Original Article

Investigating Spatial-Physical Consequences of Polygamy Phenomenon in Border Villages of Iran (Case Study: Hirmand County)

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Abstract
Purpose- The most common type of marriage in Iran is monogamy, however polygamy is sometimes happening. It seems that the situation of polygamy, as well as the causes and factors involved in it, is varied in different geographic regions and even within the geographical regions of Iran. Also, the phenomenon in different regions will have many physical consequences. So, the basic question is, given the particular geographical situation and ethnic diversity in the region, what are the physical consequences of polygamy on rural settlements in Hirmand County? The purpose of this study was to analyze the situation and spatial consequences of polygamy phenomenon in rural areas of Hirmand County in Sistan and Baluchistan province, Iran.

Design/methodology/approach- The research is descriptive-analytical and based on, field studies and completion households’ questionnaires. The statistical population of the study consisted of 303 villages, which after the consultation with members of the councils, local experts in the study area, 30 villages with prevailing occurrence of polygamy had been selected by proportional allocation method according to their destination to the border. SPSS and ArcGIS soft wares were used for data and statistical analysis and zoning.

Findings- The results of the study confirm that the less distance between the villages of Hirmand County from the border of Iran and Afghanistan, the more polygamy cases in villages within a radius of 5 km of the border is more common than other villages. In this regard, the results of Kendall test confirm the significant relationship between this lifestyle and its impact on the physical development of villages.

Originality / Value- A review in the literature of research shows that this issue has not been taken into consideration in previous studies related to the field of geography. To this regard, the study, understanding the necessity and importance of this issue, sought to study and analyze the situation of polygamy as well as to analyze its physical consequences on the rural settlements in Hirmand County.

Keywords: Polygamy, Spatial consequences, Villages, Hirmand County, Iran.

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1. Introduction

Marriage has always been acknowledged as the most important and most important social formulation for full filling the emotional needs of individuals. Marriage is also a complex, subtle way of human communication. The review of existing literature shows that some of main reasons of marriage are mainly love and affection, having a partner and companion in life, satisfying emotional-psychological needs and increasing happiness (Nawabinejad, 2001). In this regard, the family as a social system involves a group of people living together through marriage, reproduction and raising children. This system and social organization have played a vital role in the history of human development and socialization, which is influenced by other social institutions, and possibly made a change in them (Mohammadi & Sheikhi, 2008, as cited in Parsons and Bills, 1998). In fact, marriage is entering to a new stage of life, which is a very important part of individual and social life of each person. How to initiate and form relationships in their subsequent behaviors can affect their couples and their children positively or negatively. Since marriage is often referred to as legal, religious, and cultural practices, whose nature and quality is built upon by social norms, it can therefore be called monogamy or polygamy, which are in a different position in each society (Bernardes, 2005). The phenomenon of polygamy is one of the topics that has been widely considered by social thinkers and family studies in the last century. The term polygamy means a marriage that lets to be married to more than one woman. In terms of etymology, it does not identify the number of husband or wives, but its historical usage has always been the marital concept of a man with more than one woman (Gould & Kolb, 1964). Polygamous marriage in collective societies is a typical pattern. In these societies, fertility rates are high and children are seen as providing sources of labor and wealth, and they are protecting the parent’s socio-economic interests. Thus, the desire to have a lot of children, has been supported through the polygamy structure for the family system. Nevertheless, in Iran, polygamy is not common, and there is a minor difference on the number of married women with the number of married men, statistically. In 1996, this number was 78000, which is 0.66 percent of the total number of married men, and in 2004 the number became less than that and decreased to 32.2 percent (Ramezan Nargesi, 2005). Although this phenomenon is low in Iran, this social phenomenon is still high in some parts of the country (Mojahed & Birashk, 2004). Studies have shown that the phenomenon of polygamy is emerging, even it’s already been in some specific regions. For example, estimates show that in Zahedan in 2006, out of 151,100 couples, 86,799 husbands had more than one wife. Among them, 65,425 man had two spouses and 21,374 had three or more spouses, at the same time. Moreover, the number of single-wife families in this city is 64,301. Analysis of marriage cases in this city indicates that about 42.5% of families in Zahedan have a single wife structure and 58.5% of them are in no single wife ones. (Statistics Center of Sistan and Baluchestan, 2006, as cited in Sheikhi and Mohammadi, 2008). In this regard, there are several questions that can be asked, including to which variables does polygamous phenomena depend on? What factors are contributing to the phenomenon? Is the situation of this phenomenon different, or the same, among different social groups, especially Sunnis and Shias? What are the physical consequences of polygamy for rural areas in the region? Searching in existing literature shows various factors which have been identified as the causes of polygamy. Some of them are: lack of self-denial, lack of respect to strangers’ privacy, extortion of wealthy married men, save the family from poverty, and allured girls, which is a sign of moral decline in society. However, some of other real causes are: confronting divorce, sexual or physical disability of the spouse, unwanted marriage with the first wife, fighting moral corruption and illegitimate relationships, which are indicative of the proper functioning of this legal establishment (Ramezan Nargesi, 2005). It was seen that different sources have mentioned a wide range of factors as causes of polygamy. It should be noted that the above causes are among the general causes involved in the phenomenon of polygamy, and some other causes are also effective in this case, which are mostly local, and directly related to the construction, and composition of the population in
different geographical areas. Regarding this, the specific geographic regions, whose population composition is special, in terms of ethnic and religious diversity. The quantity and quality, as causes, can be different in different areas. In fact, it seems that the situation of polygamy and the causes and factors involved in it are different between geographic regions and even within geographic areas. Moreover, the phenomenon in different regions will have many physical consequences. A review in the research background shows that this issue has not been much considered in previous studies related to this field. In this regard, the present study, understanding the necessity and importance of this issue, seeks to study and analyze the situation of polygamy as well as to analyze its physical consequences on the rural settlements in Hirmand County. So the basic question is, given the particular geographical situation and ethnic diversity in the region, what are the physical consequences of polygamy on rural settlements in Hirmand County?

Accordingly, these questions will be risen, how is basically the phenomenon of polygamy in the rural areas in this county? And what was the physical consequences of this phenomenon in the villages of this county? It is expected that the findings of the study will shed light on demographic policies in the country down to the local level.

It was found out from the databases and scientific documents that there was no such study in Sistan region. However, some of the most related researches to the present study were been selected as part of the literature review.

Aref Nazari and Mazaheri (2005) conducted a study on the attachment styles and the methods of spouse selection (monogamy-polygamy) in Tehran. Findings of this study showed that there was no significant difference between the two groups. Therefore, the result shows that unsafe attachment pattern and non-normative growth frameworks are not a factor for polygamy as there is considerable tendency in women to choose men with high social and economic status. Therefore, regardless of the marital status of a man, the degree of attachment of a woman to affluent men is socially and economically high (Aref Nazari & Mazaheri, 2005).

Ramezan Narges (2005) mentioned that one of the reasons for marriage of women with married men was increasing girls’ marriage age. His study showed that the rising age of marriage among girls is one of the reasons for getting married to a married man. In fact, in such situation that there are fewer opportunities to marry for boys due to different reasons, spouse selection opportunities for many girls is limited, too; and some girls being frustrated to marry a single person. In such a situation, they must either remain single until the end of their lives, and being deprived of advantages like being a mother or a wife, or marry the second wife. Some girls prefer to be chosen as second wife.

Nourbakhsh (2005) noted that in areas where the number of girls is higher than that of boys, polygamy is carried out with the consent of women, and the purpose of such action is to increase population and prevent prostitution. But if poverty be predominant and equity between wives cannot be met by the husband, it is psychologically unhealthy, especially when women are forced to live together in a home (Nourbakhsh, 2005).

Mohammadi & Sheikhi (2008) regarding the typology of conflict in a polygamist family, concluded that families’ intensity of conflict in Shia families with Persian ethnicity is higher. Because the acceptance rate of polygamy in this group is significantly lower than women in Sunni and Baluch families. Moreover, the least intensity of verbal, psychological and physical conflicts was observed in consensual polygamist marriages, however, the most intensity of these conflicts was in increased forced polygamist marriages, which leads to conflict in power, emotional and sexual relations. Providing social services and public awareness to people in polygamist families empower women in these families. Such an action is effective in reducing the intensity of conflict and its negative effects (Mohammadi & Sheikhi, 2008).

It can be said that in the most of researches the effective factors in polygamy can be set in these categories: the economic and social status of individuals, the socioeconomic status of the society, cultural factors such as the attitude towards polygamy, the availability of suitable wives, and women situation in the society. An interesting point in examining the literature that make this research so important is that in most of these studies, the role of geographical conditions, ethnic-religious diversity and socio-cultural
conditions in different regions have not been considered, enough. Perhaps the strength of this research is to cover the mentioned factors. Regarding what has been said so far, the purpose of the study was to investigate the physical consequences of polygamy in the villages of Hirmand County.

2. Research Theoretical Literature

2.1. The Basis of Polygamy

One of the issues discussed in the husband and wife's rights is the issue of polygamy. Some Western scholars and eastern scholars have criticized polygamy in Islam, considering it is an equivalent to the "haram". Some Muslims even regard a negative attitude to this. Maybe some of them based on bias call it one of the initiatives of the Islamic religion, while the history of polygamy goes back to pre-Islam (Motahari, 1974). In history, in the era of the Quran descent, when God limited the number of wives of a man to four, there were men who had more than four spouses and the Prophet gave them to choose four of them and leave the rest. “When Ghaithan converted to Islam, and he had ten wives, the Prophet (PBUH) said to him: Keep four (of them) and leave the rest of them and separate from them” (Kanz al-Irfan, vol. 2, p. 141).

Therefore, polygamy had existed before Islam. The necessity of prescribing polygamy according to the religion of Islam is undeniable. In addition, the acceptance of polygamy in Islam was followed by other objections and doubts from Christians, and other religions. Criticism and objections have also spread to Islamic societies, and some Muslim writers have also objected to this convention. The most important objection is that polygamy is the product of sexual desire of men and their domination and tyranny over women, and its prescription leads to inequality and oppression of women (Mehrizi, 2012).

2.2. Historical Background of Polygamy

Polygamy is a tradition that has a history dating back to human history. There is more evidence of polygamy in various historical periods. Prior to Islam, this tradition had existed among all the divine religions at that time except Christianity (Ramezan Narges, 2005). In western, and especially in Eastern world, polygamy had become quite commonplace. The Medes, the Babylonians, the Assyrians, the Iranians, the Indians and the Chinese, were less convinced of having a single wife. Among the Arabs, polygamy was also widespread and not limited (Afra, 2010). Gustaw Lobun also emphasized that before Islam, among the eastern tribes, the same pattern was common among Jews, Iranians, Arabs, etc. (Ramezan Narges, 2005).

In ancient Rome, men married more women, the purpose of multiple marriages was to achieve more dowry from women. Another purpose of multiple marriages was to connect with aristocrats and rich women (Elbedour et al., 2007). According to Ferdowsi's testimony from the Shahnameh, Bahram Goor had adopted more than 930 women, so in almost all religions and sharias, multiple wives were allowed for men.

2.3. Islamic scholars on polygamy

The issue of polygamy was not confronted with intellectual and jurisprudential problems until the new age, the question of doubts in recent times has led Muslim scholars to rationalize the same beliefs, or to re-examine the issue and present new ideas.

The popular thought in jurisprudential books, apart from the discussion of numerical delimitation and related issues, cannot be seen other ideas about it. In these documents, polygamy is considered to be an indisputable one, and its limits is four spouse. The only condition that is sometimes expressed is the financial and to observe material justice between the spouses, and the fulfillment of these two conditions is also required.

According to this group, there are some factors that suggest the use of multiple spouse and sometimes as a right for men. These factors are: infertility of a woman, woman's menopause, and man's or community's need for increasing the population; increased availability of women than men, being more females compared to males, wars which eliminate men more than women (Mahrizi, 2012).

The other group is Muhammad Abduh and his followers. They believe that polygamy is when there is an urgent need. They rely on reasoning and believe in the limitation. The most important proofs are:

1. The main condition for having more than one spouse is justifying between them, and this condition is almost impossible;
2. Religion comes to the benefit of the community and prevents the harm, but the corruption of polygamy is more likely to be not beneficial;

2.4. Polygamy in Iranian Civil Code

Polygamy has always been an important part of family law in Iran. The examination of the current rules on remarriage (Articles 16 and 17 of the Family Protection Act) indicates that the conditions set out in the current bill are somewhat making polygamy easier, and, subject to two conditions against several conditions in 1973. These two conditions are subject to a lot of ambiguity and criticism. According to the Family Protection Act of 1973, a man who is applying for a new marriage must submit his application to the court in two copies of the reasons in his request (Nikpey & Pouya, 2012). A copy of the application will be communicated to his / her spouse at the time of the notification. The court authorizes remarriage by conducting the necessary investigations and, if possible, investigating the first spouse, the man's financial ability, and administering justice. In all cases, the right reserved for the first spouse to request a certificate of impossibility of conciliation from the court. Moreover, the imprisonment for the husband, the wife, and the registrar in case of violation is predicted. A look at these two regulations, one in 1974 and the other in 2008, reveals the fundamental differences between them. In the current terms, remarriage is simplified for men by removing some necessary conditions and measures. Furthermore, the condition of commitment to the administration of justice is ambiguous and not easily possible (Nikpey & Pouya, 2012).

2.5. Polygamy in Islam

The fact is that in Islam, the importance of females, especially when it comes to motherhood, it is not comparable to a male. In this regard, there are many narratives in which the primacy of the mother’s right is pointed out. One of the most prominent examples of this priority is the treatise on the rights of Imam Sajjad, in which he detailed the rights on the basis of priority (Javid, 2010). Islam does not accept polyandry, but accepts polygamy and restricts it. First, it’s limited to a number, and second, doesn’t allow to choose multiple wives to everyone (Ellahi & Malekutifar, 2010). Therefore, Islam has constrained polygamy in a framework of the necessities of human life, and put it under some conditions. These conditions with adherence in which it’s encouraging justice and virtue and ultimately validated in the form of an acceptable version. In Islam, men can take up to four spouses, provided that the man is in charge of the conventional material and spiritual expenses (Javid, 2010). Quran says: if you are afraid of justice violation, you should only marry to one female (Surah Nisa, verse 3). The meaning of justice, as it is derived from the narratives, is the observance of equality in alimony and sexual life and other matters of life (Ellahi & Malekutifar, 2010). Currently, having several permanent spouses is accepted among all Muslims, since in the Holy Quran the principle of marriage with several women is not abandoned (Bodaghi, 2008). In general, Islam did not abolish polygamy, but corrected it.

2.6. Consequences of polygamy

Unlike some Arab and African countries, where polygamy is prevalent, this phenomenon may not have much adverse effect on the culture of those countries. In Iran, due to the culture and ethics of society, there are many negative and even negative effects of polygamy (Rafiee, 2007). Here are just some of the few adverse effects that may occur in the family or community.

The emergence of conflict of interests: In a polygamous family, the existence of wives that have the same roles and different bases, in a way, provides the basis for competing in the use of shared resources, and, on the other hand, the disagreement over the division of labor and the use of available resources provides (Sheikhi & Mohammadi, 2008).

Fair distribution of valuable benefits: Beauty, money, mental status, youth, influence, affirmation, the ability to love are the most valuable benefits that men always seek to find in women. These characteristics among women make them more popular if a woman loses any of their characteristics, her valuable resources are at risk. Thus, if a woman has the most of these resources, they have more power than others who do not have such resources. According to studies by Simmel on polygamous families, one wife among spouses finds a more prominent position than others. This woman may be the first wife, the most favorite or the most noble, or the youngest of them who possesses valuable resources, while in both cases there is a degree of evident struggle and conflict that can be proved (Simmel, 2005).
Creating unreliability in the family: One of the things that is necessary in social life is the trust and confidence of individuals towards each other. In the family environment, the existence of trust between women and men is necessary, so that life will be difficult without it (Rashidpour, 1994). In the polygamous families, the husband’s marriage causes distrust of the first spouse to the husband.
and, in some cases, children and other members of the family. It won’t be the same trust on him after second marriage.

**Changing the Structure of the Family:** This means changing the structure of the family from monogamy to polygamy. In a society like Iran, the family structure is more monogamous. Remarriage in society changes this structure.

**Changing the Number of the Family** One of the things that can cause some kind of shock in the family system is the arrival of a new member to the family, since the change brings about change in the entire structure and function of the family, the roles and the tasks are transformed and expectations has been changed (Etemadi & Ebrahimi, 2010). The arrival of a spouse or a new child increases the number of family members, and this can create social and economic changes in the family system.

**Inappropriate means in society:** Considering the people’s sight of men with multiple spouses who are viewed as lascivious and vulgar, this attitude leads to the rejection and being abandoned (Afra, 2010).

**Destroying individual comfort:** The value of the family is more than anything based on friendship and intimacy among its members, especially husband and wife. If this attitude continues in friendship, understanding, it will lead to peace and comfort, and ultimately to self-fulfillment (Tarsali, 2003). But usually this procedure does not exist in a polygamist family. Conflicts and jealousy within the family create an environment full of stress and psychological oppression. In polygamist families, the existence of several subsets of the family, communication and interactions between parents, two spouses, spouses - children, children - children, etc., make the relationships and interactions complicated. Children are the common point of parents and they will react unconsciously to any risks about their children (Etemadi & Ebrahimi, 2010). Breakdown in the family and the possibility of disintegration, causes an insecure feeling in the kid and, if it continues, causes irreparable harm to children. Damages like high anxiety, aggression, depression, and lack of self-esteem etc. may affect their life (Etemadi & Ebrahimi, 2010).

**Occurrence of conflict:** Different types of conflict, depending on the structure of the family, affect family relationships. According to sociologists, constant conflict in the family provoke the disorder and collapse (Mohammadi & Sheikhi, 2008). Increasing participation rates: In traditional and tribal areas, individuals are engaging in marriages with other people in order to be more solid with other tribes, which is resulting in individuals participating.

**2.7. Physical consequences**

**Increasing the number of houses in villages:** Because independent housing for each wife intensifies the conflicts and helps to the social and mental health of family members, the spouses prefer to live separately in favor of reducing the intensity of conflict in the family. In some Islamic scholar’s books has been mentioned that a man cannot dwell his two spouses in a room because a separate residential home is one of wife’s rights, but if the two spouses are satisfied, it’s acceptable, but if there are several rooms in a building. For example, women dwell in different rooms (or floors) (Khomeini, 1987).

**Increasing the tendency of staying in the village:** There are several factors that make people to stay in rural areas. Regarding the traditional structure of the study area, one of the reasons in making population stay is polygamy, which can increase affinity and thus impede immigration.

**3. Research Methodology**

**3.1 Geographical Scope of the Research**

Hirmand County is in northeast of Sistan and Baluchistan province. The county is located at 30° 56’ to 31° 23’ north latitude and 61° 28’ to 61° 50’ east longitude. The study area is adjacent to Afghanistan from the east and north and to Zahak and Zabol Counties from the south and west, respectively. The county has 2 districts, 5 rural districts and 303 villages. According to the general population and housing census in 2011, about 14857 households and 65471 inhabitants and an area of 1100 square kilometers are included (Iranian Center of Statistics, 2011). The study of the distribution of villages in Hirmand County confirms that their distribution does not have a monotonous distribution, and the northwestern part of Hirmand County, due to the existence of the Hamoon International Wetland, lacking rural settlements. This wetland during wet periods increases humidity and reduces the temperature in the region. But in periods of drought, the conditions of the region are

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**Vol.10 Investigating Spatial-Physical Consequences … / Ghanbari et al.**
completely different. 120-day winds over the region carry micro-deposits from the dry bed of the Hamoon wetland and the Hirmand River and create a lot of dust. According to the estimate that the number of days with storm and dust for a period of 10 years in the country, Sistan region has more than 1500 days in 10 years, has the first ranking in the country (Khosravi, 2008). 120-day winds have an unavoidable impact on all ecological, economic and social aspects, causing critical environmental conditions in the region.

3.2. Methodology

The method of this research is analytic-correlation, which is based on library research, field research and questionnaire completion. In this study, after identifying the influential components of the marriage pattern on the physical-physical development of the village, 23 effective indicators of polygamy pattern on physical-physical development of villages (house area, number of rooms, foundation of houses, household density in building unit, ratio of the number of rooms to the number of households, the number of doors and windows, Wall diameters in the residential unit, the height of the floor of the residential unit, the height of the floor to the ceiling, the shape of the ceiling of the residential unit, the distance of the residential unit with the closest neighbor's location, the size of the kitchen, the shape of the kitchen, the shape of the yard, the size of the yard, the type of surface in yards, occupation types of the residential unit (property, rent, mortmain), density of people in residential unit, the age of the building).

Meanwhile, the statistical population of the study includes all villages in Hirmand County (303 villages). Sample was selected from rural families with emphasis on polygamy (two spouses, three spouses and four spouses). In this regard, firstly, villages with few spouses were identified by consulting and interviewing with rural managers, council members and local experts and interviewing villagers living in different parts of the study area. In the next step, in order to determine the villages, first the distance between the villages of the border is obtained in terms of the radius of the nearest village and the farthest villages to the border. Thus, we selected 14 villages, within a radius of less than 5 km from the border, and 16 villages, above 5 km. we used proportional allocation method (based on the number of villages in each radius and population over 50 households) in a form of sample villages among 108 polygamist households (Figure 2).
In the next step, Kendal Correlation Coefficient was calculated using SPSS software. The relationship between the marriage pattern and the physical development of the villages of study was investigated.

4. Research Findings

4.1. Descriptive findings

The average age of the sample population (Parents of 108 households) is 55.4 years, with a minimum of 26 years and a maximum of 78 years, and an average household size is 6.37. The level of literacy, 72.5% of them were illiterate and 27.5% of them were literate. Of the 108 households in the sample population, in 94.4% of them male parent was in charge and the rest were single mother (5.6%). The type of family relationship with the first wife shows that 43.8 percent of respondents have a close family relationship (first cousins), while in 78.5 percent of the spouses, their second marriages are either with a stranger or a distant relative. Moreover, the study of the causes of polygamy in the villages of the study area also shows that the tendency to have more children, religious practice, and family conflicts with 20.38%, 15.75% and 14.82%, respectively, are among the most causes. The need of labor force, the acquisition of social base, and family salvation from poverty were among the least causes of polygamy (Table 1).

<table>
<thead>
<tr>
<th>Row</th>
<th>Causes</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Labor need</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Improving economic situation</td>
<td>3</td>
<td>2/77</td>
</tr>
<tr>
<td>3</td>
<td>family salvation from poverty</td>
<td>3</td>
<td>2/77</td>
</tr>
<tr>
<td>4</td>
<td>Mistrust of the first wife</td>
<td>8</td>
<td>7/40</td>
</tr>
<tr>
<td>5</td>
<td>Infertility of wife</td>
<td>9</td>
<td>8/33</td>
</tr>
<tr>
<td>6</td>
<td>Lack of desire to the wife</td>
<td>11</td>
<td>10/18</td>
</tr>
<tr>
<td>7</td>
<td>avoiding the sin</td>
<td>5</td>
<td>4/62</td>
</tr>
<tr>
<td>8</td>
<td>Spouse death</td>
<td>12</td>
<td>11/12</td>
</tr>
<tr>
<td>9</td>
<td>Having more children</td>
<td>22</td>
<td>20/38</td>
</tr>
<tr>
<td>10</td>
<td>religious practice (according to prophet Mohammad life)</td>
<td>17</td>
<td>15/75</td>
</tr>
<tr>
<td>11</td>
<td>Family conflict</td>
<td>16</td>
<td>14/82</td>
</tr>
<tr>
<td>12</td>
<td>the acquisition of social base</td>
<td>2</td>
<td>1/86</td>
</tr>
</tbody>
</table>

In terms of ethnic-tribal composition, 43.33% of the villages are composed of Persian and Baluch tribes, 33.33% of Fars and 23.33% of Baluch tribes (Figure 3). Accordingly, the distribution of villages of the studied area in terms ethnic-tribal components shows that villages with a majority of Baluch tribes are mostly near the border, and the villages with a combination of ethnic (Baluch, Persian and Afghani) are in the northern towns and villages. The majority of Persian are scattered throughout the studied area. On the other hand, the pattern of partnership in the studied villages indicates that 37.5% of the villages have two spouses, 37.5% of the villages have three spouses and 21.87% of the villages have a pattern of more than three-spouses. A survey on the distribution of villages in Hirmand County according to the partner pattern shows that villages with more than three spouses are mainly located in the eastern part of the study area and within a radius of less than 5 km (Figure 4). The results of these calculations indicate that most villages with few spouses are located in adjacent border areas near the border. One can conclude that, with the proximity of the border, the number of villages with more than one spouse rises, and with more distance from the border, the number of villages with polygamist families is reduced. In this group of villages, cultural backgrounds and attention to the fact that the marriage is a way of Prophet Mohammad’s life plays the most important role in the tendency toward polygamy.
However, based on the findings of the research, the villages of Abdul Rahman Safarzai, Milak, Al Gorg, Mullazim Rudini, Shandal, and Sassuli have the highest number of polygamist families (Table 2).

Table 2. Rural settlements in household varieties

<table>
<thead>
<tr>
<th>Village</th>
<th>Number of households</th>
<th>One spouse household</th>
<th>One spouse household child</th>
<th>One spouse households' tenant</th>
<th>Polygamist households</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Freque</td>
<td>Percent</td>
<td>Freque</td>
<td>Percent</td>
</tr>
<tr>
<td>Gmashad</td>
<td>134</td>
<td>118</td>
<td>88/05</td>
<td>7</td>
<td>5/22</td>
</tr>
<tr>
<td>Qerqeri</td>
<td>245</td>
<td>228</td>
<td>93/06</td>
<td>9</td>
<td>3/67</td>
</tr>
<tr>
<td>Khaksefidi</td>
<td>239</td>
<td>224</td>
<td>93/72</td>
<td>8</td>
<td>3/34</td>
</tr>
<tr>
<td>Borj mirjol</td>
<td>54</td>
<td>47</td>
<td>87/03</td>
<td>4</td>
<td>7/40</td>
</tr>
<tr>
<td>Tapeh kaniz</td>
<td>87</td>
<td>78</td>
<td>89/65</td>
<td>5</td>
<td>5/74</td>
</tr>
<tr>
<td>Piran</td>
<td>121</td>
<td>109</td>
<td>90/08</td>
<td>7</td>
<td>5/78</td>
</tr>
<tr>
<td>Gale Bache</td>
<td>77</td>
<td>71</td>
<td>92/20</td>
<td>4</td>
<td>5/19</td>
</tr>
<tr>
<td>Moladadi</td>
<td>197</td>
<td>187</td>
<td>94/92</td>
<td>6</td>
<td>3/04</td>
</tr>
<tr>
<td>Jahan abad sofa</td>
<td>136</td>
<td>124</td>
<td>91/17</td>
<td>8</td>
<td>5/88</td>
</tr>
<tr>
<td>Haj malek</td>
<td>59</td>
<td>54</td>
<td>91/52</td>
<td>4</td>
<td>6/77</td>
</tr>
<tr>
<td>Barahui</td>
<td>51</td>
<td>43</td>
<td>84/31</td>
<td>5</td>
<td>9/80</td>
</tr>
</tbody>
</table>
As seen in Table 3, in the families of two spouses the area of the house is 270 meters and the building area is 160 meters. In this template, the average number of rooms is 5 with a density of 4.7. But in the families of the three spouses the area of the house is more than this. In this pattern of polygamy, the area of the house is 350 meters and the building area of the houses is 185 meters. Also, the number of rooms is 6.5 and the household density is 6.8. But in the pattern of four spouses, given that the pattern of spouses is higher in this pattern, the area of the house and the number of rooms are more than the previous ones. In this pattern, the area of the house is 360 meters and the building area of the houses is 270 meters. The number of rooms in this pattern is 7.5 and the density of the household is 6.9.

Table 3. Comparison of buildings and marriage pattern

<table>
<thead>
<tr>
<th>Marriage pattern</th>
<th>Area of house (Meter)</th>
<th>building area of the house (Meter)</th>
<th>Number of rooms</th>
<th>Density of households in building units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two spouses</td>
<td>270</td>
<td>160</td>
<td>5</td>
<td>7/4</td>
</tr>
<tr>
<td>Three spouses</td>
<td>350</td>
<td>185</td>
<td>5/6</td>
<td>8/6</td>
</tr>
<tr>
<td>Four spouses</td>
<td>360</td>
<td>270</td>
<td>5/7</td>
<td>9/6</td>
</tr>
</tbody>
</table>

4.2. Information analysis and testing of hypotheses

Hypothesis 1: It seems that the phenomenon of polygamy in the villages adjacent to the border (radius less than 5 km from the Iran-Afghan border) is different from other villages in the County of Hermand.

To investigate the significant difference between the phenomenon of polygamy in adjacent border villages and other villages in Hermand County, Mann–Whitney U-Test was used. The results of the statistical analysis and Mann–Whitney U-Test on the values of the polygamy phenomenon also indicate a significant difference between the
Hypothesis 2: There is a significant relationship between the marriage pattern and the physical development of the village (increasing housing construction). The result of Kendall rank correlation test between the occurrence of polygamy and the physical development of villages suggests a positive and significant relationship between these two variables. In other words, by increasing the number of couples in the villages of Hirmand County, the physical development of the village with a correlation coefficient of 0.552 and a confidence level of 99% increases (Table 5). Because the increase in polygamist marriage has led to the construction for comfort of families and the reduction of chaos within the families, this has led to the physical development of the villages.

<table>
<thead>
<tr>
<th>Table 4. Result of Mann–Whitney U-Test on polygamy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Mann-Whitney U</td>
</tr>
<tr>
<td>Wilcoxon W</td>
</tr>
<tr>
<td>Z</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 5. Correlation between polygamy pattern and Amount of physical development in villages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kendall's τb</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.01 level (2-tailed).

5. Discussion and Conclusion
Throughout history, marriage has existed in three forms of monogamy, polyandry, and polygamy. The most common marriage is monogamy. Polyandry, which a woman can have more than one husband at the same time, didn’t exist except in a short time and some communities. Polygamy is a way in which a man can simultaneously have more than one wife and is commonly used in societies like Islamic society. The purpose of this study was to analyze the situation and spatial consequences of the phenomenon of polygamy in the rural areas of Hirmand County. In order to achieve this goal, the extracted data from field observations forms and villagers' supplementary questionnaires on polygamy status and its spatial effects were analyzed. The study of the causes of polygamy in the studied villages suggests that the tendency to have more children, the practice of the Prophet Mohammad, is the most common causes of polygamy among the villagers, which are consistent with the findings of two previous studies such as Nouri (2006) and Ramezan Nargesi (2005).

On the other hand, examining polygamy status in the studied villages shows that 37.5% of the villages have two spouse families, 37.5% have three spouse families and 21.87% of villages have a pattern of more than three-spouse families. The study of the distribution of villages in Hirmand County in terms of polygamist pattern indicates that villages with more than three spouses are
mainly located in the eastern part of the study area and are less than 5 km radius. In this regard, the result of the Mann-Whitney U-test in a confidence level of 99 indicates a significant difference between villages adjacent to the border with other villages in this county. The result of Kendal correlation between the occurrence of polygamy and the physical development of villages suggests a positive and significant relationship between these two variables. On the other hand, the result of Kendall rank correlation test between the occurrence of polygamy and the physical development of villages suggests a positive and significant relationship between these two variables. In other words, by increasing the number of couples in the villages of Hirmand County, the physical development of the village with a correlation coefficient of 0.564 and a confidence level of 99% increases.

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References
تجزیه و تحلیل بیاندهای مکانی – فضایی چند همسری در روستاهای مرزی ایران

(مطالعه موردی: شهرستان هیرمند)

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چکیده می‌سوز

1. مقدمه

بی‌سابقه بودن همسر به همان‌دندان باشد، در ایران، با توجه به خنثی و اخلاق عمومی جامعه، باید متاسف و حس مورد جنگ‌های سیستمی که ممکن است در خانواده یا در جامعه روی دهد اشاره می‌کنم. این بار ابزاری از ظاهر منافع مشترک، توزیع عادلانه منافع ارزشمند، روابط اجتماعی در خانواده، تعیین ساختار وضعیت خانواده، تغییر ساختار وضعیت خانواده، و تغییر وضعیت خانواده در همکاری و تجربه قابل حمل و سرمایه‌دار، این امر می‌تواند با توجه به فرهنگ این کشورها، باشد.

2. روستایی‌ها و این‌ها

پیامدهای فوق می‌توان به پیامدهای بدنی چون در بدن‌های مخرب و حتی مخرب چند در این شهرستان هیرمند، باید یکی از موارد خاصی از مهم‌ترین وژی‌شن در منطقه‌بندی که این امر می‌تواند با توجه به شکل، اندازه و نوعی از سوی این کشورها و همچنین پیدایش این امر در مناطق مختلف جغرافیایی حتی در بازی‌های طبیعی، می‌تواند با توجه به این کشورها در منطقه‌بندی که این امر می‌تواند با توجه به شکل، اندازه و نوعی از سوی این کشورها و همچنین پیدایش این امر در مناطق مختلف جغرافیایی حتی در بازی‌های طبیعی، می‌تواند با توجه به این کشورها و همچنین پیدایش این امر در مناطق مختلف جغرافیایی حتی در بازی‌های طبیعی، می‌تواند با توجه به این کشورها و همچنین پیدایش این امر در مناطق مختلف جغرافیایی حتی در بازی‌های طبیعی، می‌تواند با توجه به این کشورها و همچنین پیدایش این امر در مناطق مختلف جغرافیایی حتی در بازی‌های طبیعی، می‌تواند با توجه به این کشورها و همچنین پیدایش این امر در مناطق مختلف جغرافیایی حتی در بازی‌های طبیعی، می‌تواند با توجه به این کشورها و همچنین پیدایش این امر در مناطق مختلف جغرافیایی حتی در بازی‌های طبیعی، می‌تواند با توجه به این کشورها و همچنین پیدایش این امر در مناطق مختلف جغرافیایی حتی در بازی‌های طبیعی، می‌تواند با توجه به این کشورها و همچنین پیدایش این امر در مناطق مختلف جغرافیایی حتی در بازی‌های طبیعی، می‌تواند با توجه به این کشورها و همچنین پیدایش این امر در مناطق مختلف جغرافیایی

*این مقاله مربوط به اثرات منای و حتی مخرب چند همسری در روستاهای مرزی ایران است.

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پس از اتمام پژوهش و انتشار نتایج، افراد به همکاری و تجربه قابل حمل و سرمایه‌دار، این امر می‌تواند با توجه به فرهنگ این کشورها، باشد.
روش تحقیق حاضر، توصیفی- تحلیلی و مبتنی بر بررسی منابع اسنادی. بررسی‌های بیشتری و تکمیل بررسی‌های انسانی و حساب روستاهای به‌دست‌آمده است. جامعه آماری تحقیق ۳۰ روستای واقع در شهرستان هیرمند را شامل می‌گردد که ضمن مشاوره و مصاحبه با به‌دلیل اعضای شوهرها و خبرگان محلی و مصاحبه با روستایان ساکن در نقاط مختلف محدوده مورد مطالعه. ۲۰ روستای دارای دیده قابل رشد جدید همسری به عنوان روستاهای نمونه بر حسب فاصله از مرز و با روش تخصصی مناسب به صورت تصادفی مورد بررسی قرار گرفت. در تجزیه و تحلیل اطلاعات و تحلیل‌های آماری و پهنه بنرردی مکانی این پدیده از نرم‌افزار SPSS و ArcGIS اسیرتااده شررده است.

۴. یافته‌های تحقیق
نتایج تحقیق می‌آید که یکی از علل به‌بیان‌بیان شریعت شهرستان هیرمند از مرز ایران و افغانستان، روح جدید همسری در روستاهای شمالی کلوپ‌های باشکوهی مربوط به ابزار‌های روستاها متناسب معنی‌دار بوده‌است. در این راستا نتایج آزمون کاندل تایید کننده وجود ارتباط معنی‌دار بین این وقایع و تاثیر آن بر توسعه کالبدی- فیزیکی روستاهای این شهرستان را به ثبیت رسانده است. از طرف دیگر نتیجه آزمون همبستگی کاندل رضایت از رشد قدرت‌های مبتنی بر تعداد زوج‌ها در سطح روستاهای شهرستان هیرمند، میزان توزع همبستگی - فیزیکی روستاها و در سطح اطمنان ۹۹ درصد افزایشی می‌باشد. در صورت افزایش تعداد زوج‌ها در سطح روستاهای شهرستان هیرمند، میزان توزع زوج‌ها در سطح اطمنان ۹۹ درصد افزایشی می‌باشد. در صورت افزایش تعداد زوج‌ها در سطح روستاهای شهرستان هیرمند، میزان توزع زوج‌ها در سطح اطمنان ۹۹ درصد افزایشی می‌باشد.

کلیدواژه‌های: جنده‌های مرزی، پایان‌های مکانی فضایی، روستا، شهرستان هیرمند، ایران.

۵. بحث و نتیجه گیری
بررسی وضعیت جنده‌های مرزی در روستاهای مورد مطالعه نشان می‌دهد که دهه که ۲۷/۳ درصد روستاهای دارای دو همسر، ۲۳/۵ درصد روستاهای دارای سه همسر و ۲۱/۷ درصد روستاهای دارای اکثریت بیش از سه همسر را دارا می‌باشد. بررسی چگونگی پراکنش روستاهای شهرستان هیرمند از نظر چند همسردری نشان می‌دهد که پژوهش حاضر حامی مالی نداشت و حاصل فعالیت علمی توبنگان است.