CGIAR Challenge Program on
WATER & FOOD

A GENDER ANALYSIS PERSPECTIVE FOR IMPROVED LIVELIHOODS IN THE KARKHEH RIVER BASIN

Mohamad Effati, Malika Abdelali-Martini, Akram Abbasi
and Shohreh Soltani

Strengthening Livelihood Resilience in Upper Catchments of Dry Areas by INRM (CPWF PN 24)

8

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International Center for Agricultural Research in the Dry Areas

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Agricultural Extension, Education and Research Organization

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Contents

Executive summary

This study on gender and livelihood aims to find new ways of improving the incomes of rural households, based on the role of women in agricultural production and the division of labor in socioeconomic activities between men and women. It targets eight villages in two regions: Merek (Kermanshah Province) and Honam (Lorestan Province), and was carried out through conducting a social survey (quantitative research) and a participatory rural appraisal - PRA- (qualitative research). The results from qualitative and quantitative research were integrated.

The study focused on gender roles in agricultural activities; women's access, control and share of income; and their perceptions and impressions of ways of improving their family livelihood. Theories and overviews on *gender and development*, gender inequality, feminism, and other issues, are summarized in the study.

The study revealed that the roles played by women in the agricultural field, concentrated on seeding, planting, weeding, harvesting and packing; leaving operating machinery and marketing to men. In the field of animal production, women's roles concentrated on milking, rather than cleaning or feeding. Handicrafts, however, were mainly women's activities, with very little participation from men. Despite the major role women play in the provision of household income, the patriarchal culture in rural families leaves fewer opportunities for women to take part in decision-making and to have access to resources.

To improve their livelihoods, rural families need training (informal) and education (formal) to help establish and develop businesses and income-generating activities using the small savings of local people and credit from the government.

Introduction

1. Introduction

1.1. Importance of gender research in livelihood in the Iranian rural setting

In recent decades, participation of people and particularly of weakened and marginalized groups in development plans has received serious attention by development planners and others engaged in this context. Women generally, and rural women particularly, are among these groups. This attention represents a new way of thinking and planning reflected in a shift from the 'women in development' approach to the '*gender and development'* approach. The *gender and development* approach continues to be the dominant approach in development plans in Iran.

The concept of *gender and development* lies behind a strategy suggesting that the state of gender inequality in the world today, has no origin in women's biological characteristics. Gender results from regulations and rules, traditions, and social relations in societies and cultures, which all determine men's and women's behaviors as well as their shares in power, access, control, and benefits of material and non-material development facilities in society. Weight and importance of the gender concept in a new development paradigm are realized through the fact that it reviews social and economic processes in terms of their impacts on men and women, and also of existing interactions between them. In this concept, unlike the *women and development approach,* women are in no way considered in an isolated sphere from men, rather the differences (resulting from various factors) between men and women are more specifically revealed.

While both approaches eventually focus on improving life conditions for women, they differ in their attitudes towards women's issues. A key weakness in the *women and development* approach was its consideration of women in isolation from men. However, the *gender and development* approach considers both men and women; thus, a gender analysis does not mean looking simply at the differences, rather, it means to analyze how such differences lead to inequality between men and women, e.g. in their opportunities, access to facilities, and power, etc.

Today, it is commonly believed that plans of the *gender and development* approach are of more structural concentration than those of the *women and development* approach, because they tend to emphasize the relations between men and women, assuming that it is not enough to concentrate only on women. Applying an approach based on gender and/or gender analysis means that organizations assess the (potential) impact of their policies, plans, and activities on women, men, and the relations between them. It does not mean that policies and plans - with special focus on women and/or men might - are not justified, but it implies enhancing strategies that eventually lead to a reformation of gender differences existing in a society, focusing on women and men in a separate or common manner. A main objective in the *gender and development* approach is to provide equal opportunities for women, compared with those for men, and to avoid marginalization in order to promote the participation level of all individuals (men and women) in determining their destiny and forming a sound and equal society. Marginalization means one's lack of control of his/

her life and physical environment, and lack of power to decide on the issues influencing his/her material and non-material life. Marginalization is a result of an unequal socio-political process which involves social, economic, cultural, and political deprivations caused by unequal relations of power. Inequality of power refers to a lack of equal access to the control of resources, production, assets, income, information, and knowledge. Now, the importance of, and need to institutionalization of the gender equality strategies have become more acceptable.

A brief look at the women's situation in the world, revealed an unpleasant state of inequality between men and women throughout the world, indicating a constant trend of marginalizing of women compared with men. Iran has indeed never been an exception. Research and studies conducted in Iran also suggest that women, particularly rural women, have a lower level of participation in the relevant decision-making than do men, despite their significant role in economic activities. Understanding of constraints and realization of existing capacities and potentials in rural livelihoods, have led us to initiate this research program, which has accordingly tried to identify current issues, problems, and potentials of rural women in the studied regions through the *gender and development* approach. Thus, it attempts to analyze these factors in comparison to men's situation and suggests possible solutions to enhance livelihoods of households in the Upper Karkheh area (i.e. Merek and Honam regions) with a focus on the role of rural women.

1.2. Problem statement

It has frequently been said that rural women have substantial roles and participation in agricultural activities; such a strong participation inevitably results in household livelihoods being largely provided by women. If so, livelihood resilience with neglecting the gender aspects of rural communities would be an imperfect overview. Therefore, it appears necessary to study gender roles to be able to present suitable options for livelihood resilience of a given region. For this purpose, as part of a longer study in Karkheh area of Iran, including comprehensive economic, social, and technical studies, it was also felt necessary to undertake a study addressing women and their role and participation in various agricultural activities (cultivation, management, harvesting, processing, marketing, and sale) in separate sub-sectors of livestock breeding, farming, and gardening.

The Challenge Program on water and food in Iran has a project on 'Livelihood Resilience in Karkheh River Basin' that is implemented in the geographical area of Upper Karkheh in Iran – it mainly aims at improving rural livelihoods while maintaining strengths of natural resources. One of the leading purposes of the program is to develop patterns and options capable of positively influencing livelihoods in rural communities.

Obviously, these patterns and options should both provide requirements and priorities of local society and address goals and changes at a wider scale and at higher levels.

Since women in this region are a large group of the labor force and play a major role in agricultural activities – this led to the idea of studying and reviewing their role and share in household livelihoods of the region, and presenting possible solutions for improving their livelihoods. The research program was therefore proposed by ICARDA in 1997 to Rural Research Center, and the studies in Iran commenced in two regions, Honam

and Merek, located in Lorestan and Kermanshah Provinces, respectively.

a) The most important questions of this study are: What is the role of rural women in household livelihoods, and how much share do they have in the household income (agricultural and non-agricultural)?
b) How does that translate in decision-making patterns?
c) How much access and control do women have on production resources?
d) Which factors and options can improve women's situations in rural regions?

Methodology

2. Methodology

A number of methodological steps were followed, commencing with a review of secondary information and with a focus on what has been done in Iran. This was followed by some informal surveys in the study area where qualitative information was collected using a checklist. Finally, a formal survey was conducted in the integrated benchmark research sites using a stratified sampling procedure, and following a purposive selection of villages with contrasting biophysical and socioeconomic conditions.

Gender refers to the social construction of the roles of women and men in a given society, not to their biological differences. It is the society which assigns different roles to women and men according to the rules and sanctions of that society. This situation has led to the assigning of different roles to women and men in agricultural production, such as the division of labor or the decision-making process. These roles differ between societies, which explains the importance of such a process, and gender analysis is used to understand these roles (Abdelali-Martini *et al.*, 2008).

Gender analysis is a guide intended to help better understand the social and economic set-up of livelihoods through understanding of gender roles, differences, and relationships. It provides valuable insights to understand specific demands for specific groups in the society (Abdelali-Martini *et al.*, 2008).Recognition that male and female responsibility for production and reproduction tasks vary among societies, races, and classes has encouraged the understanding that such activities are socially or gender defined, and are mutable and responsive to other changes in farming systems (Feldstein and Poats 1990a). Recording and using these gender differences in the analysis constitutes a platform for better designing and testing improved technologies. Gender disaggregation of responsibilities, work, and knowledge is considered a starting point in examining and explaining the multiple roles of women and men as resource users.

2.1. Study area

The integrated benchmark research sites were established within the Challenge Program on Water and Food in the Karkheh River Basin in Iran. Honam and Merek, two watersheds in the upper catchment, represent the prevailing rainfed crop, range, and forest environments with different water resources for supplemental irrigation. In the downstream irrigated environment, two sites were identified, one representing farming communities with access to fresh water for irrigation, from the irrigation network and wells, and the other with different levels of salinity and water-logging problems. The benchmark sites attempt to maximize water productivity at all scales from plant to basin, to improve livelihood resilience of the communities and to ensure environmental sustainability as a result of increasing productivity in the river basin.

The research sites of Merek and Honam were selected. The methodology used in the selection of household samples was a multistage selection procedure: secondary data was reviewed, and a rapid appraisal was conducted in Merek catchment, in addition to intensive discussions with local research staff and extension agents. The results showed that sources of income (e.g. livestock, horticulture, crops, and off-farm employment), as well as access to water, rangeland, markets, and

services differed. Therefore, the study adopted a stratified sampling procedure that aimed at ensuring that most representative conditions of the villages in the catchments were included. Because of heterogeneity between villages, the objective of representativeness was achieved by selecting a small number of villages with contrasting biophysical and socioeconomic conditions, using the following steps:

1. The communities in Merek catchment were first subdivided into three different groups based on their geographical location, natural resources, and production system. These groups were villages along the valley, near the forest, and near rangeland areas. The valley region had more irrigated areas and, with 23 villages, the highest concentration of population.
2. One village was selected from each group, in addition to a fourth village from the valley, to better represent the community. The four villages selected in Merek catchment were Bagh Karam Beig near the forests, Sekhere Olya near the rangelands, Mahdiabad Sofla and Kolahjoob from the valley.
3. The communities of Honam catchment were divided into three groups: upstream, midstream, and downstream. These groups generally differed in the importance of livestock and water availability. Upstream villages had more livestock, horticulture, and dry land crops; the midstream villages had more mixture of rainfed and irrigated crops as well as livestock, mainly cattle; and downstream villages had good access to water and have mainly irrigated crops and dairy cows. Four villages were selected in Honam catchment – Peresk Olya (upstream), Chahar Takhteh (midstream), and Siyahpoosh (downstream) – that represented different livelihood types and production systems of the catchment as described above, in addition to Bardbal (downstream).
4. The selected villages comprise at least 40 households; small villages were discarded from the sample on the assumption that on one hand, they may be affected by out-migration in the near future making their stability uncertain, and on the other hand, to avoid getting a sample that was too small. The selected villages were visited and surveyed through rapid rural appraisals conducted during the summer of 2007 in which basic village information including village size, production patterns, importance of different activities in livelihoods, resources, services, constraints, and perceived community potentials were collected.

2.2. Sample selection

The total number of households selected (261) from the two sites for this research represented 63% of all households (413) in the two sites: 160 households from four villages in Merek, and 101 households from four villages in Honam (Table 1). The survey was conducted during the period November 2007 to May 2008. As part of a larger study on livelihoods, this part was intended to focus particularly on women and their specific concerns and needs. Therefore, the interviews were mainly addressed to women from these households, although addressing questions about all members of the households.

The studied population consisted of four villages in two regions of the Upper Karkheh area, located either in Lorestan Province (i.e. Honam) or in Kermanshah Province (i.e. Merk). The Honam region is

Table 1. Population of Merek (Kermanshah Province)

Villages	No. of households (1996)	Population (1996)	No. of households (2006)	Population (2006)
Bagh-e Karambeik	33	141	42	201
Sakhr-e Olya	45	240	53	266
Kolahjoub	69	351	80	385
Mahdiabad-e Sofla	33	169	44	217
Total	180	901	219	1069

located in Honam rural district of Selseleh (Alashtar), and the Merek region is situated in Sarefirouzabad rural district of Kermanshah county. The studied villages in the Honam region included four villages - 'Chahar-takhteh', 'Persek Olya', 'Bardbal', and 'Siah Posh'; and the studied villages of the Merek region also included four villages - 'Kolahjoub', 'Mahdiabad Sofla', 'Bagh Karam Beig', and 'Sekher Olya'. The villages were selected on the basis of economic and social parameters, as well as natural conditions of the regions, and were carried out as follows:

1. In Merek, villages were categorized into three groups according to their geographical locations, access to natural resources, and production systems. These three groups included villages along the valley, near pastures, and near forest. The villages along the valley mostly had irrigated farmlands, and their population density was the highest with 23 villages. Thus, in the first step, one village was selected from each group; then, another village from each region was added to the sample villages to reach a greater coverage of the society.
2. In Honam, due to the local situation, the villages were categorized into three groups (upstream, midstream, and downstream) varied substantially in the importance of livestock breeding and access to water. Upstream villages mostly relied on livestock breeding (mainly sheep), gardening, and rainfed farming, while midstream villages applied a combination of irrigated and rainfed farming with a livestock production mostly depending on cattle breeding. However, downstream villages had good access to water and thereby had both irrigated and dry cultivation, with their livestock production depending mostly on cattle breeding. Therefore, one village from each group was taken for sampling purposes (Tables 1 and 2) show populations and households of the studied regions.

Table 2. Population in Honam (Lorestan Province)

Villages	No. households (1996)	Population (1996)	No. households (2006)	Population (2006)
Bardabel	34	197	27	131
Siyahpoush	56	343	52	225
Peresk	84	499	90	436
Chahar-takhteh	21	115	25	137
Total	195	1154	194	929

The study used a proportionate stratification sampling method, i.e. given the number of concerned villages in the studied regions; a proportionate number of resident households were selected from each village. Therefore, the selected sample size of each village was determined proportionately to the number of households. (Table 3) indicates the sample size of each village selected separately in 2006, according to the number of residing households. Sample selections were done in a simple random manner. For this purpose, first of all, names of the village households were identified through cooperation with village Councils. The names were then put into a bag, mixed up and drawn out, thus ensuring random sampling. The women of the households were then interviewed. In this study, the unit of analysis was a household woman residing in the concerned village.

2.3. Methods of data collection

Qualitative and quantitative methods were used to study livelihoods, such as informal and formal surveys: the first method was done through participatory rural appraisal (PRA) techniques, i.e. focus group discussion; and the second, through questionnaire interviews addressed mainly to women. The informal surveys were used to identify the main issues and constraints. Considering the governing cultural environment in the villages, a number of local females educated in the humanities (social sciences), who spoke the local dialect perfectly, were selected and well-trained in collecting information through questionnaires.

Table 3. Sample sizes of the studied villages (in 2006)

Regions	Village	Number of Households	Selected Sample Size
	Bardbal	27	16
Honam	Siah Posh	52	22
	Peresk Olya	90	51
	Chahar-takhteh	22	12
	Total	**194**	**101**
	Bagh Karam Beig	42	29
	Sekher Olya	53	36
Merek	Kolahjoub	80	53
	Mahdiabad Sofla	44	31
	Total	**219**	**149**
Total		**413**	**250**

Theoretical framework

3. Theoretical framework

The *gender and denvelopment* approach rests on different outlooks. Different researchers, depending on their field of specialization, have tried to analyze the concept of sex and its role in rural development. In this article, we will scrutinize these outlooks - closely related to the subject of our study - analyze and summarize them , in order to present a suitable theoretical framework based on such theories. But first, we will explain the concept of gender and relevant common perceptions in the following sections:

3.1. Concept of gender

Sociologists assume a considerable difference between sex and gender. While the term 'sex' indicates the biological differences between men and women, 'gender' indicates the personal and mental specifications determined by society; followed by the state of being man or woman, or manly and womanly (Gert, 2000). In other words, gender indicates roles assigned by the society for men and women (Tores *et al.*, 1996). On one side, gender is viewed as a socially and culturally obtained behaviour, whereas on the other side, it is a symbol of how the society expects the social behaviour to be. All of us are born in a special gender format, and we enter a collection of behaviors and social attributes that form our gender. Since this type of becoming socialized covers all the experiences throughout life, it has a long-term effect that is passed on from generation to generation. In a nutshell, sex indicates the natural and biological differences, whereas gender is attributed to social differences between men and women; such differences are learned, and they change through time and differ among different cultures and societies.

3.2. Gender roles

One of the main issues in development-related discussions is the analysis of gender roles and attention to gender in planning and development. The role of gender is attributed to activities and responsibilities assigned by society and culture to men and women. In fact, the role of gender results from the division of social work, based on gender. In this gender distribution, the production activities and responsibilities out-of-house are assigned to men, whereas the in-house tasks and day care of children are assigned to women.

The result of such a distribution is that women are not permitted to participate in economic, political, cultural, and social affairs. Moreover, other determinative factors such as social class, tribal and racial status, as well as nationality and age, intensify that result. The lower status of women in society, most times means that women have no control of existing economic resources (Lis *et al*., 1996).

Gender specifies which different roles are played by men and women in society and identify different governance patterns. Proper understanding of such terms requires deep and precise studies concerning gender roles, responsibilities, access to and control of resources, as well as decision-making ability related to utilization of resources. In most parts of the world, men play greater roles in utilizing natural resources for commercial uses, e.g., use of animal grasslands,

fishing, extraction of mines, and different utilizations of trees. However, although men and women partake in economic activities such as agriculture, women also undertake domestic responsibilities.

3.3. Gender division of labor

There is a gender division of labor in entire communities, i.e. some work is for women and some for men. However, the nature of tasks done by men or women differs in different societies and has changed during history. Therefore, gender distribution of labor has its origin in society and has no relationship to natural difference; gender roles and gender distribution of tasks in society has no dependence on biological specifications. For instance, in the division of agricultural tasks in some parts of the world, men play the principal role but in others this role is assigned to women (Lis Toures *et al.*, 1996; Abdelali-Martini, 2003a; 2003b).

Even within a country, there are regional differences in terms of gender roles. For instance, a variety of handicrafts such as carpet weaving are produced by women in some regions of Iran, and in other regions this task is fully done by men. Sex of individuals does not vary over time, while gender roles and gender distribution of labor may have social changes over time. Changing living conditions, developments in science and technology result in changed living conditions for individuals and make gender roles subject to change. Such roles are one of the sub-structural and main dimensions in the social structure of humanity and we cannot study them separately from variables such as age, race, ethnicity, religion, and economic status.

3.4. Gender and development

Following the experience of implementing projects on 'women in development', we conclude that concentrating on women regardless of men, and their participation and collaboration with women, may not be a successful approach. Therefore, the emphasis on 'women in development' was omitted and transferred to '*gender and development* '. Therefore, entire social, political, and economic structures and development policies were re-studied from the viewpoint of gender differences and it was discovered that access to gender equality required fundamental changes. Such changes start from changing minds and then lead to the reconstruction and renovation of gender relations policies, structures, and constitutions (Khani, 2006).

Experts believe that concept of *gender and development* is not related only to issues related to women but is related to social structure and assignment of social roles and responsibilities to women and men as well as the specific expectations from them. This concept also analyzes the nature of participation of women in the social realms both inside and outside their home. Moreover, it indicates that the necessary correction of the labor classification in which tasks done by women inside homes has been previously neglected.

Gender and development has nothing to do with women but is related to the social structure of gender and perception of society concerning the roles, responsibilities, and expectations of society from men and women. In addition, *gender and development* pays attention to the analysis of the nature of services that women do inside and

outside their homes which has been given little attention (Khani, 2006).

Study of gender relations within recent years has become one of the most important study fields in sociology. The main reason for such importance is the existences of hindering attitudes, which attributes some abilities for doing activities to a particular gender and justify the gender inequalitiesaccordingly (Lis *et al*., 1996).

3.5. Sociological gender theories

In line with the focus on gender issues, sociologists have used current sociological theories to establish gender sociology. Although the term gender is used with good faith in sociology in favor of women, gender sociology tries to study roles, relationships, and social identities of men and women. Gender sociology assumes the term gender as only one of the variables in social relations and structures.

In the study of the viewpoints of sociologists concerning *gender and development* distinguished three main sociology doctrines. The first doctrine involves functionalists who endeavor to justify the gender differences existing in the relationship between men and women and evaluate it as positive for the sake of the social system. The second doctrine of outlooks indicates 'conflict' – they attribute the gender difference between men and women to social and class inequalities within the society in different historical periods and believe that we should omit social classes to save women from such inequalities. The third doctrine can be assumed as intermediate theories that combine the other two doctrines or outlooks.

3.6. Functional theoreticians

Durkheim said: "man is the product of society while woman is the product of nature". He added that "tastes, wills, and behavior of men have originated mainly from collective actions". Women, on the other hand, are affected by their organisms. Therefore, the needs of men are completely different from the needs of women. In other words, women and men have different identities, discriminations, and tendencies, because women are less socialized, compared to men, and are closer to nature than men are (Gidenz, 1998).

Parsons believed that the existing labor division between women and men was the result of different social roles; and that the socialization process of men and women had been such that it had trained them to be suitable for these roles. When undertaking domestic duties and responsibilities, men are found suitable for roles with instrumental aspects and women are suitable for roles with expressive aspects. These complementary divisions of labor are required for the family and the society, if they were to achieve the desirable function (Riters, 1995).

He believed that for the family to effectively function, a kind of gender labor will be established to make men and women able to undergo remarkably different roles. If the functions and orientations of men and women were made very similar to each other inside the family, then competition between them would distort family life and the determinative role of the family would be weakened in preserving social stability (Riters, 1995).

Shelski and Azazi (1997) assumed lack of equality between men and women

inside the family. They presumed that the state of unemployment for women is a positive factor of family stability. In fact, they believe that being the generator of the spiritual base for behavior, a woman's out-of-home employment would jeopardize the security and undermine the entity of her family. Outdoors employment for women, would lead to the disorganization of the social relationships at home (Riters, 1995).

3.7. Conflict theoreticians

Marx believed that differences related to gender in the field of the power and status of men and women had resulted from class divisions. He believed that in primitive forms of human societies there was no sign of divisions related to gender and class. Dominance of men over women emerged only when class divisions appeared. Women were gradually turned into a form of private property owned by men through the marriage institution. Only when class gaps decreased, women would feel free. Therefore, according to Marx, the existing gender differences inside society have resulted from class inequalities in the society (Gidenz, 1998). Therefore, to remove discrimination from society, we should remove class differences Engels believed that the process of family maturation would come along with social maturation. He believed that during the history of the humans' life (from hunting to grazing), man, being entitled with a superior position in the family (i.e. owner of the flock), could distort the inheritance regulations and make the male descent and paternal heritage-right dominant over that of maternal heritage. Therefore, he believed that the first class-injury was concurrent with the injury of male on female and the very initial class exploitation was in relation to the exploitation of women by men.

3.8. Gender inequality theories

Theories related to the gender inequalities state that the inequalities within society between men and women are not the result of biological differences but are the products of social conditions. Theorians believe that, firstly, women compared to corresponding men have less financial interests, social status, power, and opportunities. The occupation of such a low social position by women, besides being related to gender, can be attributed to other factors such as class, race, occupation, social status, religion, and education. Secondly, such inequalities have originated from the society's organization, rather than any main biological or personality difference between men and women. Thirdly, the inequality theory indicates that although individuals may differ from each other in talents and attributes to some extent, there is no main natural elevation or preference model for the discrimination between these two sexes; inequality between two sexes is due to the fact that women have less power to achieve self-actualization.

Williamson believed that gender inequality was generally influenced by three factors including 'economic role', 'access to labor market and resources', and 'traditions and social contracts'. In most countries, the regulations, norms, rites, and rituals have determinative roles in the statement of gender inequalities within society, such that they generate limitations for the entrance of women into the labor market or limit their access to the required resources. Therefore, he suggested that we should take different factors into account for reaching changes in contracts and social mores, including policies with the objective of access for women to education, healthcare, financial credit, and the labor market. In addition, he states that change in the traditional

beliefs and internalized social norms may cause resistances and this matter requires a long-term period (Khani, 2006).

Janet Chavez focused on the organization of the obligatory bases of gender inequality and believed that the gender inequality system is under the effect of several sociological, economic, and political factors. Thus, gender stratification depended on labor division in the macro level of a society.

As men controlled the material resources and power, such superiority was also used for the social definition of gender and ideological and cultural justification of the unequal situations. It was applied to adjust behaviors and conduct at the micro level within units and interpersonal relations. The function of these social and internalized definitions concerning gender relations is that they established a fundamental and basic relationship between the macro levels and social microsystems and such unequal opportunities and roles. The social and internalized definitions concerning gender in three general groups were classified as follows:

- *Ideology of gender*: or ideas that point out the basic and biological and physiological differences between men and women.
- *Gender norms*: or expectations which differ between men and women in terms of opportunities provided for them.
- *Stereotyped notions of gender*: or prominence and exaggeration, in case of the differences between men and women in relation to their reactions in different positions.

These processes of social and cultural definition of gender result in the distribution of unequal opportunities in labor division, power structure, rewarding system, and unequal evaluation of opportunities and roles that give legitimacy to inequality. Legitimacy of inequality makes men and women accept such roles and positions optionally in the gender stratification system (Aghapur, 2001).

In a discussion about gender stratification, Collins criticized the classic sociological theories of family (which mostly concerned functionalism doctrine). These theories have tried to justify inequalities between men and women and to preserve traditional positions of women and the unequal labor division between them. Collins criticized the functionalist outlook concerning preservation of the traditional labor division system among men and women that, regardless of the structure of unequal power and different allowances and values of this position, tries to strengthen and regenerate such inequalities. Collins also believed that family, similarly to other institutions, is a mixture of power and dominance that strengthens many inequalities in gender roles of a family. A higher scale of dominance of men over women can be addressed in relation to jobs, execution of tasks, and gender action.

After analyzing the distribution of gender inequalities, Collins tried to express such inequalities; and introduced two groups of factors resulting in unequal gender models:

1. Forms of social organization that influence the application scale of pressure and force.
2. Status of labor market of men and women.

On average, men are stronger than women and women are more vulnerable and delicate in physical terms, because of childbirth and child care, which means unequal distribution of resources and facilities for social dominance among men and women. While Collins assumed that

women were weaker than men in physical terms, he believed that the control of dominance tools and resources entailed more than physical power differences among individuals.

One other effective factor in gender stratification and relationships between men and women was the scale of control of financial resources of the society by one of the sexes. One of the determining factors assigning the control scale of financial resources was the economic surplus level. By analyzing different historical periods - based on the economic surplus level of societies and control and access rate to such surplus by one of the two sexes, Collins tried to express the unequal relations between men and women in different historical periods.

Another important factor in practicing control of financial resources of a society is the principles of inheritance. If in a society, one sex inherits wealth or power, or if such resources are unequally inherited, the ground is provided for the control of a considerable amount of financial resources of that society by one of the sexes (Shali, 2003).

3.9. Feminist theories

The principal component of feminists' theories is giving a special attention to women; presenting a detailed list of discriminations and inequalities throughout the world, in relation to women, and they try to correct these structures to the benefit of women. They believe that every unit of society is a system with which some people practice dominance on some others. In most fundamental social structures, a continuous model of dominance and subjection can be addressed among classes, minorities, race groups, tribes, religious groups, and age groups. Men through participating in patriarchy learn how to influence other people. According to feminists, classical analyses related to the inequality of the social structure do not take the patriarchal societies – despite being considered the principal inequality structure, into consideration. Having access to the resources of controlling women, men have been able to generate patriarchy and maintain it, and so force women to serve them as subservient instruments (Aghapur, 2001).

3.10. Conclusion

The above theories indicate that the origin of the gender roles in a society that results in the emergence of social labor division between men and women are generally social and cultural, rather than biological. Therefore, since there are differences and discriminations in society between roles and type of labor divisions, the above-mentioned experts in this connection have analyzed this matter according to their skills and outlooks. However, taking into account the presented theories as well as studies and research in the field of *gender and development* , we compiled a group of factors with which we may be able to suggest more effective solutions for the improvement of social status of rural women.

Therefore, in order to study the effective social factors concerning the improvement of the status of rural women and enabling their active participation in rural development plans, the following cases are mentioned:
1. Personal variables (age, education, job, marital status, skills, type of needs and difficulties, and type of technology used).
2. Social variables (social status, social participation, social organizations, power relations, and social labor division).
3. Economic variables (ownership, economic status of family, access rate to the production resources, and type of livelihood).

Results and discussion

4. Results and discussion

This section consists of data and information analysis based on the research objectives. The characteristics of the households' members are explained first to provide general information on the studied sample.

4.1.General characteristics of household's members

Age

The average age of women in the study was 38.9 (range 16–70) years. The average age of their husbands was 44 (range 20–80) years.

Jobs

When asked about their jobs, 99.2% of rural women in the study declared that they were housewives, and only 0.8% of them referred to dressmaking as their main job (Table 4). But when asked about their daily activities, all respondents included agricultural activities in their daily responsibilities. They considered agricultural and farming activities as a part of housework and child care chores rather than a formal, money generating occupation. Since activities carried out indoors, were not formally classified as proper jobs, women did not mention them as such.

As for the spouses of the women under study, the results revealed that they were mainly farmers (71%), or agricultural workers (16%).

Table 4: Rural women's jobs

Job	Number	Percent
Housewife	259	99.2
Tailor	2	0.8
Total	261	100.0

Source: this survey

Household size

The household size of the studied villages was 4.8 and 4.7 persons in Honam and Merek, respectively (Table 5); Chahar-takhteh had the highest average household size (6.2 persons) in Honam, and Sekher Olya had the highest average size in Merek (4.8).

Table 5. Household size (persons)

Village	Household size
Bardbal	4.9
Siah Posh	4.3
Peresk Olya	4.8
Chahar-takhteh	6.2
Honam	4.8
Mahdiabad Sofla	4.8
Bagh Karam Beig	5.0
Sekher Olya	4.8
Kolahjoub	4.9
Merek	4.7

Source: this survey

Literacy

More than half of rural women were illiterate (54%), 14.9% knew only how to read and write, 18.8% had finished primary school, 6.5% finished guidance school, and only 5.4% finished high school (Table 6). Therefore, the majority was either illiterate or had a low level of literacy and none had any academic education.

Of respondents' husbands, 34.4% were illiterate and 27.6% finished primary school, showing a high level of illiteracy and low literacy. Men were more literate than women in the region.

Table 6. Literacy

Literacy level	Number	Percent
Illiterate	141	54.0
Read and write	39	14.9
Primary school	49	18.8
Guidance school	17	6.5
Secondary school	1	0.4
Diploma (finished high school)	14	5.4
Total	261	100.0

Source: this survey

The population of illiterate and low-literate people in Honam was greater than in Merek (Table 7), and a chi-square test indicated that this difference was significant (P=38.801), is shown in (Table 8).

The level of literacy decreased as women's age increased. The illiterate women were usually older than the literate ones; about 91.3% of womenaged ≥ 57 years were illiterate (Table 9). A chi-square test showed a significant relationship between age and literacy (Table 10). Thus younger women were more literate than older woman, due to the increased education opportunities for rural women in recent decades.

Marital status

Most of the studied women were married (87.4%) and only 12.6% were widows. Unmarried women were not included in this research, because they were not the head of the household (Table 11). Most widows were heads of households, carried out the main house affairs, and played the main role in socioeconomic interactions of their village.

Table 7. Literacy by region

Region	Count	Literacy level						Total
		Illiterate	Read and write	Primary	Guidance	Secondary	High school	
Honam	Number	52	8	14	12	1	14	101
	Percent	51.5%	7.9%	13.9%	11.9%	1.0%	13.9%	100.0%
Merek	Number	89	31	35	5	0	0	160
	Percent	55.6%	19.4%	21.9%	3.1%	0.0%	.0%0	100.0%
Total	Number	141	39	49	17	1	14	261
	Percent	54.0%	14.9%	18.8%	6.5%	.4%0	5.4%	100.0%

Table 8. Chi-square test

	Value	d.f.	Asymp. Sig. (2-sided)
Pearson chi-square	38.801	5	0.000
Likelihood ratio	43.919	5	0.000
Linear-by-linear association	17.022	1	0.000
N of valid cases	261		

Table 9. Literacy level by age

Age	Literacy	Literacy level						Total
		Illiterate	Read and write	Primary	Guidance	Secondary	Diploma	
16-26	Number	11	5	14	6	1	10	47
	Percent	23.4%	10.6%	29.8%	12.8%	2.1%	21.3%	100.0%
27-36	Number	30	18	28	9	0	4	89
	Percent	33.7%	20.2%	31.5%	10.1%	0.0%	4.5%	100.0%
37-46	Number	35	12	6	2	0	0	55
	Percent	63.6%	21.8%	10.9%	3.6%	0.0%	0.0%	100.0%
47-56	Number	30	2	0	0	0	0	32
	Percent	93.8%	6.3%	.0%	0.0	0.0%	0.0%	100.0%
57 and more	Number	35	2	1	0	0	0	38
	Percent	92.1%	5.3%	2.6%	0.0%	0.0%	0.0%	100.0%
Total	Number	141	39	49	17	1	14	261
	Percent	54.0%	14.9%	18.8%	6.5%	.4%	5.4%	100.0%

Table 10. Chi-square test

Tests	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	110.612	20	.000
Likelihood ratio	118.730	20	.000
Linear-by-linear association	72.752	1	.000
N of valid cases	261		

Source: this survey

Table 11. Marital status

Marital Status	Frequency	Percent
Married	228	87.4
Widow	33	12.6
Total	261	100.0

Source: this survey

4.2. Farm characteristics

Land area

The studied women often did not know the exact area of land, under their households' control; however, 83.1% of the households possessed land, and only16.9% were landless (Table 12). Table shows that 17.6% of respondents had less than 2 ha, 30.7% had 2–3.1

ha, 11.3% had 3.1–8 ha, and only 12.6% owned more than 8 ha. Thus, most farmers in the two regions were smallholders, with average size of 4 ha.

Table 12. The size of farming land area of households

Land area (ha)	Number	Percent
No land	44	16.9
< 2	46	17.6
3.1–2	80	30.7
5.1—3.1	34	3.1
5.1-8	24	9.2
≥ 8.1	33	12.6
Total	261	100

Source: this survey

Land tenure

Land ownership in the studied area ranged in type and percentage (Table 13). About 21% of the households had privately owned land, 3.1% had rented land, 2.7% obtained their land through endowment, and 33.7% of the households, which is the most common type of ownership, had joint (Mosha) lands. 16.9% of the households were rendered landless.

Table 13. Types of land tenure

Types of land tenure	Number	Percent
No land	44	16.9
Privately owned land	55	21.1
Rented	34	3.1
Endowment	7	2.7
Joint (Mosha)	88	33.7
Combined	33	12.6
Total	261	100

Source: this survey

In Honam, most land ownership was private, while joint ownership was more popular in Merek (Table 14). A chi-square test showed a significant difference between the regions in types of land tenure (Table 15).

Land plots

Most rural women's households had ≥ 7 plots (72%), indicating many small-scale agricultural plots in the studied regions (Table 16). The average number of plots per farmer was 5.1 (i.e. a high rate). Just 9.2% of farmers had one plot. The high number for plots and their spread indicate the need for integrating agricultural land. The average area of each plot was < 1 ha (9930/5 m^2).

Water supply system

Most respondents (65.5%) owned an irrigation source while 34.5% did not. Among the first group, 24.5% had a well, 3.1% had an irrigation canal (Qanat), 8.8% used a lake, 23.5% used a river, 1.9% had both a well and a Qanat as their water source, and 3.8% used both river and a well (Table 17).

Livestock production

As a result of the study on livestock ownership, it was concluded that about half of households did not have any cows, 10% owned one cow, about 17% owned two cows, and about 24% had ≥ 3 (Table 18). The study concluded that the average of cow ownership per household was 3.3 heads.

When asked about ownership of sheep, 70% of respondents reported that they did not own sheep, 11.5% had 1–9 sheep, 6% had 10–15 sheep, and 6% had 16–20 sheep (Table 19).

Table 14. Type of land tenure in two regions

Region	Count	Type of land						Total
		No land	Private	Rental	Endowment	Mosha	Combined	
Honam	Number	17	31	25	0	6	22	101
	Percent	16.8%	30.7%	24.8%	.0%	5.9%	21.8%	100.0%
Merek	Number	27	24	9	7	82	11	160
	Percent	16.9%	15.0%	5.6%	4.4%	51.3%	6.9%	100.0%
Total	Number	44	55	34	7	88	33	261
	Percent	16.9%	21.1%	13.0%	2.7%	33.7%	12.6%	100.0%

Table 15. Chi-square test to illustrate the difference of land ownership types in two regions

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	77.626	5	.000
Likelihood Ratio	89.196	5	.000
Linear-by-Linear Association	8.594	1	.003
N of Valid Cases	261		

Source: this survey

Table 16. The number of land plots

Number of plots	Number	Percent
1	24	9.2
2	39	14.9
3	33	12.6
4	35	13.4
5	24	9.2
6	20	7.7
≥ 7	54	20.7
No land	32	12.3
Total	261	100.0

Source: this survey

Table 17. Water supply system

Irrigation source	Number	Percent
Well	64	24.5
Qanat	8	3.1
Spring	23	8.8
River	61	23.4
Well and Qanat	5	1.9
Well and River	10	3.8
Rain	90	34.5
Total	261	100

Table 18. Number of cows

Number	Frequency	Percent
0	129	49.4
1	26	10.0
2	44	16.9
3	20	7.7
4	18	6.9
≥ 5	24	9.2
Total	261	100.0

Source: this survey

Table 19. Number of sheep

Number	Number	Percent
0	182	69.7
9–1	30	11.5
15–10	15	5.7
20–16	15	5.7
≥ 21	19	7.3
Total	261	100.0

Source: this survey

Of the studied households, 77% did not possess goats or goat kids, 10% had 1–4 goats and kids, 3.4% had 5–9, and 9.6% owned ≥ 10 (Table 20). The average number was 8.2 heads per household.

Table 20. Number of goats and kids

Number	Frequency	Percent
0	201	77.0
4–1	26	10.0
9–5	9	3.4
≥ 10	25	9.6
Total	261	100.0

Source: this survey

The study revealed that rural women in the region often kept poultry (e.g. hens or roosters) in their birdhouses; They mainly breed birds such as hens for their eggs, and roosters for meat production. A few households produced poultry for live sale. Only 28.7% of households did not own poultry (Table 21), indicating that poultry was more prevalent than other animals for rural women. Households with 6–10 birds (26.1%) were the most common in the study. The average number of birds was 10.2 per household.

Table 21. Numbers of poultry

Number of birds per household	Number	Percent
0	75	28.7
5–1	59	22.6
10–6	68	26.1
15–11	29	11.1
≥ 16	30	11.5
Total	261	100.0

Source: this survey

Households who owned domestic animals had an average of 20 livestock. If households who did not own animals were included in the study, this number would drop to 14.3. Honam and Merek, Peresk Olya and Sekher Olya, respectively, had the maximum number of livestock per household compared to other villages (Table 22). In Honam, however, the average of the animal population and cattle-holder households in Peresk Olya was more than in other villages.

Dairy processing

Rural women had a significant share in dairy processing, an activity carried out by rural women in a traditional manner. The dairy products included cheese, yogurt, butter, ghee, and dried whey. The average annual cheese production per household was 32 kg with annual revenue of 2 240 000 Rls; and the corresponding values for dried whey, ghee, dropped yogurt, butter, and thick yogurt were 17.2 kg and 344 000 Rls, 15.8 kg and 1 896 000 Rls, 304 kg and 1 216 800 Rls, 52.8 kg and 264 000 Rls, and 820.3 kg and 264 000 Rls per household (Table 23). Milk selling was a daily activity.

Farming situation and condition

The average of cropped land area by village and region

The average land cropped by the respondents was duly calculated. In Siah Posh (1.766 ha) of the land was cropped and in Chahar-tekhteh (1.578 ha) villages had the largest cropped land area allocated to cereals, while Bardbal (0/689 ha) and Mahdiabad Sofla (1.165 ha) had the smallest area of irrigated cereals. Peresk Olya (2.634 ha) and Bagh Karam Beig (3.720 ha) had the largest areas of rainfed cereals. Chahar-takhteh (0.667 ha) and Siah Posh (1.045 ha) had the

Table 22. The average number of livestock by villages

Village	Number of households with livestock	Average number of livestock	Std. deviation
Bardbal	16	10.750	13.2288
Siah Posh	22	14.636	13.8170
Peresk Olya	51	21.706	18.9750
Chahar-takhteh	12	16.083	11.1800
Mahdiabad Sofla	31	7.000	10.0366
Bagh Karam Beig	30	14.600	17.5609
Sekher Olya	36	18.583	25.4170
Kolahjoub	63	9.778	11.3129
Total	261	14.307	17.0029

Source: this survey

Table 23. Processed dairy products of households

Dairy products	Annual production (kg)	Average price (Rls)	Annual revenue (Rls)
Cheese	32	70, 000	2, 240, 000
Whey (Kashk)	17.2	20, 000	344, 000
Ghee	15.8	120, 000	1, 896, 000
Thick yogurt	304.2	4,000	1, 216, 800
Liquid yogurt	820.3	3,000	2, 460, 900
Butter	52.8	5,000	264, 000

lowest average for rainfed cereals area. Siah Posh (0/318) had the largest areas of irrigated cereals and irrigated fodder (Table 24a).

Despite the differences in the land area cropped with crop products, ANOVA showed no significant differences. For example there was no significant difference between villages in terms of cereals and corn production, while it is significant in vegetables and fodder production. Bagh Karam Beig had the largest area of vegetable production. In Siah Posh a larger area of was allocated to fodder production (Table 24b).

Total land area cropped with cereals in Merek (623.59 ha) (Table 25) was almost twice that of Honam (321.37 ha). The land area allocated to vegetables in Merek (5.10 ha) was about ten times that of Honam (0.50 ha). However, forages in Honam (44.10 ha) were cropped more than in Merek (11.21 ha).

Land use patterns

Households in the studied villages cultivated different crops such as wheat, maize, chickpea, lentil, broad bean, sugar beet, summer vegetables, alfalfa, tomato, cucumber, eggplant, clover, bean, and

Table 24a. The average land area by crops in different villages (ha)

Village	Cereals	Legumes	Vegetables	Forages
Bardbal	2.064	0.481	0.000	0.562
Siah Posh	2.811	0.834	0.000	0.986
Peresk Olya	3.925	0.593	0.000	0. 131
Chahar-takhteh	2.194	0.461	0.042	0.563
Mahdiabad Sofla	3.265	0.536	0.035	0.033
Bagh Karam Beig	5.023	0.810	0.067	0.007
Sekher Olya	4.018	0.705	0.000	0.158
Kolahjoub	3.604	0.668	0.032	0.068
Total	3.621	0.652	0.021	0.212

Source: this survey

Table 24b. ANOVA for farm land-area in each village

		Sum of Squares	df	Mean Square	F	Sig.
Total cereal * Name of village	Between groups (Combined)	150.946	7	21.564	.773	.610
	Within groups	7053.786	253	27.881		
	Total	7204.732	260			
Total legume * Name of village	Between groups (Combined)	3.100	7	.443	.453	.868
	Within groups	247.459	253	.978		
	Total	250.559	260			
Total vegetable * Name of village	Between groups (Combined)	.137	7	.020	2.344	.025
	Within groups	2.105	253	.008		
	Total	2.241	260			
Total animal feed * Name of village	Between groups (Combined)	20.631	7	2.947	10.441	.000
	Within groups	71.420	253	.282		
	Total	92.051	260			

Source: this survey

Table 25. Cropped land area by region (ha)

Region	Cereals	Legumes	Vegetables	Forages
Honam	321.37	61.80	0.50	44.10
Merek	623.59	108.40	5.10	11.21
Total	944.96	170.20	5.60	55.31

fodder (Table 26). The average irrigated cropped land per household was 1.8 ha, and for rainfed land 2.3 ha.

Wheat, maize, sugar beet, and clover were cultivated more than other crops. Wheat bread constitutes the main food of the country; therefore wheat cultivation has been encouraged as a strategic crop by the government with special attention paid to it. In most of the households, of course, farmers used diversification strategies to address different production risks such as natural risks and price fluctuation. Based on the dominant culture and tradition in the region, none of the owners were women. Most ownership documents (if there are any) in Iran belonged to the head of the household who was typically a man. The average of irrigated cropped lands in Siah Posh and Sekher Olya was greater than in other villages. The average of rainfed cropped lands in Bagh Karam Beig and Sekher Olya was more than the other villages. So Sekher Olya had the highest average of irrigated cropped land area in the two studied regions. The lowest average irrigated cropped land was in Bardbal and Bagh Karam Beig villages. Siah Posh and Chahar-takhteh had the least average size of rainfed cropped land.

Amongst the villages in the two regions, Sekher -Olya had a special situation in terms of having large area of cropped lands, both irrigated (2.3 ha) and rainfed

Table 26. Cropping land area per household

Crops		Irrigated (ha)	ha /Household	Rainfed (ha)	ha /Household	Total (ha)	(ha) /Household	Area Owned By Women
	Wheat	257.8	1	324.6	1.2	582.4	2.2	0
Cereal	Barley	45.7	0.2	284.8	1.1	330.5	1.2	0
	Maize	32	0.1	0	0	32	0.12	0
	Chickpea	8.8	0	128.4	0.5	137.2	0.52	0
	Lentil	0.2	0	18.6	0.1	18.9	0.07	0
Legumes	Broad bean	6.1	0	1.3	0	7.4	0.02	0
	Sugar beet	79.7	0.3	0	0	79.7	0.3	0
	Beans	6.8	0	0	0	6.8	0.26	0
	Clover	29.3	0.1	0	0	29.3	0.1	0
Forages	Alfalfa	25	0.1	0.5	0	25.5	0.09	0
	Animal feed	0.5	0	0	0	0.5	0.002	0
	Cucumber	0.1	0	0	0	0.1	0	0
	Tomato	3.6	0	0.2	0	3.8	0.015	0
	Egg plant	0	0	0	0	0	0	0
Vegetables	Summer vegetables*	1.7	0	0	0	1.7	0.007	0
	Total	497.3	1.8	758.4	2.9	1255.7	2.35	0

* Summer vegetables = green salad, carrots, radish, basil, parsley, and leek.
Source: this survey

(3.3 ha). The most important issue was that the average of the total of irrigated cropped lands (1.9) in both Honam and Merek was less than the average of rainfed cropped lands (2.9 ha). This issue arises from the fact that rainfed cropping dominates these regions. Despite the difference between the villages in terms of cropped land, the ANOVA showed no significant differences.

4.3. Community institutions

There were two types of community institutions in rural areas, formal and informal. The formal institutions include village councils, assistance institutions for the village (Dehyari), and cooperatives. Informal institutions have social, cultural, and economic functions in rural areas, e.g. religious groups and work groups (who have common land or water resource and collaborate with each other in farming).

Formal community institutions
Village councils

The management of villages at macro level is undertaken by village councils. These councils play an important role in policy making, decision making, and planning different economic, social, cultural, environmental, and organizational affairs. These institutions have sufficient authority to manage some village. However, due to the social and economic situation and to the characteristics and features of other villages, these councils, do not function as efficiently. In this study, all villages had their village council to manage affairs. All councils in the studied villages had male members only. However, some women were known to occasionally take part in council meetings, but never as members.

Assistance institution for the village (Dehyari)

In some villages there were also 'village assistance institutions' - 'Dehyari', with functions similar to those of the municipalities in urban areas. The 'village assistant' (Dehyar) is the manager of this institution and works under the supervision of the village council. In 1998, the 'Establishment of Autonomous Dehyari in Rural Areas Act' was enacted by the government and this gave authority to the Ministry of Interior to establish Dehyaris in rural areas. According to the Act, Dehyaris are established with consideration to the location of the village and upon the demand of villagers, as an autonomous non-governmental organization in rural areas. Dehyaris are non-governmental public institutions. The Dehyar in charge of the managerial affaires of the village and is assigned by the village council to work for four years. Nowadays, most villages in the studied areas have Dehyaris and almost all Dehyars are men.

Cooperatives

Cooperatives undertake very important duties in Iran. Two main missions of the cooperatives in Iran are providing job opportunities for workforces who lack enough capital; and providing land properties to reduce social gaps (inequality). In rural areas, cooperatives are established to complement functions of other institutions such as extension services and institutions which provide micro-. There are four types of active cooperatives which work formally:

- rural cooperatives
- rural women cooperatives
- rural production cooperatives
- agricultural cooperatives

Each of these cooperatives has its special mission and activities in rural areas.

In the studied villages, cooperatives delivered different agricultural inputs and services to rural people, and most of their members were heads of households and were mainly men.

Informal community institutions/ organizations

History in rural Iran shows that there have been different kinds of traditional collaborations among rural people to address emergencies, and these collaborations have embedded diverse social, cultural, and economic functions. While some rich people and donors took part in beneficial activities such as constructing roads, bridges, caravanserais, mosques, water reservoirs, and buildings, the ordinary people also collaborated on these activities with their labor as much as possible. There are good instances of collaboration among rural people which have been a valuable custom from past to present and have been prevalent between Iranian farmers. The peasant class in Iran, like many rural communities throughout the world, helped each other in different activities like weeding, irrigating, harvesting, and picking. This kind of collaboration can be considered as community farming with ownership rights and individual profit from land, and is still prevalent between rural people.

This type of traditional institution is a prominent type of participation in the human society in Iran, e.g. Boneh, Haraseh, and Vareh. During recent years, with social and economic changes in the structure of rural communities, especially the introduction of different types of machines and modern technologies, in addition to reducing traditional group working or transformation of group efforts, have resulted in new types of collaborations and partnerships in different contexts.

Rural women have always had a principal role in these traditional collaborations and some of these communities were particularly related to rural women, like Shirvareh[1]. To be familiar with these traditional collaborations, which can be an appropriate basis for institutionalizing them in new societies, we explained existing examples in the studied villages. While 48.7% of rural women in the study, acknowledged the presence of such collaborative activities in their villages, 51.3% denied it. Those who responded that there were collaborative activities, were asked about types of activities which women did in groups. These activities included a vast range of responsibilities ranging from housework (cleaning, washing and house care), to cooking and preparing traditional dishes, (e.g. Tarkhineh), in addition to other gardening activities like weeding, and other chores like cleaning the local mosque (Table 27).

The extent to which women participated in traditional institutions and associations for group work was considerable. However, participation in formal institutions such as village councils and Dehyari was not prominent. The most important issue was the potentially appropriate context for women's participation in group activities. It was an appropriate background for establishing local institutions for organizing women to gain access to proper services for local development

4.4. Gender analysis

Rural women's perceptions of their economic situation

The respondents were asked to divide the families of the village into five economic

1 A traditional local institute in which rural women collaborate to collect and process dairy products. In this collaboration, every individual takes turn to manage the whole process of dairy processing.

Table 27. Collaborating activities of rural women

Activities	Frequency	Percent
Sewing	4	2.1
Embroidery	2	1
Harvesting(rainfed chickpea and lentil)	4	2.1
Processing tarkhineh	60	31.4
Gathering forage (fodder)	3	1.6
Repairing Qanat	8	4.2
Weeding	18	9.4
Cleaning house	64	33.5
Cleaning mosque	12	6.3
Preparing dowry	5	2.6
Loading sugar beet	5	2.6
Repairing house	2	1
Cleansing products	4	2.1
Total	191	100

Source: this survey

levels of very poor, poor, moderate, rich, and very rich, and to give their opinion on the level to which their family belonged (Table 28). No one assumed their family was very poor, but 32.6% of women assumed their family was poor, 66.3% moderate and only 1.1% as rich. Most assumed their families as moderate.

Table 28. Rural women perception of their economic situation

Perception of the economic situation	Number	Percent
Poor	85	32.6
Medium	176	67.4
Total	261	100.0

Source: This survey

In Honam, 63.4% of female-headed households estimated themselves as households with moderate income. This percentage for Merek however, registered 68.1% (Table 29). A chi-square test indicated no significant differences between perceptions in the two regions (Table 30), indicating similar perceptions of economic status.

The women who assumed their families as poor (32.6%) were asked about the reasons for their answers. Their responses included 'lack of land ownership', 'having small farms', 'lack of livestock ownership', 'low level of wages', and finally 'lack of employment for their husbands and youth' (Table 31).

Rural women's access and control of resources

Women's ownership of lands

Of 261 rural women, only nine (3.4%) were land owners with formally registered ownership. Thus, the majority of rural women lacked ownership of land. Registered lands were mainly registered as men's properties since men were heads of the households. There was no statistically significant difference between these two regions in this regard. The nine women, who were owners of their farm, were also heads of their household.

Table 29. Perception of the studied women about their family economy by region

Region		Perception about poverty			Total
		Poor	Medium	Rich	
Honam	Number	37	64	0	101
	percent	36.6%	63.4%	.0%	100.0%
Merek	Number	48	109	3	160
	percent	30.0%	68.1%	1.9%	100.0%
Total	Number	85	173	3	261
	percent	32.6%	66.3%	1.1%	100.0%

Table 30. Chi-square test

Tests	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	2.942	2	.230
Likelihood ratio	3.974	2	.137
Linear-by-linear Association	1.873	1	.171
N of valid cases	261		

Source: our survey 2008

Table 31. Reasons provided by rural women on their perception of their economic status

Reasons of selecting a particular level of economic situation	Number	Percent
Less farm land area	55	16.7
Low income	20	6.1
Unemployed children and husband	13	4.0
Having no livestock	23	7.0
Do not receive a wage	20	6.1
Lack of agricultural land	3	0.9
Low-income job of the head of household	10	3.0
Do not own a house	5	1.5
supported by Imam Khomeini committee (A charity institute)	3	0.9

Source: our survey 2008

Women's ownership of livestock

About 23% of respondents were owners of livestock, while 76.6% were not. Livestock is mainly owned by the whole family; however, ownership of livestock is not as important as land ownership in rural areas of Iran. Both in urban and rural areas of Iran, women have a special right called 'Mahrieh'.

Women's participation in family decision-making

Findings on the extent to which women take part in the decision-making process (Table 32) in the family showed that important decisions about land (e.g. selling, buying, and utilization), livestock (selling and buying), purchasing agricultural equipment and facilities, and crop management (e.g. deciding on crops to grow and marketing) were mainly made by men (60%).

Women's participation in village decision-making

Most respondents (80.8%) said they did not take part in making decisions on village-related issues; only 19.2% responded positively. Also 54% of those who responded positively were requested to answer a follow-up question on the typical activities and meetings which they had to go through to participate in decision making process on village affairs. About 81.5% (44 persons) took part in the Village Council (Table 33).

Control income

Management and control of income gained from agricultural activities was undertaken by men in 46.6% of households which were studied. In livestock production, women had more managerial and controlling roles than in crop production (Table 34).

Table 32. Women's participation in family decision-making

Type of activities	Only men	Mainly men	Mainly women	Only women	Other (both men and women & their children)
Crops to grow	78.2	9.5	8.2	4.1	0
Crop products to sell	86.6	.4	1.7	10.9	.4
Dairy products to produce	3.3	17.5	3.8	74.5	.9
Dairy products to sell	1.4	21.1	48.4	20.7	8.5
Animals to sell	82.8	1.1	4.2	9.6	2.3
Animals to buy	87.4	0	7.3	5.4	0
Labor to hire	90.4	0	3.4	1.6	.4
Children's education	0	0	36.4	0	63.4
Marriage	0	0	0	0	100
Household's income management	4.2	69.7	11.5	.8	13.8
Household's furniture	0	43.3	33	11.5	12.3
Farm equipments to buy (dairyproduction)	87.7	0	1.9	8.4	1.9
Farm equipments to buy (farming production)	3.1	84.3	4.6	5	3.1

Source: this survey

Table 33. Types of women's participation in village decision-making

Type of activity	Percentage
Islamic councils	81.5
School related sessions	7.4
Deciding on mourning ceremony	3.7
Public complains	1.9
Mosque building	3.7
Repairing village sewage	1.9
Total	100

Source: this survey

Table 34. Participation in decision-making

	Decision-making and control over resources				
	Only men	Mainly men	Mainly women	Only women	Men, women and children
Important decisions on land	42.5	34.4	7.7	2.3	13.2
Important decisions on livestock	21.5	40.4	18.5	9.2	10.4
Control over the income from agricultural activities	34.4	34.4	8.6	7.7	15
Control over the income from the dairy product	20.6	31.9	12.2	23.9	11.3
Household's income management	4.2	69.7	11.5	.8	13.8
Crop to grow	78.2	9.5	8.2	4.1	0
Crop products to sell	86.6	.4	1.7	10.9	.4
Household furniture to buy	43.3	33	11.5	12.3	0
Farm equipment to buy	87.7	1.9	8.4	1.9	0
Mean	46.6	28.4	9.8	8.1	7.1

Source: this survey

Although rural women's participation in performing agricultural activities was considerable, their role and participation in decision-making, access, and control of production resources was very limited. The patriarchal culture in rural families has left less opportunity for women to take part in decision-making and have access to resources. When access of a group of people in a society to production resources is limited, their participation also decreases, because an important requirement for taking part in decision-making is having a share in property, especially in local communities.

Although women contributed to crop and livelihood production, they had fewer roles in decision making. Men are owners of land, water, and farms, a reason why women had no decision-making power. The patriarchal system prevailing affects gender relationships and does not allow women to intervene in decision making.

4.5. Perceptions and impressions of women on the ways of improving livelihoods of women and their family

To derive an overview of sampled rural women on ways to improve their livelihood situation in villages, different questions were asked. The first question was "What type of activities do you think could help improve livelihoods in your village in which you can participate"? Responses to this question are classified in (Table 35):

1. Government support in establishing and developing the semi-industrial livestock production units in villages. Considering the importance of rural women's role in livestock production activities in different villages of the region, they believed that the government should provide ways of financial support (e.g. low-interest and long-term loans) for the establishment of farm animal shelters and procurement of farm animals as well as for providing trainings on animal care (feeding, sanitation, etc.). This would be a major source of household income, especially for women.
2. Apiculture (beekeeping) was mentioned by women as an effective activity for improving livelihoods in Honam. Considering the good quality of the honey produced in the region, women requested governmental support to expand this activity.
3. Turkey breeding is an effective activity for improvement of household livelihoods, and was mentioned by rural women in both regions.
4. Mushroom cultivation was suggested. Women play an important role in mushroom cultivation, as mushrooms have become more common in Iranian dishes recently.
5. Growing vegetables and establishing greenhouses were two other useful activities which most rural women indicated.

4.6. Rural women's constraints and needs

Both quantitative (questionnaire) and qualitative (PRA) methods were used to assess rural women's needs and problems in selected areas. The results from these two methods were almost the same. The participatory method seemed better for analyzing constraints and problems in group discussions. Results are presented in the following:

Table 35. Activities for improving household livelihoods

Activity	Frequency	Percent
Semi-industrial animal husbandry	161	59.6
Trading livestock	3	1.1
Fishery	3	1.1
Poultry	8	3
Beekeeping	20	7.4
Mushroom cultivation	18	6.7
Turkey breeding	13	4.8
Carpet weaving	6	2.2
Farming (vegetable growing, chickpea, maize, sugar beet, horticulture, establishing greenhouses)	35	13
Sprinkler irrigation	2	0.7
Tailoring	1	0.4
Total	270	100

Source: this survey

Honam

Constraints

The main constraints which rural women encountered in Honam (Table 36) included the unemployment of young girls, water shortage for the agricultural sector, poor health services in the village, insufficient sanitary facilities in the village, high cost of forages, unhealthy animal houses/stables, and low price of milk which resulted in less income for rural women.

The most important problems of rural women in Chahar-Takhteh (Table 36) were the unemployment of their children; lack of asphalt for roads; lack of water for farming; high cost of fodder; lack of drinking water; high cost of herbicides, pesticides, insecticides, and fungicides; lack of medicine in drugstores, and poorly-managed public environment of the village.

Problems in Peresk Olya (Table 36) were lack of drinking water, lack of income, lack of capital for rural women's income generating activities, unemployment of young girls, high cost of fodder, floods, animal losses, unsanitary stables, pests of walnut trees and fruits, accumulation of animal residues in public places, and low prices of milk.

Problems in Bardbal (Table 36) were difficulty in selling milk in periods of snow and also in summer when milk production reached its peak (the higher the production, the lower the price), unemployment of young people, lack of sanitary services in stables, animal residues in public places, and delay in vaccination due to a lack of communication with veterinarians.

Rural women's problems in Siah posh (Table 36) were unemployment of the youth, lack of documentation (formal registration) for farm lands to use as collateral in order to receive loans, high costs of inputs for producing agricultural products, problems of women in female-headed households, less attention of government to rural women's situation,

Table 36. Rural women's constraints in Lorestan

Problems Siahpush	Type(agriculture, non-agriculture)	Problems Peresk-olya	type(agriculture, non-agriculture)	Problems Chahr-takhteh	type(agriculture, non-agriculture)	Problems Bardbal	type(agriculture, non-agriculture)
Less job opportunities for young men and women	Non-Ag	Natural disasters (drought, flood)	Ag	Less job opportunity for youth	Non-Ag	Transportation problems in agricultural products marketing	Ag
Less farm lands and non-registered lands	Ag	Low level of income	Non-Ag	Difficulty in transportation	Non-Ag	Less job opportunity for young people	Non-Ag
High cost of inputs (e.g. fodder machinery, chemicals, fertilizers)	Ag	Lack of capital for rural women self-employment and education	Non-Ag	Lack of enough wheat flour for village	Ag	Less access to veterinary information and services	Ag
Special constraints for female-headed households(e.g. less income, different responsibilities in home and out of home	Non-Ag	Less job opportunity for young girls	Non-Ag	Lack of water for agriculture and drinking	Ag	Unsanitary stables and village environment	Ag
Less public services for rural women (training)		High cost of fodder	Ag	Unsanitary environment of villages and stables	Ag		
Prevalence of Sunn pest	Ag	small livestock mortality	Ag	High cost of fodder and pesticides	Ag		
Limited access to micro-credits	Non-Ag	Unsanitary stables	Ag	Less health services for people and livestock	Ag		
Less quality of bread and unsanitary situation of bakeries	Non-Ag	Pests	Ag				
Livestock mortality	Ag	Accumulation of animal dung in village path ways	Non-Ag				
Accumulation of Animal residues and house junk in public places	Non-Ag						
Unsanitary stables	Ag						
Less advisory and consultancy services in agriculture	Ag						
Less income-earning sources for rural women	Non-Ag						

Source: this survey

expensive fodders, high cost of operating agricultural machinery, unemployment of graduated girls, outbreak of wheat pest (Sunn pest), lack of agricultural land, cumbersome bank conditions and regulations for loans discouraging farmers from receiving loans, livestock losses, high cost of improved seeds, low quality of bread and poor sanitation in bakeries, abortion of pregnant livestock, livestock residues and domestic garbage in public places, high prices of chemical fertilizers, non-sanitary stables, low price of milk, and high costs of agricultural pesticides, herbicides, and insecticides.

The survey results showed that among the other problems the rural women encountered, were poor access to domestic gas for cooking and heating, poor access to water for washing, and finally, money saving mechanisms for rural women.

Recommendations for each village

Based on the aforementioned problems, the following recommendations were suggested:

Chahar-Takhteh

a. Providing domestic gas
b. Facilitating loans for buying dairy cows and sheep
c. Providing health insurance for women

Peresk Olya

a. Constructing dams for irrigation
b. Providing veterinary services
c. Facilitating access to loans

Bardbal

a. Facilitating loans for livestock
b. Providing sufficient agricultural equipment
c. Providing trainings for handicrafts

Siah push

a. Facilitating loans for income generating activities for youth
b. Facilitating loans for buying milking cows
c. Facilitating loans for buying stables/ shelters for animals

Needs

Chahar-takhteh

In addition to the constraints, rural women were asked about their needs. Rural women in Chahar-takhteh, mentioned the need for gas fuel supply through pipelines to village houses, receiving loans for purchasing and keeping dairy cows and small livestock (sheep and goats), medical insurance services for rural women, chemical fertilizers, machines for seeding and spraying, improving bakeries in villages, providing adequate wheat milling for villages, spraying animal stables, training courses on livestock, farming, natural resources, tailoring, floral embroidery, carpet weaving, providing milking machine.

Peresk Olya

The rural women in Peresk Olya expressed various needs, including building dams to control surface water and supply water for irrigation, providing the necessary facilities for carpet-weaving, mushroom cultivation, dairy cow production, raising domestic poultry, the need for veterinarians for treatment of livestock, establishing consumer cooperatives in villages, chemical fertilizers, asphalting roads, offering training on handicrafts (e.g. tailoring and weaving), facilities and equipment for mushroom cultivation, and electrical devices for processing dairy products.

Merek

The most important requirements expressed by rural women in Merek included the need for contribution to the development and improvement of handicrafts in villages, training on livestock production styles and feeding, as well as training in the field of feeding and production style of livestock and mushroom production. Some other needs included providing milking equipment, loans for farming and livestock production equipment, providing veterinarian services in villages and supplying drugs and treatment for livestock, and supplying necessary equipment for weeding and cropping chickpea (Table 37).

Mahdi Abad Sofla

The most important needs of Mahdi Abad Sofla included the need for loans, weeding equipment, training on fruit tree and vegetable production, handicrafts, milking equipment systems, training on mushroom cultivation, quality wheat seeds, and introduction of fattening and milking breeds.

We asked them to prioritize the above needs according to their importance. "Training on growing mushroom" and "Quality seed" were of the first rank; handicrafts was the second; and training on breeding livestock and introduction of milky and fattening breeds were the third in the pair-wise matrix. In the matrix for

Table 37. Rural women's needs in Merek region

No	MahdiAbad Sofla	Type	Kolahjoub	Type	SekherOlya	Type	Bagh Karam beig	Type
1	Training on mushroom cultivation and livestock breeding	Ag	Training on handicrafts, mushroom cultivation,	Ag	Harvesting machine for chick pea and lentil	Ag	Land consolidation	Ag
2	Improved seed	Ag	Need for weeding tools	Ag	Training on handicraft	Non-Ag	Drinking water	Ag
3	Training on handicrafts	Non-Ag	Poultry-machine	Ag	Loan	Non-Ag	floods	Ag
4	Loan to buy livestock	Non-Ag	Bank loans	Non-Ag	Training on animal feeding and animal care	Ag	Training on handicrafts	Non-Ag
5			Training on livestock health	Ag	Veterinarian services	Ag		
6			Milking machine	Ag				
7			Modern equipment for selling milk	Ag				
8			Tree planting development	Ag				
9			Alfalfa chopper	Ag				

Source: this survey

the classification of needs, mushroom breeding got the first rank; the need for livestock got the second rank; and the third rank was allotted to training on cultivation of vegetables.

Kolahjoub

Significant needs in Kolahjoub were improving handicrafts, mushroom cultivation, weeding equipment, chicken equipment, loans, training in animal health, milking equipment, development of orchards, and harvesting equipment for alfalfa.

Sekher Olya

The principal needs of Sakhr-e-Olya were harvesting combines for chickpea and other legumes such as lentils, improvement of handicrafts, loans, training for animal production and feeding, and need for veterinarians and drugs for livestock.

Bagh Karam Beig

Due to the considerable poverty among households, most needs in the village concentrated on welfare facilities. These needs include organization of rural wastewater systems, establishment of health centers, establishment of secondary schools, and establishment of bakeries. In addition, needs related to the agricultural sector were given the following priorities: i) consolidation of land; ii), water supply and establishment of dams; and iii), training on handicrafts.

Needs prioritized

Mahdiabad Sofla:

Mushroom cultivation

1. Better quality wheat seed
2. Handicrafts, providing loans and training

Kolahjoub:

1. Mushroom cultivation
2. Handicrafts: loans and training
3. Agricultural equipment for weeding

Sekher Olya:

1. Handicrafts training
2. Combine harvester for chickpea harvesting
3. Loans for diversification of agricultural activities
4. Veterinarian services and medicines for animals.

Baghe Karam beig

1. Land consolidation
2. Water pipelines to houses needed
3. Handicrafts training

Mahdi Abad Sofla

1. Mushroom cultivation
2. Sheep feed and cow veterinary services
3. Handicrafts
4. Fattening and milking breeds species introduction.

Conclusion and recommendations

5. Conclusion and recommendations

5.1. General summary and conclusion

This study investigated ways of improving the livelihoods of studied households with consideration of women's roles in producing agricultural products, as well as the existing gender division of labor in their various economic and social activities - compared with men. The studied sample consisted of eight villages in the two regions, Merek and Honam located in Kermanshah and Lorestan Provinces, respectively. The study was a social survey also using methods of PRA, and eventually combined results from both methods.

The leading points under study were: explanation of existing gender roles in activities related to agriculture, extent of women's access to and control over production resources, women's share in household income through their different on- and off-farm activities, rural women's perceptions of their own livelihood resilience as well as their families, and finally presentation of appropriate options to improve livelihoods of rural households with an emphasis on women's roles.

Theoretical bases of the study included current theories on *gender and development,* gender inequality, and feminism. The relevant theorists believe that the formation of gender roles in society led to a social division of labor between men and women, and mainly originated in social and cultural contexts, rather than biological ones. Therefore, when there are differences and thereby discrimination between such roles and resulting labor divisions in a society, the reasons should be sought in social and cultural relations of that society.

The existing gender inequality results in inequalities in power and access to required facilities and services, and thereby leads to the marginalization of women. Individual, social (cultural), and economic factors should also be mentioned among a number of other different factors also involved. These scientists argue that improving such variables will lead to improved status of women.

The agricultural sector in Iran tends to have a large share in employment and food provision of the country (it provides about one-third of employment and over four-fifths of the food requirements in Iran). The activities of this sector are also mainly carried out in villages specifically by small peasant operators (> 70%) where women constitute most of the labor. Therefore, paying adequate attention to women has always been of great importance. Women used to play a significant role in the production process in the village until the land reforms in Iran. Following the introduction of technology and higher levels of education into villages, women's role has changed, resulting in reduced participation in farming and livestock production and greater involvement in making decisions.

Rural women have experienced changes, either in direct production (of crops, livestock, handicrafts, and cottage industries) or in contribution to the agricultural sector (as labor), and are considered of great potential in society. The statistics and information given in the present study showed that women played certain roles at various stages of livestock raising and agricultural activities, but their most important role in the former was in processing dairy products and feeding animals and/or

preparing animal feed, and in the latter was in harvesting of crops.

Since women's share in processing agricultural products is 77%, livestock breeding is 65%, crop production is 25%, poultry is 100%, sericulture is 90%, production of vegetables, and summer crops is 100% in Iranian villages, it could be concluded that women's role in achieving food security is undeniable.

About 80% of the rural women in Iran have jobs, but these jobs are usually categorized under the umbrella of reproductive activities, just like unpaid employees, domestic workers, family workers and/or independent employers. Seasonal, part time, and unpaid employment and reproductive activities are rarely included in official records, and the only part of women's activities which has been formally assessed in the economic and social sciences, is that emerging in the national economy and outside of houses. Most studies and statistics tend to recognize men as household heads, landowners, and landholders. Thus women have less opportunity to access capital, credit, and power.

In case of women's political and social participation, it can be argued that despite rural women's greater involvement in managing their villages, attending cultural and social organizations, and managing cooperatives, their lower levels of literacy and education, job incomes, and social status compared with urban women have decreased their share in power structure considerably. There are many obstacles for women's participation and contribution, categorized as follows:

- Individual factors (low education, information, knowledge, and scientific situation; traditional and sometimes false beliefs);
- family-related factors (male-dominated culture, lots of activities inside the house, men's attitude towards women's work outside the house, and unequal power distribution between men and women);
- social factors (restrictive social traditions, lack of appropriate participatory formations, women's limited access to public credits and financial facilities, domination of planning with a male-client approach, less women experts, less active non-governmental institutions in women issues, and discriminative laws and regulations). Efforts to remove the abovementioned obstacles will pave the way for increased participation of women in social and political affairs.

The present study showed that most households in the two regions carried out agricultural activities. Due to the prevalence of agriculture as the main livelihood in the region, women also participated in agriculture activities. The average of the rainfed cropped lands per household in Merek was 4 ha, and for irrigated land, 1.2 ha; for the corresponding values in Honam were 2.2 and 3.4 ha. Most ownership is by household heads (i.e. men).

Most land ownership for households was joint and private. The main water sources for irrigation in the regions were wells and lakes. Wheat and barley cultivation covered most area of cropped lands, due to government support for wheat as a strategic crop and self-use of barley by animal herders. Most farmers in the region are smallholders with < 3 ha. Most land is in small plots and this has hindered the process of agricultural mechanization.

The share of agricultural activities in the revenue of all studied villages in Merek was 73.3% and in Honam 41.3%.

These figures showed the dominance of agricultural activities in Merek compared to Honam. Cultivation is one important factor in income-generation and plays a major role in villagers' livelihoods. Most lands in the region are rainfed, due to the climatic situation. In Merek 4.8% of the households are landless and in Honam 3.3% are.

Animal husbandry is usually the main complementary activity to agriculture. Rural people keep some domestic animals for other agricultural activities and household consumption, and sometimes sell them in the case of oversupply. In villages where agriculture is prevalent, animal husbandry was carried out as a complementary activity. However, in villages in mountainous areas, due to the shortage of water and low quality of land for cultivation, most households were involved in animal husbandry.

In villages with prevalent cultivation and less access to ranges there was a tendency to keep cattle (cow and calf); whereas in mountainous areas, keeping livestock was more common due to easy access to pastures.

The animal husbandry activity share of the total income of the households in the region was 26%; this amount was 18.8% in Merek and 32.2% in Honam. Animal husbandry, therefore, is the second most important factor in income generation. The average number of heads of cows and calves per household was 3.3, for sheep 18.8, for goats 8.2, and for poultry 10.2. The Honam region had more animal husbandry than did Merek.

Rural women were greatly involved in dairy processing. This activity is mostly carried out in a traditional manner by rural women producing dairy products, e.g. yogurt, butter, animal oil, and curds.

Most animal husbandry activities were carried out by rural women. The major roles of women in animal husbandry include milking, dairy processing, animal grooming, animal feeding, and preparing animal feed. Women participated more in cattle (e.g. cow and calf) than in livestock rearing (sheep and goats). The comparison of two regions indicated no meaningful difference in rural women's activities in cow and poultry rearing but there were differences in rural women activities in sheep and goat rearing.

Rural women took charge of all housework chores that are typically done by women, in addition to their outdoors agricultural activities. The greatest share of all different housework activities, rural women were mainly responsible for laundry, cleaning, bread making, and child care. Upon comparing rural women in the two regions (Honam and Merek), significant differences were shown with regards to their participation in house chores.

When studied for doing house chores, women in Honam participated more than those in Merek. The types of handicrafts made by women included carpet weaving, Gelim weaving, rope making, cotton, and spindle making - which was usually accomplished by hand.

Although rural women's participation in agricultural activities was considerable, their role and participation in decision-making, access and control of production resources was small. The patriarchal culture in rural families leaves few opportunities for women to take part in decision-making and to access resources. When access of a group of people in a society to production resources is limited, their participation also decreases, because an important requirement for taking part in decision-making is having a share in household property, especially in local communities.

The extent to which women participated in traditional institutions and associations for group work was considerable; however, participation in formal institutions such as village councils and Dehyari was small. The most important issue is the appropriate context for women's participation in group activities. This forms an appropriate background for establishing local institutions to organizing women and gain access to services for local development.

The results showed that the main constraints that rural women encountered within the Honam region were unemployment of young girls, shortage of water for the agricultural sector, poor health services in the village area, lack of sanitary facilities in villages, costliness of forages, low hygiene in animal sheds/ stables, and low levels of income for rural women.

5.2. Recommendations

The results of this research led to the following recommendations for the improvement of the status of rural women in the studied villages:
Girls' education beyond primary schools was a real problem as girls were too busy to think about continuing school. Without raising awareness and without novel training on the importance of education for girls, they will continue to drop out of school.

1. Recommendations for prevention of dropping out of school

- Literacy courses for adults may help rural women.
- Motivating young girls for education through Islamic councils and local village leaders.
- Raising families' awareness on the importance of educating their girls.

2. Recommendations for training/ extension

- Better livestock management concerning animal diseases, delivery, and treatment.
- Dairy production is primitive and lacks hygiene. Training is needed in technologies to improve the quality of dairy products and add value to products to maximize income and be ready to compete in external markets.
- Crop production, pest management, and irrigation technologies.
- Post-harvest-related activities.
- Training in household economy.
- Introduction of new products: mushroom and saffron cultivation which do not need excessive amounts of water.
- Training in handicrafts.

3. Recommendations for financial credit

- Establishing local funds that would act as collateral for women to get credit. The funds would act as providers of credit and collateral. Social capital is the strength for these women and this helps in trusting each other in the repayment of loans.
- Training in team-making within cooperatives, rules, and regulations of cooperatives and credits.
- Interest rates for credit should be lowered for women farmers.

4. Recommendations for the involvement of women in the public sphere

- Encouraging the women to participate in village and institution management.
- Targeting men and women, rather than men only.

  Justification: All projects were men-oriented; and project planners, while

dealing with issues related to women, tend to address men and refer to them during negotiations. This, allow men to pull the conversation into the direction of their own interest, forgetting the main purpose of the whole discussion- helping women. It is then understandable that women want women only to represent them and discuss their needs.

- Increasing the number of women experts in community organizations.
- Involving women and girls in Islamic councils at the village level.
- Improving the quality of handicrafts.

5. **Recommendations for dairy production technologies**

- Holding meetings between local village women who produce dairy products and the factories that process them to demonstrate how the products are processed.
- Linking livestock producers with women dairy processors to demonstrate new technologies and improve the traditional tools used.
- Promoting utilization of milk plants to help improve dairy production
- Calling meetings between women producers and professionals in the region to explain and design suitable tools.

6. **Recommendations for improving the available, modified chickpea harveste**r.

The harvester currently available in Merek wastes much grain, and needs improvement. Extension agents are experimenting with a new variety of chickpea that is better than the local variety and can be harvested by machine. If the experiment is successful, the new variety will be introduced to farmers.

- Mechanization for harvesting
- Introduction of tall chickpea varieties

7. Recommendations for young women's underemployment especially graduates:

- Providing facilities and funds for girls to institute income-generating activities such as those related to livestock production, mushroom production, beekeeping, and protected agriculture.
- Providing opportunities for girls to manage these activities based on their education and the potential to improve these activities.
- Providing girls with credits.
- Training girls as local facilitators.

Any successful activity for women should consider the social and cultural aspects of women's lives.

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Annex: Literature review

Annex: Literature review

In Iran, many studies concerning rural women and their role in socioeconomic activities in villages have been carried out. These studies can be divided into three major groups in terms of the concerned subjects. Some have simply described socioeconomic status of rural women; others - in addition to describing rural women's role and participation in various rural activities - attempted to explain the existing factors and obstacles to women's participation. In none of these studies, did any case directly and specifically address gender and livelihood, even though some had a general look at the role of rural women in household economies. In this section, we mention the most significant relevant research for Iran, as well as briefly present their findings and achievements.

Effati and Keyvarian (1995)

This study was a survey on the extent of women's participation in economic and social activities in villages of Mazandaran Province. The research aimed to identify the extent of rural women's participation in the economic and social activities of villages and understanding the economic, social, and individual factors affecting the participation of women. This was used to present practices for an improved level of rural women's participation.

The theoretical basis of the study included current theories on participation and employment of women, e.g. capital accumulation theory, neo-classical, and dual market in economy. Study assumptions included some relationships between social consciousness, extent of a wife's dependency on her husband, women's share in agricultural production and livestock and handicraft products, and husband's attitude toward religious issues (as independent variables) with the extent of women's participation in economic and social activities (the dependent variable). The data were collected from 33 villages in Mazandaran Province, selected through a cluster sampling method. The study used a survey research method; and like all other prevailing social studies, data-gathering was done during an interview using a questionnaire.

The study reported that during the period prior to land reforms, although women played an important and substantial role in housework and production affairs, they were never allowed to get involved and give their ideas in decision-making concerning house managing and agricultural activities; thus, they were doing tasks and duties without expecting the minimum level of their rights to be recognized. After land reforms, in a new phase of rural life history, women's role and their participation in economic activities gradually declined and changed with the introduction of modern technology and emerging social changes and developments. Most jobs previously undertaken by women were subject to change and were replaced by new jobs and activities. These developments had a positive impact on promoting women's social position and changing dominant values in rural society; however, they did not lead to significant participation by women in decision making.

The data analysis of this report showed that the extents of social consciousness and participation in social activities were largely correlated. Women's social consciousness was negatively related to their participation in farming, livestock production, and handicraft activities, i.e. higher social consciousness resulted in a lower presence of women in economic activities. There is a significant relationship between the extent of a woman's dependency on her husband and social participation;

i.e. the more a woman depended on her husband, the more her social participation was. In addition, there was a significant relationship between the extent of women's share in economic and productive activities and their involvement in decisions concerning family affairs; i.e. women's increased role in production activities resulted in their greater involvement in family decision-making. Furthermore, the study showed no significant relationship between a husband's attitude toward religious issues and his wife's participation in economic activities; therefore, the assumption that 'the more religious is a man or the more rigid is his attitude toward religious issues, the less is the participation of his wife' was rejected. The study identified certain practices for improving rural women's participation, including:

1. Devising appropriate participation formations and organizing them in a series of local institutions for economic and social purposes to achieve useful results in the context of women's collective activities;
2. Suitable training mechanism for rural household heads (i.e. men) should be adopted to activate women's presence in decision-making on village affairs;
3. Investments promoting women's consciousness of decision-making in production affairs of households will greatly contribute to increased production yields;
4. Establishing rural cooperatives specialized in handicrafts and carpet-weaving in particular, and planning certain training and extensional training courses to upgrade labor quality are very important; and
5. Establishing a cooperative for rural women who are active in livestock production affairs is an effective mechanism to enhance women's activities as well as upgrade the quality of product supply.

The issue studied was the status of rural women's participation in managing and organizing villages and the agricultural sector. This study was the third sub-project of a program called 'Understanding of Grounds and Features of Women's Participation in Agriculture Sector of Iran and the Expected Developments in the Perspective of the Year 1400'. Among other theories presented in the context of women's issues, the study drew on theories of 'roles and needs', 'empowering sources', and 'enabling theory' as a theoretical basis for its topic issue. A descriptive method of research was used, and the required information was mainly gathered using a library and documentation method. The study tried to specify the extent of rural women's role and participation in family decision-making as well as in production activities.

Furthermore, they tried to identify and introduce existing public and non-public administrations and organizations in charge of servicing rural women in villages, and to assess how rural women were networking with these organizations and receiving services from them, and also how these organizations work and how they influence the status of rural women. This study specifically reviewed literature which referred to both rural women's role in managing and decision-making and organizations related to them. Women's role in decision-making in production and family affairs showed that in general, although women had an effective role in production, men still dominated decision-making of farm and family affairs; and evidently, women benefited from such power only when they became the head of household as a result of divorce or their husband's death.

Woman's power in decision-making was also high in certain village activities (e.g. poultry husbandry or dairying) that

are mostly done by women. This report showed that women's power in decision-making largely depended on their marital status, higher number of children (sons in particular), older ages, and especially on their income-generating activities – women's power in decision-making and bargaining in negotiation increased with these features. Therefore, helping women to have an income-generating activity enabled them to effectively make production and family decisions. As indicated by an analysis of secondary data from previous research reports, some 96% of the source literature emphasized that rural women played a significant role in production and they constituted half of the labor force in rural society; some 75% emphasized that despite rural women's role in production, they rarely participated in decisions on domestic and agricultural affairs, and their social status and dignity were not acceptable, with adverse effects on their participation in management and decision making. Some 75% of literature emphasized that rural women's increased income improved the position of women in families, eventually leading to better participation in management and organization. Some 95% of literature emphasized that negative attitudes of men and women towards rural woman's participation in management and organization was the most important restrictive factor. Moreover, as emphasized by 85% of literature, it was necessary to facilitate establishing local institutions for rural women, with the aim of increasing rural women's participation.

Various field studies, across different regions of Iran, showed that rural women's participation in decisions concerning whole-agriculture activities averaged 49%. This was compared to 40% at the stage prior to cultivation, 40% at the time of cultivation, 45% during crop management, and 46% at harvest time. Rural women's participation in crop processing was 77% and in crop marketing was 40%.

In this report, the assessment of existing institutions concerning rural women in Iran indicated that establishing and activating these organizations had been effective in increasing rural farming women's access to production factors and resources as well as growing information and specialization; and these have also been useful in changing visions of society as well as organizing and enabling farm women. However, due to limited funds and facilities of such organizations, and more importantly lack of coordination in obtaining appropriate productivity from the available potential, they failed to provide the necessary services for increasing rural women farmers' role in house- and farm-related decisions. The most important results were:

a) Women farmers' power in decision-making increased with the increase in their agricultural activities;
b) Women farmers' access to production factors further enabled them to participate in decision-making, both domestically, and on farm level;
c) Women farmers' knowledge and expertise increased their power in decision-making;
d) Women's access to active public administration in villages and the application of their services to undertake productive activities are some of the other effective factors in enabling women farmers and increasing their power in decision-making.

Lahsaeizadeh (1997)

In his many studies on rural women's participation in Iran, in an article titled 'A Review on Rural women's Class Status in Iran', Lahsaeizadeh argued that one way to study women's participation in rural society was to determine class status

of women in villages in general, and in the agricultural sector in particular. He believed that women participated as much as men in various activities in rural societies, and their participation mainly depended on their economic and/or social status, i.e. on their class status. Thus, the difference in participation was related to the difference in class status.

In terms of classes in Iranian rural society, the author mentioned eight distinctive classes of women, with some interior strata in which their extent of participation varied from one class to another. One of these classes was that of households with female heads who were probably more active in rural participation and development than any other classes.

Rural female employers extended the culture of participation morale among women in the context of the economy by employing other rural women and girls. Meanwhile, when rural female employees engage in commercial production, they are actively contributing to the rural development process. The author concluded that to raise rural women's participation in productive activities, and consequently in development, motivation should be provided as a priority. If motivation already exists, it should be enhanced. Afterwards, these women should be supported in order to turn their motivation into effect.

Lahsaeizadeh (2005)

This study addressed the economic participation of rural women in Iran. It mainly aimed at reviewing practical restraints of increased participation by rural women. Data was collected from 600 women aged 15–64 years in Fars Province. The study reviewed women's role in rural economic activities and their share in this area, drawing on the Collins theory; and it tried to analyze the practical restraints to rural women's participation in different areas of economic activities in villages. The results showed a negative relationship between education and economic participation; i.e., the higher a woman's education level, the less she engaged in economic activities which were typically, mainly related to farming and livestock production in villages. In addition, women's participation in economic activities increased with age. However, the men of the households had a higher educational level, or financial status, women's participation in economic activities declined.

The final model of the study showed that the most important variable explaining variations in the extent of women's economic participation was women's attitude toward their own employment. Among the other variables that together explained 33.8% of variation in the dependent variable (i.e. economic participation), were i) men's attitude toward women's economic role, ii) women's living conditions, and iii) women's level of self-confidence. These variables resulted from the extent of mass media utilization.

Shaditalab (2003)

The subject of this study was women's social participation, which was conducted in the 'Women Study and Research Center' in Tehran University in 2002. This research aimed at understanding various social participations by women, as well as identifying related factors. Statistical data was collected from women aged 15 years and over, who lived in Tehran city, using a survey research method. In its analytical model, the study made use of theories and empirical studies previously done in the context of participation; and six types of participation were defined: civil, supportive, cultural-entertaining,

local, religious–charity, and revolutionary activity.

The study found a very low level of participation (attending corporations, labor organizations, non-governmental organizations, political groups and parties, and cooperatives; and cooperating with organizations) and on average quite high participation in religious–charity activities, including Holy Quran reading meetings, other religious ceremonies, and wedding planning including shopping for bridal requirements (jahiziyeh) for needy families. It is very important to note that with the exception of the religious–charity participation, all other types of participation were low on average. Young women tended to show a higher social participation of the cultural–entertaining type (i.e. cultural–artistic, sporting, classmate and old friends' occasions, and scientific association activities) compared with other groups. In addition, women who did not have a spouse generally showed a higher local participation, resulting from their responsibility as family heads.

In the case of the variables of education, access to mass media, and activity status, the results indicate that higher education of the employed and active population directed them towards civil, supportive, and cultural participation. Moreover, access to mass media was linked to supportive participation (i.e. attending children support associations, ethnic associations, elderly supportive organizations, and support associations for women's rights) as well as cultural–entertaining participation.

Fani (1998)

Zohreh Fani, in 'Structure of Women's Participation in Agricultural Development', argued that employment of women varied widely in the regions across Iran as a result of different influences of geographical, cultural, and social factors. Gender division of labor was influenced by many factors limiting women's (particularly rural women) employment and participation in social, class–cultural, and economic terms. In her view, the most important factors affecting the structure of women's employment (participation) lie behind the following points:

1. Social classes and agricultural structure (due to seasonal farming employment and thereby men's migration in search of better jobs, women tend to undertake tasks in the house and farm);
2. Cultivation system and crop diversification (decisions made on variation in cultivated crop, either for domestic consumption or export, can largely influence women's burden of work);
3. Family context (i.e. Age of the family, the number of children it consists of, the marital status of the woman in the family, and whether she is the head of the family, or not) also play a role in affecting the nature of women's participation in economic development
4. The extent of women's power in decision making; and
5. Diversity of climatic conditions (which affects the manner and extent of women's participation in farming and production of crops at different stages).

The author claimed that a number of elements should be focused to attract an active and broad participation of rural women, including education and training, establishing participatory institutes for organization of skills, incentives and consciousness, and access to credit. Furthermore, the prospective horizon

of women's participation in agricultural development is created by the plans and strategies of agricultural development in Iran, rather than family economic needs and requirements.

Varzgar and Azizi Bahaei (1997)

The study was titled 'A Review on Labor Participation of Rural Women in Cotton Production and its Effective Factors in Gorgan and Gonbad Region', and used a survey research method; with information gathered using a questionnaire. Most of the studied women had low power in decision-making in house affairs (66.5%); and in the case of production affairs, most had either no decision-making power at production stages (26.6%) or some lower role (56.7%). Almost all the studied women had very great motivations in pursuit of their production activities (96.2%). Some 92% of them had never been trained in cotton production. The average working time dedicated by women to production activities was 9.4 h/day in farming season, and 2.7 h/d in non-farming seasons.

Testing of the study hypothesis indicated a significant correlation between the dependent variable (i.e. extent of labor participation of women in cotton production) and the variables of the amount of women's responsibilities, decision-making opportunities, power in production affairs, women's attitude towards themselves, material and spiritual motivations of women, ethnic features, technical and vocational training, optional application of production inputs, age, marital age, household size, marital status, women's opinion of female extension worker's presence at village, head of operation unit, operation manner, and adoption of innovation. In addition, the dependent variable was not significantly correlated with variables such as cultivated area, women's perception of their men's attitude towards them, women's motivations in farm work, and literacy.

Hosseininiya (1999)

This study reviewed effective factors in motivations behind rural women's participation in participatory and extension training activities in Fars Province. The studied sample consisted of 149 rural married women who attended some extension and participatory training activities in 1997. The results indicated that *education*, *learning* new skills for one's interest, and *making better use of time* – were respectively placed in first to third priorities.

In addition, motivations of being selected as 'The best women of the village', attracting the attention of other women in the village, making friends, and having an influence on others were placed in the last ranks of priorities.

The study showed a positive and significant relationship between motivations behind rural women's participation in training/extension activities and variables (number of daughters among children, rural women's income, extent of use of radio and television, view of extension programs, view/opinion of trainer, record of attending voluntary activities, satisfaction with extension training programs, perception of handicraft activities, and women's perception of men's attitude to their participation). In addition, there was a negative relationship with village sphere and average age of rural women's children and their motivations for participation in such activities. Comparing ranked averages of the variables showed that rural single girls' motivations for participation were significantly greater than that of married rural women.

Moreover, the motivation for participation was higher in those who had production tools for handicrafts, those who had an independent income, and those who had received a prize, compared with those who haven't. In addition, the material motivation of rural women to attend the programs was greater than that of rural girls.

Motih (1988)

The author, in her M.A. thesis 'Social Role and Status of Women in Rural Society of Iran with Emphasis on Eivaneki Region', studied women's economic role as well as their social status. The study aimed at both historical understanding of social roles, and the status of woman in Iranian rural society in the Eivaneki region. The thesis reviewed the two following assumptions:

1. The prevailing mechanization in Iran has decreased rural women's domestic function in agricultural production.
2. Women's social role and position in rural households of the Eivaneki region are directly related to women's share in the production of agricultural products.

The study showed that the application of new methods in cultivating crops like wheat and barley, as well as the mechanization of farming, indicate that women's activity in producing such crops has effectively reached zero. In other crops like cotton and rice, women's domestic activity has declined, compared with periods before land reforms. In addition, such activities of women in handicraft production have been transformed in two ways, after land reforms. In some villages, especially those near cities, handicrafts were replaced by workshop industries and in others - where developing such industry was not possible- production of hand-made handicrafts started to decline. Thus, reduced domestic activity of women has caused them to enter the labor market as an independent labor force and to be paid for their work. In livestock production, the activity of women, although undertaken in the traditional and domestic manner, has experienced some developments following the land reforms.

Therefore, the first assumption, suggesting a reduction of rural women's domestic function in agricultural production resulting from prevailing trade cultivation in Iranian villages, was supported. For rural women's social status, the results in a number of villages showed that women's social position in the family was not promoted by increasing their participation in domestic production activities, but the promotion of their social rights and value directly depended on the family's relative welfare, its type of economic activity, and social stratification.

Thus, increasing a peasant family's income also increased the extent of women's involvement in domestic decision-making. This group of rural women were no longer playing their last traditional roles as a result of the changing paternal family structure into a family of husband and wife. By understanding their capabilities, such women did not consider it a natural or logical to be inferior to men, so they tried to get involved in their family issues and give their own ideas.

The results of this study showed that rural women of the households with limited lands (i.e. small farmers) played a significant role in agricultural activities, but they rarely had any role in making important decisions. Contrarily, women in families with larger lands, despite their small role in production activities, played

an effective role in family decision-making.

Sarhadi *et al*. (1992)

This study, 'Socio-economic Role of Rural Women in Production', illustrated the demographic, geographic, and economic features of all provinces according to questionnaires received from each province. The study showed women's roles in various production activities on the basis of their activity percentage in proportion to men's in agricultural, livestock production, and handicraft activities as well as processing, and food and cottage industries.

Extents of different agricultural activities undertaken by women and men varied with climatic conditions and cultivation diversity. In mountainous regions where the main crops were produced in dry cultivation, women's pre-cultivation and crop management activities were not seen; similarly, in desert regions, men's activity also dominated these stages. However, in regions with a Caspian temperate climate, women undertook tasks at the cultivation stage. At the crop management stage (consisting of weeding, irrigating, and pest control), weeding activities were completely done by women, while pest control and irrigation activities were mostly undertaken by men. At the harvest stage, including mowing and threshing, men and women worked closely together.

Except for Gilan and Mazendaran Provinces, where both men and women contributed equally, statistical information indicated dominance of men's activity at this stage. In regions like Boushehr where tree products were abundant, some 80% of harvest was undertaken by women. In most provinces, product conservation and maintenance was done by women.

Livestock production is traditionally common in most villages of Iran. In most provinces, grazing or feeding and keeping animals were done by men; but women and men equally participated in such activities in nomadic regions, e.g. Kohgilouyeh, Chaharmahal-Va-Bakhtiyari, Kordestan, Bakhtaran (Kermanshah), and Sistan-Va-Balouchestan. Milking and making dairy products was mainly undertaken by women, sometimes helped by men. Women also undertook the task of sheep shearing in Kohgilouyeh, Mazendaran, and Khorasan. Handicraft as a side job was the most important rural activity mainly carried out by women. After hard daily work, rural women and girls then produced handicrafts like carpets, rugs, Gelim, Jajim, and embroidery in the evening. Information showed that, except for ceramics, earthenware, and miniature painting which are made mainly by men, women's role is the most important one in handicraft activities. Women's maximum participation was in carpet, Gelim, Zilu and Jajim, seat-making (masnad), and needlework (80–100%); and their minimum participation was 40–55% in making cotton sandals (giveh). Women did not often work in sugar, tea, and oil-mill manufacturing in the provinces; but they usually worked in manufacturing of dill pickles, candy, dried nuts and fruits, and cheese-making. In making juice concentrates, the range in participation of women was 15–95%; similarly, in canning fruits 15–45%, making pickles and chutneys 55–100%, producing dill pickles 30–95%, and making biscuits and cakes 20–100%.

Cottage industries are another activity of villages, which include making animal products, tailoring, embroidery, producing jam, making pickles and chutneys, and baking. The extent of women's activity in such affairs had a range of 85–100%. Women played a main role in the studied

cases (i.e. agricultural production, livestock production, handicrafts, processing, and cottage industry) that was inconsistent with official statistics concerning rural employed women.

Sarhadi *et al*. (1990)

In this study, 'A Socio-economic Review on Women's Role in Ahandan Village', the authors concluded that in general, the manner of making decisions in the selected rural households indicated power and influence of men in the family. Household women were more active than men in undertaking production affairs (in paddy fields and tea plantation farms the household labor respectively consisted of landless women with 76% and 79%, women with medium income (74% and 56%), and wealthy women (54% and 28%), among various strata); however, they played a small role in making decisions for production. Women's direct involvement in labor-intensive farming activities however, (e.g. dibbling and weeding) has made it necessary for them to be engaged in hiring workers and managing farm units. Nevertheless, as far as making sensitive decisions like product sale, purchase of inputs and agricultural instruments, buying precious house equipment, and children's education and marriage were concerned, the women's share was small.

Sha'banali Fami (1994)

In the M.A. thesis, 'Ability of Selected Rural Women in (Tafresh) County to Benefit from Development Resources in Terms of UNICEF Criteria for Power-Measuring of Women', the author tried to measure rural women's ability in terms of five criteria: welfare, access, control, consciousness, and participation.

Naghadi (1995)

The study was 'A Review on Rural Women's Role in Production Activities' on the extent of rural women's labor in both indoor and outdoor aspects in Gilan and West Azarbayjan Provinces. Daily indoors work for rural women averaged 11 h and 37 min. in West Azarbayjan and 14 h. and 30 min. in Gilan, giving an average of 12 h. and 13 min. for both provinces. In Gilan and West Azarbayjan, work undertaken by women concerning animals was 27.5 and 27.9% of total labor, respectively; and in poultry, 65.4 and 67.3%, respectively. In tobacco cultivation, in both provinces, women did some 80% of work. In farming activities for crops other than tobacco, the work for four stages – before cultivating, cultivating, crop managing, and harvesting crops – were totally done by an average of 60% of rural women in Gilan and 31.6% in West Azarbayjan. Therefore, rural women should be taken into consideration in educational and constructional planning.

Rahyaft (1986)

The research program 'Women's Role in Developing Agricultural and Rural Region of Iran, Food Security of the Country' assessed changes in the context of rural society as a result of migration and employment-generation, using statistical analyses of rural population. Given a 14% employment of women in agriculture sector, the following results were produced: i) women's manner of employment and type of activity depended totally on the composition of family members; farming system; cultivation system; and natural, economic, and social characteristics of the region. ii) Women's employment in the agricultural sector included participation

in farming, livestock production, poultry, and gardening, which were mostly carried out jointly with their husbands and other family members in an operation unit; and/or iii) women cooperated in certain agricultural operations seasonally.

Alirezanejad (1994)

This was a part of the field study 'Women's Participation in Production Activities and Its Changes: Introduction of Rural and Agricultural Modern Inputs to Gowhardan in the Suburbs of Astane Ashrafiyeh County'. This reviewed impacts of the introduction of modern technological inputs on rural women's life, in consideration of their production activities before and after the introduction. These changes were studied throughout different stages, and finally, it was concluded that the introduction of inputs had reduced the amount of women's activities but had no impact on promoting and developing their responsibilities, i.e. introduction of technological inputs resulted in elimination of some part of women's activities.

Derakhshan (1994)

This study was 'A Review on Rural Women's Role in Agricultural Economy and Their Success in Development Plans of Iran'. History showed that women were among the first who worked in agriculture and had so far maintained this important role. However, rural women's combination of work with household life and also lack of payment for their work had meant that their activities and role in agricultural production were never properly recognized. Meanwhile, it was evident that any development would be abortive in the absence of rural women's participation. Therefore, villages should be developed in a manner that allows rural women's role to be recognized. In the end, the author gave a number of suggestions to improve the status of rural women: training rural women, establishing women's formations within formal and informal organizations, generating suitable employment for rural women, providing insurance and future prospects for rural women, financing and procuring agricultural inputs, involving women in developing plans, making equal distribution of facilities, formulating laws and regulations in support of rural women's rights, and undertaking research and studies on women's issues.

Torres, Amaryllis, Rosario del Rosario and Rosalinda Pineda-Ofreneo (1994)

The authors, in their book 'gender and development', translated into Farsi by Javad Yousefian in 1996, reviewed how women's issues might be introduced and institutionalized within governmental and non-governmental organizations, presenting an outline of *gender and development* objectives. They suggested certain practices to institutionalize these objectives in governmental organizations and argued that it was feasible to raise gender issues in administrative organizations through precise thought and conscious planning on gender, as well as implementation of such planning and its exact assessment.

Effati (2004)

The subject of this report was 'Gender and Migration', with the study mainly aimed at reviewing impacts of household men's seasonal migration on changes to existing gender roles in villages, existing labor division in families, and life study (behavioral pattern) of household women, as well as the effects on the amount of household women's routine activities.

The statistical data was collected from villages in Kohgilouyeh-Va-Boyerahmad, Kermanshah, and Golestan provinces. The study used a multiple-stage cluster sampling method. The sample size selected by Cochran sampling formula consisted of 553 women with seasonal migrating husbands in 11 counties and 83 villages.

While household men were away in a migration of several months to a city, their outdoor activities and house managing tasks were mostly carried out by household women. Over time, this resulted in a confused gender division of labor in a village, as well as certain changes in gender roles in the household. Meanwhile, nuclear households benefiting from no support, which existed in the prevailing traditional relations of extended households, were more affected. Following the migration of a family's man, and due to his absence from the village, the amounts of rural women's activities increased by an average 2.1 times: 1.8 times for livestock production activities, 2.2 times for farming, and 2.6 times for gardening activities. In addition, women's tasks and undertakings at home (e.g. cleaning, childcare, and washing) were still constantly done by themselves. In rural development planning, based on a traditional gender division of labor in Iran (mainly male-oriented), they presented suggestions from the study results in the context of change in gender roles; including attention to women's roles in economic and social activities of village within training, extension, and other planning.

Conclusion

The various study results above indicate that the agricultural sector in Iran tends to have a large share in employment and food provision of the country (it provides about one-third of the employment and over four-fifths of food requirements of Iran). In addition, the activities of this sector are mainly carried out in villages, specifically by small-scale landholders (> 70%). In small-scale lands, women play an important role.

It has always been of great importance to pay attention to women. Women played a significant role in production in villages until the enforcement of land reforms in Iran. Following the introduction of technology and higher levels of education into villages, their role changed, resulting in diminished roles in farming and livestock production but with greater involvement in making decisions (Iranian Comprehensive Advising Engineers Foundation, 1999).

Thus, rural women have experienced changes, either in direct production (of crops, livestock, handicrafts, and cottage industry) or in contribution to the agricultural sector (as labor), and are considered of great potential in society. The statistics and information produced in the above studies indicated that women were playing certain roles at various stages of livestock production and agricultural activities, but their highest role in the former was in processing dairy products and feeding animals and/or preparing feeds; and in the latter in harvesting of crops.

Women's share in processing 77% of agricultural products, 65% of livestock breeding, 25% of crop production, 100%, of poultry, 90% of sericulture and vegetable production, and 100% of summer crops of in Iranian villages, indicates that women's roles in achieving food security is undeniable. However, while this is a determining role in the society and rural development process of Iran, like most other developing countries, it is not very apparent (Iranian Comprehensive Advising Engineers Foundation, 1999).

In the rural society of Iran, about 80% of women work, but their activities have been considered as reproductive activities and are addressed as unpaid employees, domestic workers, family workers, and/or independent employers. Seasonal, part-time, and unpaid employment and reproductive activities are rarely included in the official data and the role of women's activities only considered in economics and social sciences. Most studies and statistics recognize men as household heads, land owners, and farm land holders. Thus women have less potential in terms of the extent of capital, credit, and power.

In the case of women's political and social participation, it could be argued that despite rural women's greater involvement in managing villages, attending cultural and social gatherings, and managing cooperatives; their lower levels of literacy and education, job incomes, and social status, compared with urban women, have caused their share in power structure to be much lower.

There are many obstacles to women's participation and contribution, which can be categorized as follows (Effati and Keyvarian 1995):

Individual factors (low education; little information, knowledge, and scientific learning; traditional and sometimes false beliefs); family factors (male-dominated culture, large amounts of activities inside the house, household man's attitude towards women's work outside the house, unequal power distribution between men and women); and social factors (restrictive social traditions, lack of appropriate community organizations, women's limited access to public credits and financial facilities, domination of planning with a male-client approach, low number of professional women, limited number of non-governmental institutions active in women issues, and discriminating laws and regulations). Efforts to remove the above mentioned obstacles will pave the ground for increased participation by women.

Following is a table with some findings of previous studies on gender

Table 38. A summary of previous studies on women's participation in decision making

No. 1	**Studying woman's participation in socio-economic activities of rural areas of Mazandaran Province**
Author name	Effati and Kaivarian (1995)
Study area	Mazandaran
Findings	There was a statistically significant relationship between women's share in production and economic activities and their intervention in family affairs' decision-making, i.e. as women's role in producing activities increased, their role in decision making increased.
No. 2	**Studying rural women's participation situation in managing and organizing villages and agricultural sector**
Author name	Iranian Comprehensive Council of Engineers Foundation (1999)
Study area	State (civil)
Findings	- Decision-making power of women farmers or their activities had increased in agriculture. - Women farmers' access to production factors empowered them in farm and home participation in decision-making. - Increased information and skill of women farmers increased their decision-making power.
No. 3	**Studying participation of labor force of rural women in producing cotton and affecting factors in Gorgan and Gonbad region**
Author name	Varzgar and Azizi Babaei (1997)
Study area	Gorgan and Gonabad region
Findings	The majority of the studied women had low decision-making power in domestic affairs (66.5%). For production affairs, the majority of women did not have power in decision making (26.6%). The majority of woman had neither power in production processes nor a role (56.7%).
No.4	**Women's socio-economic role in village of Ahandan**
Author name	Sarhadi *et al*. (1990)
Study area	Ahandan village
Findings	- Women had an insignificant role in decision-making related to production. Women's direct participation in farming activities such as transplanting (of seedlings) and weeding, increased their role as farm workers and managers of the farm unit. - Women's share was not significant in important decision-making, e.g. selling products, buying agricultural inputs and tools, buying home equipment, and education and marriage of children.

No. 5	**Studying social situation and role of women in rural community of Iran by focusing on the Ivanaky region.**
Author name	Nahid Motih (1988)
Study area	Region of Ivanaky (city of Garmsar)
Findings	Increasing the income of the farming family increased women's intervention in household decision-making. Rural women in households with limited land (small landholders) had a considerable role in agricultural activities but insignificant roles in important home decision-making. In contrast, women in families with more land, despite having an insignificant role in production activities, had a remarkable role in family decision-making.
No. 6	**Rural women access to decision-makers**
Author name	Brianth (1991)
Study area	Australia
Findings	Research executed in Australia to study factors impeding women's ability to participate in rural and social policies decision-making. Some problems were recognized as common obstacles including the attitude to women, lack of knowledge and information, lack of confidence in decision making, lack of facilities for taking care of children, no existing women's networks, and closed men's special networks. In this research, the determined and introduced strategy for increasing women's participation includes increasing women's knowledge through holding workshops as well as increasing their self-confidence and skills.
No. 7	**Socio-economic role of rural female carpet weavers**
Author name	Maryam Hashemi (1995)
Study area	Gobadbezan village. City of Qom
Findings	Women's participation in decision-making and their social role in the family in terms of using income from selling carpet and decision-making in the area of education of their children, or participation in cooperatives especially established and supported by state organizations for this group of producers was very limited.
No. 8	**Women in agriculture and rural development**
Author name	FAO (1995)
Study area	Middle-East countries
Findings	There have been limited studies in the area on women's roles in decision-making in Middle-East countries; hence it is very difficult to understand who takes decisions on what. Due to the prevailing father-ruling in villages of almost all countries of the region, it can be concluded that decisions are taken mostly by men. Some countries like Morocco have reported that decisions are jointly taken in rural households by men and women. In almost all countries of the region, women had some power of decision-making and their decision-making ability increased after marriage, with the increasing number of children (especially sons), and finally with age.

Table 39. A summary of previous study on women's ownership status

No. 1	**Women role in rural development**
Author name	Zolghadr Moghaddam (1991)
Study area	Rural women in countries of East and Africa
Findings	Lack of access to land was the most important obstacle for participation of women in rural development processes. Women were faced with a series of limitations in property rights and ownership of possessions that usually originated from traditions and rules of inheritance.

Table 40. A summary of previous studies on women's participation in farming activities

No. 1	**Participation of rural women labor force in producing cotton and influencing factors in Gorgan and Gonabad region**
Author name	Varzgar and Azizi Babaei (1997)
Study area	Gorgan and Gonabad
Findings	The average of women's work hours for producing activities in the farming work season was about 9.4 h/d, and in non-farming seasons about 2.7 h/d.
No. 2	**Studying social situation and role of women in the rural community of Iran by focusing on the Ivanaky region**
Author name	Nahid Motih (1988)
Study area	Region of Ivanaky (city of Garmsar)
Findings	By using new methods of farming and mechanization for cultivating crops such as wheat and barley, women's activity had effectively reached zero in producing these crops.
No. 3	**Studying the role of rural women in agricultural production**
Author name	Assadollah Naghdi
Study area	West Azarbayjan and Gilan
Findings	In cultivating tobacco in both provinces, 80% of farming was executed by women. About 60% of farming activities (except for tobacco), such as pre-planting and harvesting in Gilan were carried out by women, and 31.6% of farming activities in west Azarbaijan, were done by women.
No. 4	**The role of woman in agricultural and rural development and food security in Iran**
Author name	Rahyaft (1986)

Study area	State (civil)
Findings	These results showed a 14% employment of women in the agricultural sector. Employment method and kind of activity depended on the following factors: number of family members, land utilization system, kind of farming, and natural and socioeconomic characters. Women's involvement in the agricultural sector included participation in farming, animal husbandry, poultry breeding, or gardening. These were mostly jointly executed with the spouse or other family member in the land utilization system or cooperating in some seasonal agricultural practices.
No. 5	**Socio-economic role of rural women in agricultural production**
Author name	Sarhadi *et al*. (1992)
Study area	State (civil)
Findings	Men and women's farming activities have changed due to climatic situation and cultivation variety. In mountainous regions where most crops are cultivated as dry farming, women have fewer roles in the processes of pre-production. In the producing process, women performed 100% of weeding, but irrigation and pest control were mostly done by men. In harvesting, including reaping and threshing, men and women worked jointly. In regions such as Booshehr with plentiful tree products, women were responsible for about 80% of harvesting activities. Women were also responsible for keeping and maintaining products in most provinces.
No. 6	**Studying the effects of men's seasonal immigration on rural women's activities**
Author name	Effati (2004)
Study area	Villages of Kohgilooyeh and Boyerahmad , Kermanshah and Golestan Provinces
Findings	In addition to performing home duties, activities and executed such activities in collaboration with other family members (men and children). About 6% of rural women said they had no participation in farming activities. Rural women who claimed participat in farming, actively helped with almost all farming activities, except plowing. The most prominent activities of women in a household whose male head migrated, was mostly working in the area of winnowing, weeding, threshing, producing different by-products, and processing of agricultural products. The activities which were least performed by women were related to land leveling, product transportation, marketing, preparing agricultural tools and equipment, and also using pesticides, and fertilizers. Farming activities that involved operating farming machinery (e.g. plowing and product transportation was performed mostly by tractor) were mostly done by men (husband, male children, or near relatives). Rural women's activity increased by an average of 2.1 times with immigration of men; 1.8 times for animal husbandry; 2.2 times for farming activities; and 2.6 times for gardening.

Table 41. A summary of previous studies on women's house-keeping activities

No. 1	**Patterns of women's participation in agricultural development**
Author name	Fani (1998)
Study area	State (civil)
Findings	Seasonal agricultural employment forced men to immigrate and find better jobs, thus women took responsibility for the home and farm.
No. 2	**Rural women's role in agricultural activities**
Author name	Naghadi (1995)
Study area	West Azarbayjan and Gilan Provinces
Findings	Rural women worked at home 11 h. and 37 min. in west Azarbaijan and 14 h. and 30 min. in Gilan; giving an average of 12 h and 13 min. About 27.5% of affairs related to livestock keeping, in Gilan and 27.9% in west Azarbaijan were done by women.
No. 3	**Studying men's seasonal immigration effects on women's activities in villages of Kohgilooyeh and Boyerahmad, Kermanshah and Golestan Provinces**
Author name	Effati (2004)
Study area	Villages of Kohgilooyeh and Boyerahmad, Kermanshah and Golestan Provinces, respectively
Findings	When men were in the village, 63.3% of home activities were done by women; with immigration of the rural man for temporary work to cities this increased to 87.3%. Based on the available labor division between men and women, cooking, taking care of children, washing dishes and clothes, cleaning the house, and sewing and mending clothes were mainly feminine activities with 90.8% of these done by women. Affairs such as counting household costs and earnings, buying home tools, and preparing fuel for home are mostly male activities that with the man's presence in the village, were mostly executed by men (60%) or by cooperating and participating women (28%). With the immigration of men, most of these activities were executed by women (75.5%) or father in-law and brother-in-law.

Table 42. A summary of previous study on women's livestock production activity

No. 1	**Studying social situation and role of women in rural community of Iran by focusing on region of Ivanaky**
Author name	Motih (1988)
Study area	Region of Ivanaky (city of Garmsar)
Findings	Women's activities in animal production, although done in a domestic and traditional way, have changed gradually since land reform.
No. 2	**Studying rural women's role in producing activities**
Author name	Naghadi (1995)
Study area	West Azarbayjan and Gilan Provinces
Findings	About 27.53% of all activities related to livestock production were done by women in Gilan and 27.91% in west Azarbaijan; the corresponding values for poultry breeding were 65.4 and 67.3%.
No. 3	**Socio-economic role of rural women in production**
Author name	Sarhadi *et al*. (1992)
Study area	State (civil)
Findings	In most villages, livestock production was done with traditional methods; in most provinces men were responsible for animal grazing and keeping. However, in nomadic regions (e.g. Kohgiloyeh, Charmahal Bakhtiari, Kordestan, Bakhtaran, Sistan, and Baloochestan) women cooperated with men in such activities equally; milking and preparing dairy products were women's duties and sometimes men helped women.

Table 43. A summary of previous studies on women's participation in handicrafts and home industries

No. 1	**Studying social situation and role of women in rural Iran by focusing on the Ivanaky region**
Author	Motih (1988)
Study area	Region of Ivanaky (city of Garmsar)
Findings	Women's home activities in producing handicrafts have changed since land reform in Iranian villages. In some villages, particularly near cities, home-made handicrafts have changed to industrial ones. In other villages, home-made handicraft production has been devalued, and thus women's home activity in handicraft production has decreased and women therefore earn less income.
No. 2	**Rural women's socio-economic role in production**
Author name	Sarhadi *et al*. (1992)
Study area	State (civil)
Findings	Handicrafts, as a secondary activity, was the most important rural activity mostly done by women. Rural girls and women, when resting from daytime tasks, made handicrafts such as rug and carpet weaving, and embroidery. Except for ceramics and miniatures that men participated in preparing, women were the main producers of all other handicrafts. Women's participation in carpet weaving was 80–100%.
No. 3	**Rural women's socio-economic role in production**
Author name	Sarhadi *et al*. (1992)
Study area	State (civil)
Findings	Home-industries were other activities executed in villages, including preparing animal products, jams, and pickles. Women performed 85–100% of these activities.

Table 44. A summary of the previous studies on women's social participation

No. 1	**Studying women's participation in socio-economic activities of rural areas of Mazandaran Province**
Author name	Effati and Kaivarian (1995)
Study area	Mazandaran Province
Findings	The study showed a significant correlation between social awareness and participation in social activities. There was a negative relationship between women's social awareness and their participation in handicrafts, animal husbandry, and farming activities. With increasing social awareness, women's participation in these economic activities decreased. There was no statistically significant relationship between a wife's dependency on her husband and her participation in social affairs. There was no statistically significant relationship between husband's views on religious issues and a wife's participation in economic activities.
No. 2	**Studying rural women's class situation in Iran**
Author name	Lohasaeizadeh (1997)
Study area	State (civil)
Findings	Among the eight social classes determined, rural women who were the head of the household were the most participative class.
No. 3	**Rural women's economic participation in Iran**
Author name	Lohsaeizadeh (2005)
Study area	State (civil)
Findings	There was a negative relationship between economic participation and education, i.e. when women were more educated, their tendency to collaborate in economic affairs was less. With increased age, women's participation in economic activities increased. With increased education and income of the head of the household, his wife's participation in economic activities in village decreased.

No. 4	**Recognizing types of social participation and influencing factors in Tehran**
Author name	Shaditalab (2003)
Study area	Tehran
Findings	On average, religious participation was more than other types of participation. Young women had more social participation compared to other groups. Widows had more local participation compared to other groups due to their responsibility in the family. Access to mass media had a positive correlation with social participation.
No. 5	**Studying influencing factors on incentives of rural women for participation in extension training activities in Fars Province**
Author name	Hosseininya (1999)
Study area	Fars Province
Findings	Rural girl's participation incentives were greater than for rural married women in extension training.
No. 6	**Women's participation in agricultural activities, village of Gohardan, Astan-e-Ashrafieh**
Author name	Alirezanejad (1994)
Study area	State (civil)
Findings	having access to enough agricultural inputs, has decreased women's activities
No. 7	**Rural women's role in the last decade**
Author name	Firoozeh Navab Akbari (1997)
Study area	State (civil)
Findings	Factors which had a significant effect on women's participation in the agricultural sector were gender, population growth, and family structure. Industrialization, increasing fertility rate, family, and social structure were main causes of participation.

No. 8	**Studying women's role in different processes of production and after producing in livestock and agricultural activities**
Author name	Haghjoo (1998)
Study area	State (civil)
social participation	Obstacles and problems for participation of rural women in animal production and farming economic and producing affairs were: 1) Social beliefs that did not accept women as home supporters and did not allow them to work out of home. 2) The long distance between working and living places prevents women from getting home on time for performing home duties. 3) Disparity between the education Iranian women receive, and the jobs that are typically done be them. 4) Directors and employers who think that women are unable to perform many tasks. 5) Women's physical composition. 6) Research and statistical inadequacies.
No. 9	**Results of the first congress of rural women's role in developing rural regions of northwest regions of Iran (1998)**
Author name	Ministry of Agriculture, 1998
Study area	Northwest regions of Iran
Findings	Obstacles to rural women's participation were: 1) **Economic obstacles**: lack of investment, equipment, and land. 2) **Social obstacles**: cultural issues, father-ruling family, peer pressure, excessive home duties (e.g. taking care of children). 3) **Political obstacles**: lack of regulations and rules for women's participation in social affairs.
No. 10	**Tribal and rural women's situation in development and growth in Kohgiloyeh and Boyr-Ahmad Province.**
Author name	Bani Hashem, 1993
Study area	Villages of Kohgiloyeh and Boyr-Ahmad Province
Findings	Women faced problems such as: being ignored by policy makers; having limited roles and opportunities; being deprived of their rights to participate in home management decisions; and feeling shackled when it comes to social participation.

No. 11	**Recognizing influencing factors on rural women's participation in rural development in Bandar Anzali**
Author name	Nouroozi (1995)
Study area	Village of city of Bandar Anzali
Findings	Young women with few children tended to participate in new areas of rural development. There was a positive correlation between extension support and participation in development activities. There was a positive association between age, literacy, and characteristics of rural women and participation in producing crops.

CGIAR Challenge Program on
WATER & FOOD

Benchmark river basins

The CP Water & Food is a research, extension and capacity building program aims at increasing the productivity of water used for agriculture. The CP Water & Food is managed by an 18-member consortium, composed of five CGIAR/Future Harvest Centres, six National Agricultural Research and Extension Systems (NARES) institutions, four Advanced Research Institutes (ARIs) and three international NGOs. The project is implemented at nine river basins (shown above) across the developing world. The Karkheh River Basin (KRB) in western Iran is one of the selected basins. The program's interlocking goals are to allow more food to be produced with the same amount of water that is used in agriculture today, as populations expand over the coming twenty years. And, do this in a way that decreases malnourishment and rural poverty, improves people's health and maintains environmental sustainability.

Improving On-farm Agricultural Water Productivity in the Karkheh River Basin Project (CPWF PN 8)
Strengthening Livelihood Resilience in Upper Catchments of Dry Areas by Integrated NRM (CPWF PN 24)

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