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Full Length Research Paper

Women's literacy and extension education in rural eastern Mediterranean Turkey

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In spite of an increasing number of projects and campaigns in public policies to higher, the schooling ratio among girls have been applied in Turkey since 1997, societal gender disequalities are still very important problems of education. Especially in rural areas there are thousands of girls who cannot complete education even elementary school system. Morever, informal education opportunities are also insufficient for women. The primary purposes of this research were to determine the level of women's participation in formal and informal education programs in rural areas of Mersin province, and to determine the efficiency level and income generation capacity of training programs designated for women in the area. Multiple Correspondence Analysis (MCA) was used to investigate the relationships between several socio-demographic and educational variables. Research findings showed that the young women wanted to educate their daughters for reaching better living conditions when they become adults. The major constraints for educating girls are poor living conditions for rural families and difficulties in meeting school expenditures. In addition, women's participation to various training programs was quite low, and most of the women found the training not useful because it provided information which was practically unusably for their daily life.

Key words: Rural women, extension education, ınformal education, literacy, Mersin/Turkey.

INTRODUCTION

According to Agarwal (2001), governance arrangements in developing countries affect men and women differently because there are gender differences in the costs and benefits for use of public goods (Lincove, 2006). Ignoring these differences can lead to severe unintended equity consequences. To understand these differences, it is necessary to depart from the traditional neoclassical model of the family as a single decision-making unit and to look at resource allocations within families (Lincove, 2006). Female domestic work has no formal market value, so women's contributions to the family are often undervalued. As a result, women and girls often receive fewer family resources, including health care, nutrition and education (Lincove, 2006). Shortall (1996) argues that education, as a particular instance of wider social and cultural institutions, provides a medium for processes and structures that support different experiences and opportunities for men and women in agriculture. An important issue faced by literacy in development policies today concerns whether research should be limited to shedding light on particular literacy practices in particular cultural or geographical contexts, or should be linked to development policies. We often find statements such as: "lack of literacy is strongly correlated with poverty" (Shiohata, 2009). When the education of women falls behind that of men, there are more dangers to the women and the society for it leads to inequality between men and women. This makes women take less part in decision-making in their families and societies (Chuks, 2004).

The education of girls is neglected in much of the

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developing world (UNICEF, 2005). Consequently, pro-male educational gender gaps remain in many developing countries, as illustrated by lower school enrollment, educational attainment, and literacy of girls relative to boys. There are numerous household and social level reasons for the persistence of pro-male educational gender gaps. From the household's perspective, educational, gender gaps persist because of poverty, low monetary returns from girls' education, safety concerns and lack of availability of school. Furthermore, negative social stigma against educating girls based on culture, ethnicity, religion and race exacerbate educational gender gaps in developing countries (Shafiq, 2008; Bates et al 2007).

The numerous social benefits of educating girls are widely acknowledged in the economic literature (Shafiq, 2008). Increases in women's human capital affect gender bargaining and is closely related to declines in child mortality, fertility and population growth, and increases in child "quality" as proxied by child schooling and health status (Lincove, 2006; Schultz, 2001). Furthermore, Yildirak et al. (2003) emphasized the importance of education as an indicator of women' status. Jayaweera (1997) also reported that education improved the socioeconomic status, alleviated poverty, and created more opportunities and better living conditions for children in Sri Lanka, and Malaise.

Informal education programs are also important means of improving socioeconomic status of women. Among these are agricultural research and extension programs which have been built in most of the world's education and information systems. A substantial number of economic impact studies evaluating the contributions of research and extension programs to increased farm productivity and farm incomes and to consumer welfare have been undertaken in recent years (Evenson, 2001). Although rural women play an important role in agricultural sector like crop production, livestock production as well as cottage industry; they have incomplete access to resources, agricultural extension education services, and newest technical knowledge and information sources (Butt et al., 2010). Education on crop and livestock production was targeted at men, while education on home economics (canning, sewing and supporting the farm and rural home) was targeted at women (Trauger et al., 2010). There is widespread recognition of the need to improve both agricultural education and extension work with rural women (Crowder, 1997). Rural women are not only users of basic services, bearers and socializers of children and keepers of the home, they also represent a product potential, which is not being fully tapped. From the empirical study carried out on the impact of livelihood training and literacy on production, productivity, and standards of living; it was found out that there is a big improvement in the livelihood of women who have undergone the training organized in the villages than those who are yet to attend it.

The training has increased their family income generation because they have learnt better ways of achieving their aims. They are literally aware of business turnover and retention. Since they can now go back with confidence and seek for loans, source for fertilizer and other mechanized farming facilities to improve their skill (Chuks, 2004).

Education has been given more importance by the United Nations and the European Union since the beginning of the 1990s. Empowering women is a top priority in pre-accession process which is going on between EU and Turkey. The accession partnership with EU calls for identification of challenges women face and specific priorities to promote the role of women in the society. Indeed, even though Turkey has accomplished a significant progress in gender equality, issues like low participation of women in the labor market, access to education and their role in decision-making process need to be further elaborated. This gender-based disadvantageous socio-economic situation is more critical in rural communities. Records have shown that rural women form more than 12% of the population of Turkey. Therefore, the development of Turkey cannot be realized if 12% of the people are left illiterate with no serious skills and vocational training.

In the reviewed literature, there are surveys studying the role of education on rural women in different regions of Turkey (TKV, 1991; Bircan, 1992; Ertürk, 1993; Abay et al., 1999; Akhun et al., 2000; Özgen and Ufuk, 2000; Yildirak et al., 2003; Budak et al, 2005; Atmi et al., 2007; Ho gör and Smits, 2008; Kukulu and Öncel, 2009; Yılmaz et al., 2010; Rad et al., 2010). However; educa-tion aspect of rural women in Mersin province where 46% of its inhabitants live in rural areas has not yet been studied. This study is intended to make significant contributions in the development of policy proposals for rural women's participation in production process and for an increase of their income generating capacity in the locality.

Education structure and policies in Turkey

FORMAL EDUCATION

As normally used, the term formal education refers to the structured educational system provided by the state for children. The Ministry of National Education of the Republic of Turkey is the central authority in regards to decisions pertaining to primary and secondary education. This ministry has defined a general educational structure spanning the pre-primary through higher education years. It includes structures and policies encompassing pre-primary, primary, secondary and higher formal education, as well as non-formal education (MEB, 2002).

Pre-primary education in Turkey is optional for children between 36 and 72 months old. Turkish primary education

Table 1. Schooling ratio by educational year and level of education (8-year compulsory education).

Level of education		Educational years				
		1997/98	2004/05	2007/08	2009/10	2010/11
		Schooling ratio (%)				
Elementary school	Total	84.74	89.66	97.37	98.17	98.41
	Women	78.97	86.63	96.14	97.84	98.22
	Men	90.25	92.58	98.53	98.47	98.59
Secondary school	Total	37.87	54.87	58.56	64.95	69.33
	Women	34.16	50.51	55.81	62.21	66.14
	Men	41.39	59.05	61.17	67.55	72.35
University	Total	10.25	16.60	21.06	30.42	-
	Women	9.17	15.10	19.69	29.55	-
	Men	11.28	18.03	22.37	31.24	-

Source: TÜĐK (2010).

is free in public schools and compulsory for all boys and girls, usually commencing at the age of six or seven and continuing for eight years, when a primary education diploma is granted. It also prepares them for either general or vocational-technical secondary education "parallel to his/her interests and skills" (MEB, 2002).

Turkish secondary education is optional, commencing at the age of 13 or 14 and continuing through age 17 or 18. It is free in public schools, although the better secondary schools customarily expect an informal processing fee. The secondary level is the level at which students who are not yet entering the work force must choose to pursue a program that is either general higher education preparatory or vocational-technical (MEB, 2002).

At about age 18 and upon the completion of their secondary education, Turkish students may enter higher education institutions, including "universities, faculties, institutes, higher education schools, conservatories, vocational higher education schools and application-research centers". At this stage, options include a two-year associate degree, or a four-year undergraduate degree. Interested students may continue on for a two year masters degree and a three-year doctorate (MEB, 2002).

The population of Turkey is 73,722,988 (TÜĐK, 2010), and 11.9% consist of women living in rural areas. There has been an increase in the number of educated women in Turkey for the last decade. In 1997, compulsory education in Turkey was increased from five years to eight years, and this situation has increased the schooling ratio among the girls and extended their education period. While the schooling ratio among the girls at elementary school level in 1997/98 educational year was 78.97%, this ratio increased to 86.63% in 2004/05 educational year, to 96.14% in 2007/08 educational year, to 95.97% in 2008/09 educational year, to 97.84% in 2009/10 educational year and to 98.22% in 2010/11 educationa l year, respectively (TÜĐK, 2010).

Similar increases were observed at secondary school level. The schooling ratio among the girls at secondary school level was 34.16% in 1997/98 educational year, and this ratio increased to 48.50% in 2003/04 educational year, to 55.81% in 2007/08 educational year, to 56.30% in 2008/09 educational year, to 62.21% in 2009/10 educational year and to 66.14% in 2010/11 educational year, respectively (TÜĐK, 2010). The schooling ratio gap between boys and girls, especially at elementary school level has dramatically decreased (Table 1). Approximately 3.8% of 3.3 million girls who are in the primary education age (age 6-14) are unable to attain to school (KSGM, 2008a).

Although there has been an increase in public policies, especially in projects and campaigns focusing on girls schooling since 1997, societal gender inequality still pertains an important problem of education. By the enforcement of the eight year compulsory education law, most of the children complete the first five years of their eight-year educational process. However, the ratio of girls leaving the school after the sixth grade is still high. Especially in rural areas and in the Eastern and Southeastern Regions of the country, there are thousands of women who could not complete their primary education (UNESCO, 2003; World Bank, 2002). While the rate of illiterate women in the most developed region of the country (Marmara Region) is 13.1%, the same ratio in the Southeastern Anatolian region goes up to 46.3% (KSGM, 2008b)

Most of the rural residences in Turkey are established in villages with small population, and therefore it is difficult to construct schools in every village. Those who are able to attend to village center schools receive education, and those who are not able to attend remain uneducated. Rural women remain behind men in terms of education and this is particularly associated with village's moral and religious issues, as well as living conditions and occupational styles of villages (TKB, 2004). Another reason for families not sending their daughters to school

or getting them back without graduation is their contribution to housework or labor need for farming activities.

INFORMAL EDUCATION

Informal education or extension education work has frequently been described as “helping people to help themselves” (Ozcatalbas et al., 2011).

Informal education refers to education which takes place outside of the formally organized school. Most typically, the term or phrase informal education is used to refer to adult literacy and continuing education for adults. Informal education in Turkey includes continuing and adult education for such goals as basic literacy, the completion of an interrupted earlier education, healthy lifestyle choices, various kinds of professional development, the improvement of scientific and technological skills, and the encouragement of “national cultural values” (MEB, 2002).

Extension education is another remarkable education type for rural women. Turkey has much experience in the application of agricultural extension system and approaches in terms of relationships between farmers and extension-research organization (Ozcatalbas et al., 2011). Public Training Centers of Ministry of National Education are the institutions which mostly implement educational programs to reduce gender inequalities in rural areas of Turkey. These institutions are followed by the Ministry of Agriculture and Rural Affairs and Ministry of Health which also implement various programs for the above mentioned purpose. Among the informal education programs for women are “Handcraft Training”, “Transportable Handcraft Courses for Villages”, and “Home Economics Extension Studies”. The main topics covered by these programs include family planning, mother-child health, nutrition, literacy, and handcrafts (Aziz et al, 2000).

Women educational programs in Turkey are initiated by different institutions, and women’s preferences and demands are hardly considered. Institutions implementing these kinds of programs hardly ask rural women’s opinion about the subjects to be covered. Therefore, rural women cannot utilize the benefits of these programs. The number of extensive programs which provide information, skills, higher income, participation, and cooperation is limited. Most of the programs designated for women remain within the framework of home economics, and include impractical, and costly activities. Therefore, women’s interest and participation in these programs is quite low. On the other hand, there are some programs which are planned to utilize women labor. Among these are carpet weaving, silk worming, and canned pickle and jam making. However, women contribute to such activities only with their labor and they are not involved in planning and marketing stages, which are accomplished by men. FAO (1997) reported that women make a significant contribution to food production, particularly in horticulture and small livestock. Although women participation and involvement in agriculture sector is active but they are very far from agricultural extension education services throughout the world (Butt et al., 2010).

MATERIALS AND METHODS

Study area

This study was conducted in Mersin province which is located on the Mediterranean coast of Turkey. The province occupies a landmass of 1.585.300 h., constituting 2.0% of Turkey’s surface area. A total of 1.647.899 inhabitants live in Mersin, including nine districts namely Tarsus, Erdemli, Silifke, Mut, Gülnar, Anamur, Aydincik, Bozyazi and Çamliyayla (Figure 1). According to Turkisk Institute of Statistics (TUIK), in 2010 the rural population was 370.267 (22.57%) of which 183.999 were women and 186.268 men.

Mersin’s contribution to gross domestic production is estimated to be 2.8%. Mersin province has a significant contribution to Turkish agricultural production. In recent years, Mersin provited one-third of national citrus, 10% of national fruits and 5% of national vegetable production. Sixty-one percent of rural population is engaged in agricultural production (MTSO 2004). According to the results of 2000 census, literacy rate in Mersin was 89.1%. The same ratio was 88.16% in Mediterranien Region, and 80.62% in Turkey. Literacy rate among women was 83.88% in Mersin, 81.96% in Mediterranien Region, and 80.62% in Turkey, respectively.

Sampling procedures

Data were collected through face to face interviews using questionnaires. The study area was divided into different groups in terms of social, economic and cultural similarities. In this sense, Tarsus, Erdemli, Silifke, Mut and Gülnar districts were in the first group; The central district was in the second group; and Anamur, Aydincik, Bozyazi, and Çamliyayla were in the third group. Sampling procedures were based on the 2000 census.

Only females older than 14 years of age were included in the sampling procedures. Population size (>14 years old) of target group to be surveyed in the study was therefore; computed by subtracting ≤14 years old females (20.616) from total rural women population (320.616) which corresponded to 300.000. A coefficient of 0.064 (20.616/320.616 = 0.064) was used to determine population size in each sampling group. Due to limited budget 0.1% of target population (300.000) was accepted as the sample size (300). The sample size was allocated to groups as shown in Table 2.

Statistical analysis

SPSS statistical program was used to establish frequency tables and cross-tables. Chi-square and Multiple Correspondence Analysis (MCA) was applied for further assessments of interactions between independent variables e.g. age, marital status, education, occupation, skills and participation in decision-making.

MCA is a useful and popular descriptive technique to examine relationships among more than two sets of discrete variables. MCA is primarily a descriptive method designed to assign scores to rows

Figure 1. Map of study area. Source: http://fle135-turkiye.pbworks.com/f/300px-Mersin-districts.png.

Table 2. Targeted rural women population (>14 years old) and sample size allocation.

Targeted rural women population					
Group I		**Group II**		**Group III**	
Erdemli	49.233			Anamur	16.898
Gülnar	14.118			Aydincik	1.809
Mut	19.304	Centrum	96.408	Bozyazi	8.613
Silifke	44.980			Çamliyayla	5.004
Tarsus	64.279				
Total: 191.914		Total: 96.408		Total: 32.294	
		Sample size			
0.064 x 191.914 = 12.282.5		0.064 x 96.408 = 6.170.1		0.064 x 32.294 = 2.066.8	
191.914 – 12.283 = 179.631		96.408 – 6.170 = 90.238		32.294 – 2.067 = 30.227	
179.631 x 0.001 = 179.631		90.238 x 0.001 = 90.238		30.227 x 0.001 = 30.227	

(representing the subjects) and the columns (representing the response categories of the discrete variables), yielding a graphical display may facilitate the understanding of the interdependency among the data set. The parameters of MCA are estimated by pooling the data across respondents under the implicit assumption that all respondents come from single, homogeneous group. However, it often seems more realistic to assume that respondents come from heterogeneous groups, so that they are different with respect to their attitudes and preference (Hwong and Takane, 2002; Hwong et al., 2006). Socio- economic and demographic factors include many variables like family and relative relations and economic indicators. MCA analysis was preferred and used in this study because it can analyze the hypervariables more easily and more understandable and easily present the relations between variables visual and securely.

RESULTS AND DISCUSSION

Education, age and marital status

As seen in Table 3, 66% of the women interviewed were between age of 21-45, and the relationship between age and education was found to be statistically significant ($p<0.05$). Accordingly, as the average age among rural women decrease, the level of education increase. Li (2005) has also observed that older rural women are less educated than younger women. 74% of women had only elementary school education, 9.7% were illiterate and 5% were literate but not graduated from elementary school

Table 3. Socio-demographic indicators of interviewed rural women in Mersin.

Socio-demographics	%
Age groups	
14-20	4.4
21-35	35.0
36-45	31.0
46-55	21.3
55+	8.3
Marital status	
Married	85.7
Single	8.7
Widow	5.6
Education level	
Men	
Illiterate	1.2
Literate	1.2
Elementary	77.2
Secondary	10.8
High School	7.7
University	1.9
Women	
Illiterate	9.7
Literate	5.0
Elementary	74.3
Secondary	4.3
High School	5.7
University	1.0

(Table 3). Of the total rural women older than 15 in Turkey, 27% were reported to be illiterate (TUIK, 2004). In this regard, average illiteracy rate in Mersin province is one-third of the national average.

The relationship between education level of women and that of their husbands was found to be statistically significant ($p<0.05$). It was revealed that the education level of women is generally the same as that of their husband's or higher (Table 3).

There is a statistically significant relationship between education level and marital status of women ($p<0.05$). The widows had the lowest level of education while there were no illiterates among singles. The relationships between education, marital status and age reveal that married women are between 36-45 years old and have elementary school education, single women are 14-20 years old and at high school level while widows are over 55 years old and illiterate (Figure 2).

Attitudes towards girl's education

During the interviews with rural women, 97.7% expressed that they desired their daughters to finish university education. The reasons for providing girls with university education were expressed as to find employment (66.8%), and to enjoy better living conditions (33.2%). Of the total women interviewed, 83.6% believed that lack of regular income and financial difficulties were the main constraints in providing education to their daughters. Daughters of poor families have less chance of education because their labor is required for both of housework and farming activities.

There was a statistically significant relationship between the educational level of women and their desire to educate their daughters ($P<0.05$). As educational level of women goes up they have more favorable attitude towards educating their daughters. Women who desired their daughters to have a higher level of education were between ages 14-45 years while those who did not wish a higher level of education for their daughters were over 55 years old.

Approximately 92% of the men wanted their daughters to be educated. 75% of the husbands wanted their daughters to graduate from university while 24.9% of them desired their daughters to be educated until finding employment. There was a statistically significant relationship between men's education level and their desire to educated their daughters ($P<0.05$). As education level of men's goes up they have more desire to educate their daughters.

Majority of women and their husbands expressed their desire to educate their daughters. This ratio was higher among women as compared to men. Providing a more privileged social status for their daughters may be the cause or motivation for this desire among rural women who regard themselves deprived from such a social status.

The main reasons for women not wanting their daughters to get education are economic difficulties and lack of stable income. On the other hand, men who did not show the desire of educating their daughters emphasized their main reasons as moral issues and economic limitations. Özgen and Ufuk (2000) ranked the reasons for girls not receiving education in a descending order; lack of interest for school (24.7%), educational costs (17.2%), lack of family permission (14.0%), need for housework (11.3%), need for economic activities of family (7.5%), lack of proper school in the locality (4%), injuries or illnesses (3.5%), child employment (2%), and bad relationships with teachers (0.1%).

Akhun et al. (2000) and Sikiae (2007) believe that the traditional gender-based roles in the family lead to gender discrimination and prevent the recognition of equal opportunities for girls. They further stress that imprints on the role of man and women do have reflection on attitude of parents with regard to education of their daughters. Ethics and religious rules along with traditional rural life style and engagements also lead to unprivileged conditions for women in rural communities with regard to education (TKB, 2004). The high ratio of women wishing

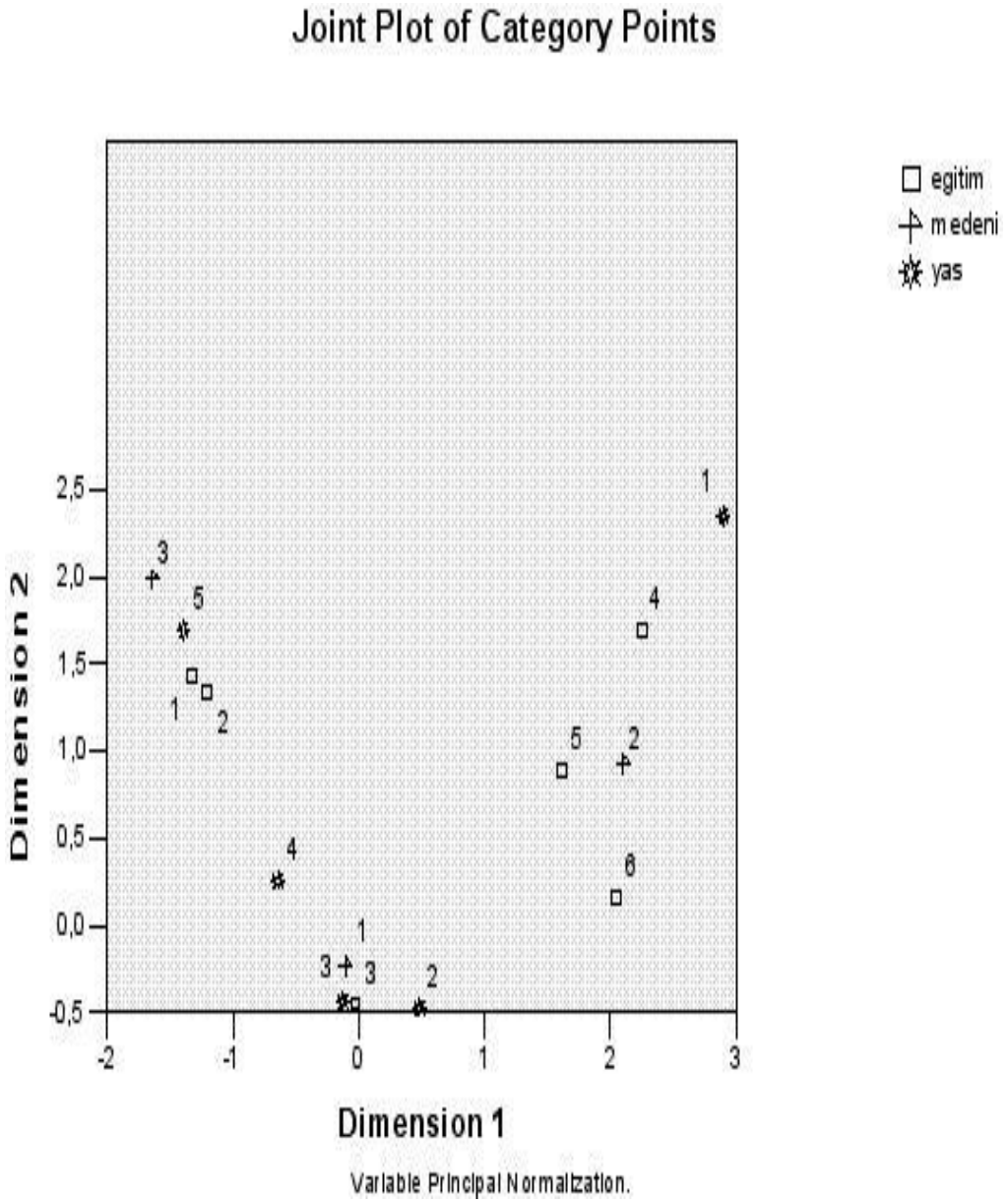

Figure 2. Relationships between education, marital status and age. Education: 1 - Illiterate, 2 - Literate, 3 - Primary school, 4 - Middle school, 5 - High school, 6 – University. Marital status: 1 - Married, 2 - Single, 3 – Widow. Age: 1: 14-20, 2: 21-35, 3: 36-45, 4: 46-55, 5: 55+.

higher education levels for their daughters in the study area is an indicator of the changing perceptions with regard to traditional gender-based roles. Rather than ethic and religious principles, economic conditions seem to be emerging as the main determinant.

In the research area, 48.3% of women reported that there have been at least one informal education in their neighborhood. Subjects such as sewing and knitting, women diseases, and mother-child health received the highest share in the curriculum while the share of activities related to agricultural production and employment were quite low (Table 4).

60% of these trainings were given in Public Education Center. This was followed by a joint program between Public Education Center and Agricultural District Directorate (17.5%), Health Care Center (11.9%), Agricultural District Directorate (4.9%), a joint program between Public Education Center and Health Care Center (4.9%), and Mother Child Education Foundation (AÇEV) (0.7%). 46% of the programs took 6 to 12 months. This was followed by daily programs (26%), 1-3 month programs (18%), and 3-6 month programs (8%).

Table 4. Educational subjects covered in informal education.

Training subjects	%
Sewing-knitting	60.8
Women diseases, mother-child health	16.1
Sewing-knitting and apiculture	5.6
Sewing-knitting, carpet weaving	5.6
Sewing-knitting, animal raising	2.1
Sewing-knitting, animal raising, sewing-knitting, tree planting and crafting	2.1
Women diseases and cooking	2.1
Carpet weaving	1.4
Sewing, knitting, apiculture, crafting	1.4
Women diseases, crafting, tree planting	1.4
Animal raising	0.7
Computers	0.7

Among the women in the research area, 19.7% participated in at least one educational program. Approximately 71% of those who took part in any educational program received training in sewing-knitting; 8.6% in women health, 5.7% in home economics, 4.3% in plant production, 2.9% in carpet weaving, 2.9% in child care, 2.8% in computers, and 1.4% in crafting and tree planting. Özgen and Ufuk (2000) found that 31.5% of the women in Kisas- anliurfa participated in skill development courses while 82.4% of women in the same district took part in sewing courses. The same ratios in Derik-Mardin were 13.4 and 92.3%, respectively.

Women in the research area spent approximately 5.7 h per day for farming activities. They took care of 76.7% of the total animal care work, 42.2% of total harvest work, 41.7% of total plant protection work, 40% of total pruning work, 36% of total tree planting work, 34% of total hoe work, and 31.7% of total irrigation work. Budak et al. (2005) found that in the ruminant raising farms in Tauros Mountains, women and girls were responsible for 94% of milk production work. They reported that women participation in training programs regarding milk production gave positive results. However, their participation in educational programs was quite low, and even lower in educational programs related to agricultural production. Asking and consulting their husbands is a mean by which rural women fill the gap for lack of technical knowledge. In Greece, women in rural areas do participate in sewing-knitting, home economics, food processing, and agro-tourism. However, their participation in programs on animal breeding, horticulture, and agricultural machinery is less than 20% (EC, 2002).

This study found statistically significant relationship between educational level and women participation status of training programs ($P<0.05$). As educational level of women increases they tend to participate in training programs. This finding was supported by Abay et al. (1999) study who found that as literacy level of women increased, their attendance to home economics training programs went up in villages, districts and central district of Izmir province. Another study supporting this finding was conducted by Baransel (1991) who found that lower educational level among women negatively affected the success of rural women training programs in rural areas of Van province.

There was a statistically significant relationship between the age of women and use of knowledge gained from training programs ($P<0.05$). Eighty percent of women expressed that they use the knowledge gained from the trainings and 88.6% reported that they find the training programs useful. The relationship among age, occupation and use of knowledge gained from training can be summarized as the following: Those who use the knowledge gained from training were housewives and 36-45 years old. This finding verifies that medium aged women have a tendency of using the gained knowledge while those who do not use this knowledge are housewives above 55 years of age (Figure 3).

There was a statistically significant relationship between whether or not women possess an income generating skill and whether or not training was useful ($P<0.05$). Women who thought that the training program would not make any contributions to their income generating skills found the program to be unuseful and therefore they did not want to participate. On the other hand, women who thought that they had income generating skills found the programs to be useful because it increased their status in the family. Abay et al. (1999) reported that few of women training programs made contributions to income generating capacity, so overall these programs could not improve the status of women in the family.

The relationships among women age, occupation, education, and the usefulness of training can be summarized as following: Those who believed that the training was useful were housewives, 36-45 age group, and elementary school graduates. Those who believed that the training was not useful were 21-35 years old,

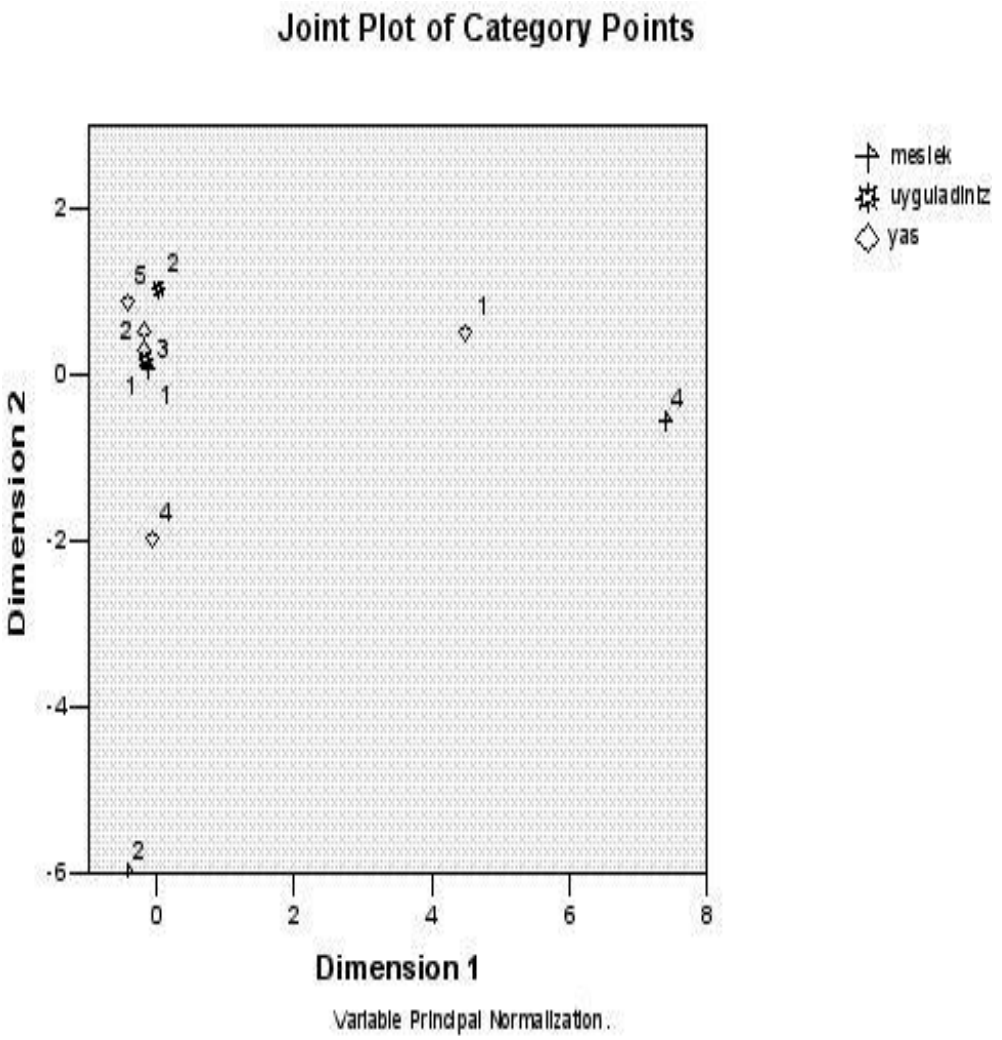

Figure 3. Relationships among age, occupation and application of information gained from training programs. Occupations: 1 - Housewife, 2 - Worker, 3 - Government employee, 4 - Others (Trader, daily worker, student). Application of knowledge provided from training: 1 – Yes, 2 – No. Age: 1: 14-20, 2: 21-35, 3: 36-45, 4: 46-55, 5: 55+.

housewives, and held a university degree (Figure 4). This findings shows that younger and more educated women did not believe that the training program they participated in was useful. Aziz et al. (2000), reported that in order for women to utilize the benefits of the training programs, the programs must be embraced by women, subjects and the scope must be target group-oriented, must meet their needs, and be useable during their daily life practices. Considering Aziz et al. (2000) findings, it can be concluded that young and educated women do not believe in usefulness of the training programs because they think that the programs have no impact on meeting their needs, and offer information which is not practical for daily life. According to Okwu and Umoru (2009), women farmers' age, educational level and income level were found to have significant relationships with their access to agricultural information at 5% level of significance. This implies that the older, more educated and richer a woman farmer is, the more likelihood of having access to agricultural information.

In the research area, women were asked to report the types of training programs they wanted to participate. While women above 36 years of age wanted to receive training in health care, sewing-knitting and child care; 21-36 years old women wanted to receive training in vocational subjects such as animal breeding, plant production, carpet weaving, food processing (pickle, canned food, jam etc), nutrition, and family planning. Women under 21 years old believed that training courses should cover subjects such as computer use and English language. These findings verify that women above 36 years of age still show the traditional patterns of thinking

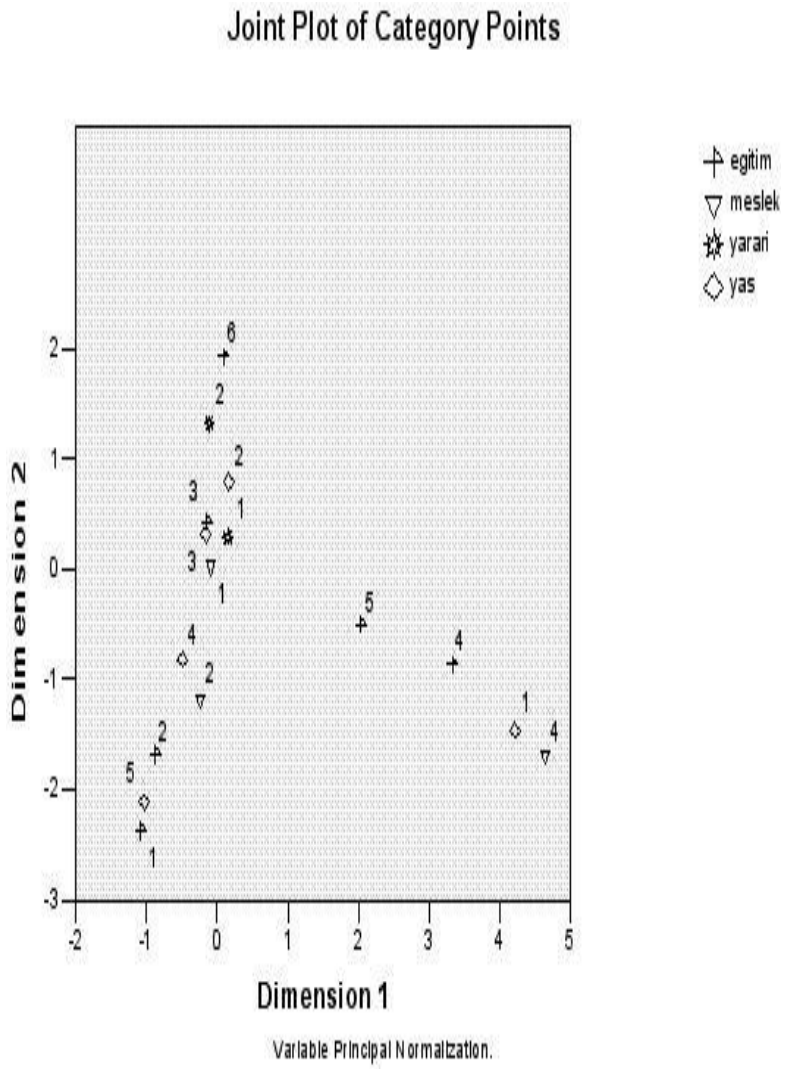

Figure 4. Relationships among education level, age, occupation, and usefulness of training.Education: 1 - Illiterate, 2 - Literate, 3 - Elementary, 4 - Secondary, 5 - High school, 6 – University.Occupations: 1 - Housewife, 2 - Worker, 3 - Government employee, 4 – Others (Trader, daily worker, student). Age: 1: 14-20, 2: 21-35, 3: 36-45, 4: 46-55, 5: 55+ . Was the training program you participated useful? 1 - Yes, 2 – No.

and mentality, and do not believe that they may obtain an income generating capability by receiving training in the above subjects. Abay et al. (1999), in their study covering rural areas of Đzmir province found that only 6.86% of women wanted to get training in agricultural subjects. Rural women in Nigeria needed information include pesticides application (67.7%), fertilizer application (64.6%) and improved farm implement (50.8%). Other areas that were mentioned by a good number of the women include improved variety of crops (47.7%), better marketing system and outlets (41.5%) and improved storage system (33.8%) (Okwu and Umoru, 2009). According to Mudukuti and Miller (2002), seven among the top 16 highest educational needs were related to nutrition, and six to Access to land and credit. The reasons for the majority of women not willing to participate in this kind of income generating programs were that they were already heavily engaged in exhausting farming activities and believed that participation in trainings would bring them extra work. Since women farmers are engaged in both on-and off-farm activities they do not have time to enjoy the extension service offered. Okwu and Umoru (2009) posited that due to the multiple roles women play in the rural household (including caretakers of children and the elderly), they do not fully benefit from extension services, particularly, when the time of delivery (of extension service) conflicts with their other household responsibilities.

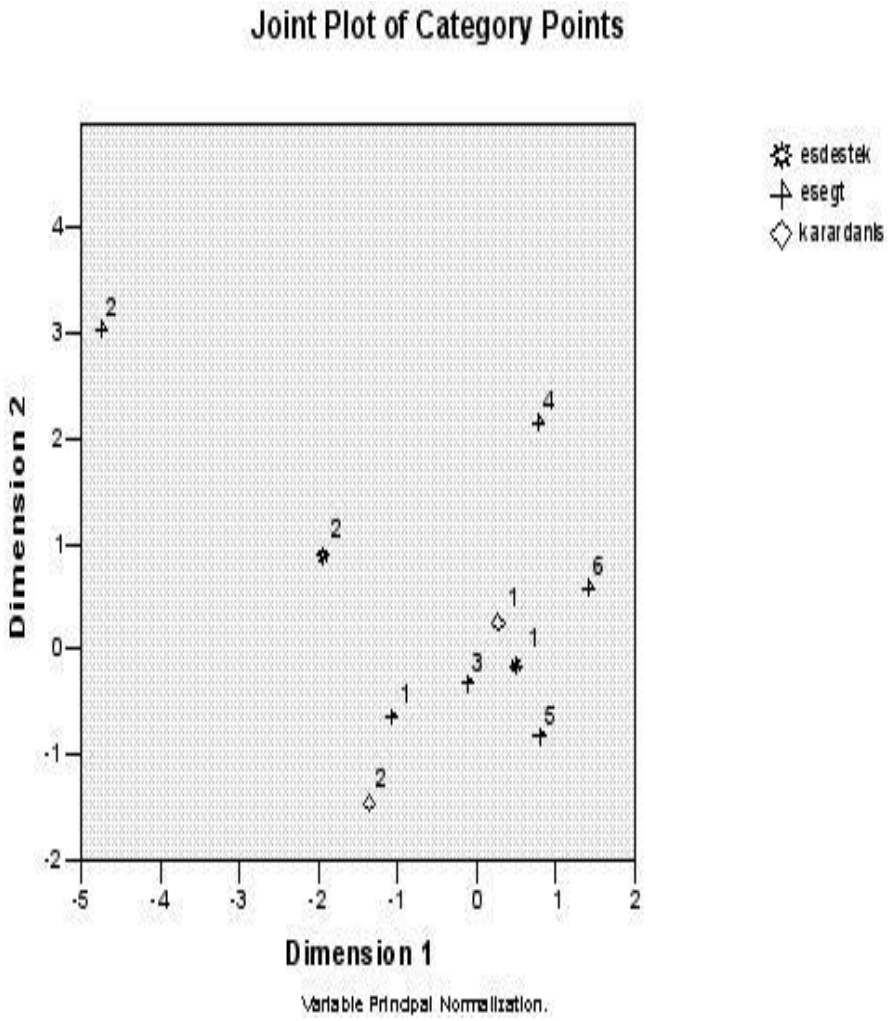

Figure 5. Education level of men, asking women' opinion before making decision, and allowing women to take part in training program. Education level of men: 1 - Illiterate, 2 - Literate, 3 - Elementary, 4 - Secondary, 5 - High school, 6 – University. Asking women' opinion before making decision: 1 - Yes, 2 - No. Allowing and supporting wife to participate in training program: 1 - Allow-supports, 2 – Does not allow – does not support.

It was found out that the majority of women (79.8%) are allowed and even supported by their husbands to attend to present and future training programs. Those who did not want their wives to attend training programs (21.1%) showed the following reasons: There is too much work to take care of (38.1%), women should take care of their small children (23.4%), too much work and jealousy (15.6%), aging (12.5%), and jealousy (9.4%). In the research area, participation in training activities for women firstly depends on their husbands' permission. So, men are the initial point of any training activity designated for women in rural areas. Persuading men is as an important task as persuading women for taking part in training programs, especially in the villages where men's pressure on women can easily be observed (Abay et al., 1999).

There was a statistically significant relationship between educational level of men and their desire/ support for their wives to participate in training programs ($P<0.05$). Husbands with higher educational level desire/ support their wives' participation in training programs. In terms of relationships between men's education level, desire/support for the participation of their wives in training programs, and consulting their wives' opinion before making any decision; it was found out that those who desire and support their wives' participation in training programs are either elementary or highly school graduates; and do ask their wives opinion before making any decision on subjects related to their family (Figure 5).

Approximately 16% of husbands in the research area received training organized in their villages. Of this number, 36% received training in aquaculture, 15% in

animal raising, 13% in plant production, 10% in animal raising and aquaculture, 8% in plant production and animal raising, 5% in irrigation, 5% in computers, 3% in aquaculture, 4% in YAYCEP- Extensive Farmers Education Program, and 3% in iron construction. Traditionally most of the extension services and training activities are planned for male farmers who have access to farm credit, use more inputs, follow technology and innovations, make investment, and own more land. It is expected that men would share the gained information with their wives. However, in the research area, only 40% of husbands who took training in different subjects share the gained knowledge to their wives. Therefore, reaching and training women throughout their husbands remains an inefficient method. Majority of the women indicated husbands (64.6%) and fellow women (53.8%) as their sources of agricultural information. Other sources of agricultural information mentioned include mass media (indicated by 30%), extension agents (23%) and others (26%) (Okwu and Umoru, 2009).

Conclusion

Ever since the implementation of compulsory eight year elementary education in Turkey in 1997, net schooling ratio among girls in all levels of education has increased and the gap between girls and boys has decreased. This shows that legal arrangements have positive influence on increasing educational level. Most of the women wanted their daughters to attend to school to increase their status in the society and to get a good job for an easier life which women do not possess themselves. However, economic problems remain as the most important constraint for increasing schooling rate among girls. For this reason, schooling rate after elementary school is quite low and especially in the rural areas, girls are withdrawn from schools after completing the fifth grade. This is because families with financial difficulties first stop sending their daughters to school.

Extension education programs play a key role in the implementation of rural development programs and to increase the living standard of the women and their families in the rural areas.

Rural women's outstanding barriers to extension participation are; lack of information about extension activities, heavy loads of household task and time constraints, and permission from husband. In the research area, women's participation to extension education programs and training is quite low. Their participation in agricultural training programs is even lower. This is because women consider their first duty as taking care of their housework and they do not perceive themselves as agricultural producers. The training activities in which women usually participate are activities which strengthen women's traditional role in the family and society at large.

Therefore, first of all women need to be educated to change this traditional way of thinking. They must be made aware of their needs. Training subjects must not cover general issues only. They must be suitable with the conditions of specific women target groups. The content of the training must correspond the needs of specific target groups and the knowledge gained must be practicaly usable for their daily life. This is because, different attributes such as age, education level and marital status influence the expectations of women from the training program. In addition, women's participation to training programs particularly depends on men's permission and confirmation. Therefore, in order to develope women training programs in rural areas, persuading men is as an important issue as persuading women.

Extension program will be more effective as they focus on the educational needs of the rural women. Rural women are not a homogeneous group. There is some diversity in terms of age, educational level, marital status and income. We recommends appropriate target planning extension programs that address the needs and take into account the existing diversity within rural women, such as age, educational level, marital status and income.

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