in extension programs.

Key words: Extension • delivery approaches • gender • descriptive research Jordan

INTRODUCTION

Delivery strategies in extension that are appropriate to clientele in different cultural settings are vital to the effectiveness of extension education and subsequent agricultural development resulting from educational efforts [1]. In some cases, the failure of international agricultural development projects is, in part, linked to ineffective delivery strategies [2]. Boone [3] asserts that the selection of learning experiences requires diagnostic skill and attention to the historical use of delivery strategies. A lack of training for extension personnel in how to use delivery strategies has often existed [1, 4]. Additionally, the incorporation of indigenous methods of communications that promote community solidarity, appropriate technology and encourage permanence of projects was needed [5, 6]. The employment of participatory action research has incorporated indigenous knowledge while involving locals as equal partners in the research and planning process [7, 8]. Some researchers have viewed how gender roles have also affected the extension programming and educational methods [9], but few researchers have researched how the roles that men and women perform in agriculture and natural resources can be used to

formulate appropriate delivery strategies. While many factors contribute to the success or failure of international agriculture development projects, a deficiency of training for extension personnel in delivery methods and an inaccurate diagnosis of the most effectual delivery strategies to employ in a particular situation substantially contribute to the success or malfunction of a project. The roles of men and women in the production of food and fiber and the maintenance of natural resources may also affect delivery strategies that extension personnel use.

THEORETICAL FRAMEWORK

The effectiveness of international delivery strategies hinges upon the efficacy of the transfer of technology in extension systems. Extension workers need to develop skills in agricultural education methods to better communicate their message, though they often lack equipment and facilities to do so [1]. Numerous researchers have recommended that extension workers use hand son methods, such as demonstrations and field trials [10], although several also noted that more abstract methods such as radio and cassette tapes have been successful [11]. Knowles [12] claimed that learners should be involved in planning and evaluation of their

own learning and Rogers [13] stated that self-directed learning involves the whole human being; learners become self-actualized through the process of learning when they recognize the relevance of the subject matter. Knowles [12] also mentioned that adults amass experience over time and therefore learn best from experience and by using experiential techniques, rather than learning passively. Hilburn [14] pointed to the necessity of researching the way cultures learn, their features of conversation and subtle indicators of learning styles. Learning styles may be associated with particular cultures, though this connection is not clearly correlated or defined, as individuals among cultures may vary in learning style and personality. Their choice of delivery strategies, therefore, may be influenced by both individual and cultural factors; Espinosa [15] stated that Hispanics show a tendency toward field dependence with a feeling for nonverbal emotional cues and they express this by a friendly, personalized style of relating, "a relaxed sense of time, need for an informal atmosphere for communicating (p. 2)". The use of appropriate delivery methods in international settings is key to the effectiveness of technology transfer [16]. Many farmers in developing countries are small scale and slower in adopting technology than commercial farmers, due to problems of poverty, illiteracy, lack of agricultural credit and farm inefficient and extension services Radhadkrishna and Yoder [17] also claimed that extensionists should understand agricultural techniques as well as methods of extension education. Pezeshki-Raad et al. [4] stressed that extension agents need skills to design, implement and evaluate educational programs, but that developing countries have not prepared extension personnel in personal competencies in the areas of communications, Volume 11, Number 1 Spring 2004 63 teaching and extension methods needed to do so. Many authors pointed to the lack of participatory methodology and ignorance of indigenous methods in education and extension programs using the transfer of technology model [2, 18]. Others highlighted the incorporation of indigenous systems and the use of Participatory Action Research (PAR) in various projects and extension programs worldwide, including such projects in Latin America [19]. The area of women in development is a pertinent area of research, because one-half of the rural labor force in developing countries consists of women [20]. Extension often does not get information to women due to time schedules that are not appropriate to women, lack of literacy in women and

because extension personnel do not cater to women as separate clientele and as an agricultural labor force, even though women make up 50% of agricultural laborers [21]. Maurer [22] stated that women perform multiple tasks including preparing food for the family, gathering wood, drawing water, doing laundry, cleaning, cooking and making jam. Although extension services often focus on men's projects and women may not be able to get title to land and access to loans [9, 23]. In some cultures, women make one-half of the production decisions in agriculture and do as much work as the men [24]. In Honduras, 48% of the women sow, weed, hoe and harvest crops [25]. Colverson [9] emphasized the need for extension services catered to women emphasized the need for extension services catered to in Latin America, because extension programs have often ignored them.

PURPOSE AND OBJECTIVES

The purpose of the study was to examine agricultural production and natural resource management roles of men and women in two southern Jordanian areas in South Gour and to describe how these roles play a part in the design of delivery strategies appropriate with respect to these roles. The following research questions provided a base to address this purpose.

- What are the exclusive and overlapping roles of women and men in the production? of food and fiber and in the maintenance of natural resources?
- Which delivery strategies can best promote deeper learning with respect to these roles?

METHODS

The research study was a naturalistic inquiry in the qualitative tradition and it also involved participatory action research principles.

The procedure of the qualitative study was drawn from Erlandson [26] and Lincoln and Guba [27] and applied trustworthiness quality criteria. These criteria include transferability, dependability, credibility and conformability. Transferability may be achieved by providing descriptive detail to allow others to decide if the findings are applicable to other cases.

There is generally no attempt to generalize results of this study to other populations; however some ecological generalizations can be drawn if other situations are similar to this one. The researcher visited the 2 areas for periods of time, practicing prolonged engagement. Engagement began on June 29th, 2005 and concluded on September 15, 2005.

The researcher worked with both male and female small-scale farmers involved with extension programs funded by government contract. The researcher practiced persistent observation, using different times and locations for observations and interviews. She also employed triangulation, using different sources of data, recorded at different times, places and with various persons and methods. Dependability was addressed in the study by keeping detailed records of the data collected and analysis procedures. Credibility was addressed by the conduct of peer debriefing and member checking. The researcher conducted an audit trail, which documented the research notes, the journal and peer debriefing notes. Confirm ability was addressed in the study by including excerpts from the raw data that supported interpretations and conclusions drawn by the researcher. She utilized participatory rural appraisal methodology as delineated by Chambers [7] and the principles of action research outlined by Stringer [28]. The researcher conducted the following activities: oral history interviews, participatory mapping, ecological transects, daily time use analysis, brainstorming and matrix scoring. Oral history, semistructured interviews were conducted with the elders in the community, Volume 11, Number 1 64 Journal of International Agricultural and Extension Education both men and women. The villagers in each focus group also drew maps of their area on a large sheet of paper indicating area landmarks, where each gender worked and the flow of goods and services to and from the areas. Men and women in Mazra Gour constructed one map together, while men and women's groups in Hadetha Gour drew separate maps-one male individual also drew another map. The researcher walked a one- to two-mile transect through each area with several villagers to view the different ecological zones of each village and then met with the focus groups to discuss the ecological zones and to construct an ecological transect diagram of each area. In each area, the men and women met in separate focus groups to formulate a daily time use schedule of their activities throughout the day, writing down their schedules on a large sheet of paper, beginning when they awoke in the morning until when they turned in for the night. Each group came to consensus of what an example of a daily schedule should consist.

The researcher conducted the delivery strategies matrix scoring (Table 2), by requesting the focus group members to determine the best delivery strategies by questioning them on what methods they had used in the past. Because the villagers had difficulty coming up with delivery methods, the researcher and her assistants recorded various delivery strategies on the horizontal axis of a large sheet of paper and then asked the members of each group to list the various benefits of each of these delivery strategies on the vertical axis.

They then ranked the level of importance of each delivery strategy as it corresponded to each benefit (1 = most important, 2 = important, 3 = less important).

RESULTS

The areas studied were distinct in ecology and livelihood. Mrzra Gour, a area made their living from dairy goat and livestock production, while Hadetha Gour, a area in a hilly area, raised dairy cattle for cheese production, however, until the 1940's in Mazra Gour and Hadetha Gour, where the villagers formed ejidos, communal lands owned by organized groups of small-scale farmers that cannot be sold, but only passed down by inheritance. The villages gradually became engaged in the market economy during the period of 1960-2000, selling in Mazra Gour, dairy products in Hadetha Gour, as better roads, electricity and schools were established. The roles of men and women in both areas were different with regards to gender, with overlap primarily in the areas of animal care (Table 1). Women performed chiefly household chores, including childcare, while men worked in the fields and transported agricultural crops to market. In Mazra Gour, both men and women, however, milked goats and cows and carried out minor veterinary procedures. Male adults and children and female children also helped to herd goats. In Hadetha Gour, men and women milked cows and goats, but women were not involved in minor veterinary care of animals, although both men and women helped to draw water for household use. Similarly, male adults and children and female children also shepherded goats in Hadetha Gour. In both areas, women's lives were closely tied to the household, though they traveled locally and regionally to purchase items for the home. Men executed chores around the home, but also spend a large portion of their time in the fields, as well as traveling to market goods locally, regionally and in the U.S. Volume 11, Number 1 Spring 2004 65.

Choice of extension topics and delivery strategies varied according to gender and area. Men in Mazra Gour desired most to learn about credit opportunities, improved varieties of seeds and employment opportunities for youth, while women chose cheese making, employment

Table 1: Distinct and Shared Gender Roles in Gour Masra and Gour Hadetha

Gender	Community	Role						
Women	Gour Masra	Mill corn; clean house; cook and serve meals; wash clothes by hand; feed pigs and chickens; sew an						
		child care						
Men	Gour Masra	Prepare feed, feed and water horses, sheep, goats, cattle; plant, weed and harvest crops; irrigate fields;						
		cut firewood and transport crops						
Women & Men	Gour Masra	Milk goats and cows; herd goats and veterinary Care						
Women	Gour Hadetha	Mill com; cook and serve meals; wash dishes; clean house; wash clothes by hand and iron; make cheese						
		and child care						
Men	Gour Hadetha	Feed and water animals; veterinary care; plant, weed and harvest crops; process feed; gather wood and						
		transport cheese						
Women & Men	Gour Hadetha	Milk cows; herd goats and draw water for Household						

Table 2: Delivery Strategies Matrix for Women in Gour Masra

	Methods												
		Traditional	Research		Individual								
	Participatory		center		farm					Distance			
	Exercises	knowledge	visit	Demonstration	visit	Pamphlets	Courses	Practice	Videotape	education	Radio	Lecture	
Benefits													
Learn what we see in the demo	3	3	3	3	2	3	3	3	3	2	1	3	
Practicing what we see	3	3	3	3	3	3	3	2	2	2	1	3	
Teaching others what we learned	3	3	3	2	3	2	2	2	2	1	2	1	
What we learn there, we do here	3	3	3	3	3	3	3	3	3	2	2	1	
To see different types of jobs	3	3	3	3	3	3	3	3	2	2	1	1	
Focus on ideas learned from others	3	3	3	3	3	3	3	2	2	1	1	1	
Organize jobs better	3	3	3	3	3	3	3	3	2	3	2	1	
It's enjoyable	3	3	3	3	3	3	3	3	2	2	2	1	
Hearing and learning	3	3	3	3	3	3	3	3	2	2	2	1	
We learn to get ahead	3	3	3	3	3	3	3	3	2	2	2	1	
Improving production	3	3	3	3	3	3	3	3	2	2	2	1	

Note: 1 = less important, 2 = important, 3 = most important

opportunities for youth and candy making as most important topics. Males in Hadetha Gour showed interest in learning sausage making, commercializing cheese products and raising cattle; females expressed interest in cheese making and sewing.

Table 2 shows an example of the delivery strategies matrix constructed by women in Mazra Gour.

Women in Mazra Gour viewed traditional knowledge, participatory exercises and research center visits as most important. They were especially enthusiastic about the role of tradition as a strategy to pass on knowledge, although participatory work and research center visit were also classed at the level of most important for all delivery strategies. These women were less Volume 11, Number 1 66 Journal of International Agricultural and Extension Education interested in videotape and distance education and saw radio and lecture as less important means of delivery. They listed various benefits for the delivery strategies and these benefits exhibited various

distinct themes: hands on application of learning, teaching others, classifying jobs, improving organization of jobs and improving animal or crop production as well as personal and area advancement and enjoyment. This combination of traditional values with more innovative ideas that the women of Mazra Gour manifest is reflected in the following description: "In this area, although women's lives are closely tied to the household, they also move freely about the village, visiting other women and travel to neighboring villages, the city of Agapa to shop for household goods [29]". The men in Mazra Gour viewed numerous delivery strategies as most important: the men saw video, farm visits, research center visits, demonstration with practice, field trip and distance education as primarily important. They perceived demonstrations and pamphlets as only slightly less important. The men did not list participatory work as a delivery method. This delivery method may have been omitted, however, because the extension agent facilitator declined to mention it. The benefits of the delivery strategies that these men compiled manifested the particular themes of hands on application of learning (making knowledge concrete), learning new things and improving production, obtaining information and teaching themselves and their children. The men's tendency to be innovative is shown by their openness to new information: "The men also relax in the evening, watching TV and like the women, interested in the news on TV, so that they can be informed of Jordanian and worldwide events [29]". The women in Hadetha Gour found workshops, demonstration with practice and participatory exercises most essential. The women of Hadetha Gour expressed a wide variety of benefits and the level of importance for each strategy's benefits. These benefits were associated with learning new things, communicating with others and enjoyment. The women's group in Hadetha Gour worked very well collaboratively, highlighting their emphasis on communication within the group: "The women put an extreme amount of detail into their map drawn by the group, using a ruler and focusing on the populating the fields with illustrated people and even the schools with small figures of men, women and children [29]". The men of Hadetha Gour viewed farm visits, workshops and courses as key, with field demonstrations and participatory exercises as secondary. The benefits that the men came up with were focused on learning new things, exchanging ideas and teaching others. The desire of the villagers to learn new things was exemplified by one person in particular: "One villager in the area of Hadetha Gour had adopted several innovations that the extension agent suggested. He owned 9 milk cows and used a small milking machine to milk them. When I asked him how much labor it saved him, he said that it saved him pains in the back and shoulder [29]".

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

While the gender roles in both areas were quite segregated, the roles of men and of women were very similar between villages. Women were primarily involved in household tasks, while men spend more time working in the fields. The men in Hadetha Gour were more focused on dairy cattle production and cheese, with their wives playing a complementary role in the elaboration of cheese products. The men in Mazra Gour, with their access to fields, concentrated more on crop production, while the women take a more active role in the care of

small livestock than the women in Hadetha Gour, although they were also involved in agricultural activities such as milking and cheese making like the women in Hadetha Gour.

These gender roles affect the villagers' choices of extension topics. Men in Mazra Gour had a wide variety of interests in extension topics, but prioritized the most important topics as credit, youth employment opportunities and improved seed varieties. The improvement of crops is a production issue and directly related to the men's roles of working in Volume 11, Number 1 Spring 2004 67 the fields. The men in Hadetha Gour were concerned about production issues, such as dairy cattle raising, but they also had interest in value-added items, such as the commercialization of cheese production. These interests reflected their roles caring for dairy cattle and other animals, as well as their roles in transporting goods to market. The interests of the women in Mazra Gour, who preferred to learn about cheese and candy making, which are value added products, as well as about youth employment opportunities, correlated with their roles caring for animals, caring for children and in the processing of cheese. Mazra Gour extension topics for women concerning cheese making and sewing similarly were associated with their household and agricultural processing roles.

The delivery strategies and their benefits correspond to the social and educational attitudes of the villagers, as well as to their gender roles. Like their wide-ranging choices of extension topics, the men in Mazra Gour chose numerous delivery strategies as most important. They were most interested in hands-on activities. These men also seemed open to learning new techniques and traveling to do so, which would be consistent with their roles in primary crop production and marketing. Their desire to use video and distance education seems to show a sense of innovation and a propensity for more abstract learning. The women in Mazra Gour, on the other hand, preferred learning by traditional, folkloric means and by participatory activities, two methods that stress personal relationships and communication with family and area members, which is correlated with the women's roles within the home and in the area. The men of Hadeth Gour manifested a desire for hands-on techniques with a social component, related to their roles in dairy cattle production that would benefit from direct experience and the social activity involved in marketing. They also preferred more structured activities such as courses. The women in Hadeth Gour preferred hands-on activities that also encourage social relationships. This desire for social bonding is related to their familial roles of raising children and building close community relationships. Unlike the women in Mazra Gour, however, these women did not see traditional methods as important ways of learning. In summary, men and women in both of the areas seemed to prefer educational activities that were social in nature and which exposed them to innovative techniques. The emphasis on the social nature of learning seems to dovetail with the cultural mores in the region. Familial and area relationships had to have been strong and a priority, and were rooted in the indigenous culture. Each of the delivery strategies deemed most important by all of the villagers fosters social relationships, although videotape and distance education may not necessarily do so. Extensionists working in these areas should focus on hands-on methods, as noted in Chizari et al. [10], which incorporate social aspects. Extensionists may also employ more "technological" methods of videotape and distance education coupled with discussion to facilitate learning, which agrees with the conclusions of Holmes and Sagna [11]. Extension personnel can also avoid the pitfalls of lack of participation as expressed by Lev and Acker [2] and Freire [18] by incorporating participatory rural appraisal activities, especially for women. The use of indigenous systems of communication, as noted by Bebbington et al. [19], including traditional social activities and the passing on of information by folkloric means, should also be employed for those groups that express a desire to learn by traditional means. Additionally, extension agents should focus their efforts on catering to the needs of women, with respect to their roles in agriculture and in the home, in order to avoid limiting extension services to men as Contado [20] expressed and which Colverson [9] pointed out is characteristic of Latin American extension programs. As this study indicates, extensionists should accommodate women as a distinct clientele, as Gura [21] admonished, because women have divergent roles, interests and learning preferences from men. Using the guidelines of this study, Jordanian university faculty and extension personnel in other countries can better understand how to employ participatory methods to determine which extension topics and delivery strategies areas deem important according to gender. The differences related to gender and location shown by the study point out that these results cannot be generalized, even Volume 11, Number 1 68 Journal of International Agricultural and Extension Education within a region. Complete analysis using participatory rural appraisal techniques

provide a fully contextual understanding that yields an abundance of data to derive conclusions and cater recommendations to each area. Therefore, comprehensive research studiesusing participatory rural appraisal should be done on individual areas to promote more effective extension programming. Such studies would be the basis for more effective extension programs appropriate to different cultural settings and these programs would have greater cultural relevance that would foster the functional success of extension programs.

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