How to Reproduce Farming: A Description of the Strategies for Survival of Plum Gardens in Mountainous Rural Areas of Neyshabur County

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Received: 20 January 2017   Accepted: 6 October 2017

Abstract

Purpose: we investigate the strategies for survival of small orchards in present paper through considering this question that why orchards have kept their productive function despite of renovation pressure and universal market and totally not to be economical.

Design/methodology/approach: grounded theory method of qualitative research, especially in this article is based on a case study should be placed on the agenda; in total, 60 semi-structured interviews and in-depth (Purposive sampling: Stratified, questionnaire) those involved in this field was

Finding: The results showed domestic garden maintenance in Neyshabur when a part of strategy Employment-oriented and income from non-agricultural business backing for investment and economic mobility has become a garden. Of course, it also organized social factors in the context of traditional interactive and strong local relationships and kinship rather broad and external basis for the stability of the production process in the region; That is to say, it is also the main cause of underdevelopment. Individual motivation and personal preferences (values and beliefs) also has a fundamental role in the continuing rebel activities.

Practical implications: developers don't have more than two ways in order to participations programming in future in condition of peasant's economy conquest to rural society. The first one knows internal mechanisms and satisfaction of present production way which it guaranties the minimum of village persistence. The Second one is removing the existing obstacles in destructing the traditional interactions and extending social networks among orchardists and communicating with others in production field.

Originality/value: relational and territorial approaches in the concept of embeddedness, the main axis domestic garden maintenance strategies in the study does not explain in purely economic and rational action.

Key words: Reproduction, strategy, embeddedness, motivation, plum gardens, Neyshabur.

How to cite this article:

http://dx.doi.org/10.22067/jrrp.v5i4.61968

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1. Introduction

Construction of a modern agribusiness sector always has been a strategic approach for governmental policymakers and development specialists in postwar period (World War II) (Mann & Dickinson, 1978; Chayanov, 1986; Newby, 1978). In our country, since 1961, the agricultural sector has been converted to successive tests in field of social engineering by political elites (Ehsani, 2006) and in response, it has forced local farmers (peasants and wisdom) to increase production and subsequently change the pattern of farming and structure of working in farms (Burton & Wilson, 2006; Andrade, 2016) through intertwining domestic farms to modernization and liberal struggles and their growing dependence on market and national economic fluctuations, production costs went up (compulsion to use new inputs and devices), and, on the other hand, the price of products remained the same as before and consequently, income level of farm families fell sharply. That is why agriculture present features related to an endless crisis that has traditionally been involved with some attributes such as a reduction in the share of gross domestic product and national employment, market fluctuations, and decrease in economic value added and beneficiaries’ income. Despite extreme structural pressures, which is surprising is high level of resilience in domestic farms that it is still significant part provider of rural household income and it has maintained its original usage (Shucksmit & Ronningen, 2011).

As many years ago, Chayanov (1986) had noticed, rural households use cash incomes for Pluriactivity and diversifying to their own social and economic base to decrease their own vulnerability to unpredictable and uncontrollable fluctuations and also make the maximum use of different situations and opportunities. In fact, rural households, along with agriculture, earn money from livestock, wages and salaries (urban and rural), driving, transportation, tractors, farmland and housing renting, and other service activities (Ehsani, 2006, p. 90). Since 1990s, and based on global flows, agricultural problems were interred to a new phase of unpredictable structural change (Marsden, Whatmore, Munton, Little, 1986; Marsden, Monton, Logan and Wattemor, 1996): New pressures, such as severe fluctuations of market affected by global economic crises, especially in the year of 2007, and resulted economic troubles, climate changes and resulted drought. On the other hand, demands which they were often conflicting (i.e., environmental sensitivities and necessity of preserving aquatic, earthy and animal ecosystems) also were combined with such unexpected events and doubled the problems. Accordingly, farmers had to adopt new and sophisticated strategies to ensure adequate income for household and intergenerational resistance in domestic farms. Among these, new sources of income were derived through production promotion (scientific and capital) (FAO, 2008; Kienzle, Ashburner, Sims, 2013), diversification (Reardon, Delgado, Matlon, 1992; Block & Web, 2001), style change (Hill & McRae, 1995) (e.g. organic farming) and non-agricultural and outside the farm employment (Alasia, Weersink, Bollman, Cranfield, 2009).

Currently, new concepts and strategies for agricultural business have provided various fields of research in sociology and rural geography, agriculture economics, tourism and, more recently, entrepreneurship, and in particular researches related to domestic business (Alsos, Ljunggren, Toril Pettersen, 2003, p. 435). Innovative capabilities (Le Gal, Dugué, Faure, Novak, 2011), sustainability (Dharenhofer, Bellon, Dedieuand Millstad, 2010), and succession are different theoretical views that have been investigated by some researches of this field. Many of studies that have theoretical background merely have mentioned to small individual initiatives: for example, high quality and organic productions expansion, farm tourism and Pluriactivity. Such a concentration may prevent from a more integrated and comprehensive understanding of Mutual relations among internal processes and thus be neglected of main explanatory factors involved in domestic farms survival (Moragues-Faus, 2014). It is argued that relational approach provided a more comprehensive investigation possibility of domestic farms flexibility (Darnhofer, Lamine, Strauss, Navarrete, 2016). In general, relationship approach manifests concept of embeddedness -the term that means action type understanding dependency to social texture in different environments (Moragues-Faus, 2014) so that through it how to communicate among farmers in a specific locations specified. It includes different actors, profits, resources,
processes, etc., which binds actions with different scales in a particular region. The aim of present paper is achieving this important point that how does agricultural sector essentially reproduce itself within a particular type of rural area? In other words, which strategies have local operators applied for their own utilization units resistance against inevitable pressures and changes? In particular, in this paper, we will examine shelf life strategies of small plum gardens in Neyshabur country which based on existing theories, we can’t recognize existed mechanisms for reproduction of agricultural sector, and should reach a level of knowledge about studying subject which Enables us to strengthen findings with real data not theory.

2. Research Theoretical Literature
2.1. A brief overview on strategies for maintaining domestic farms

According to many of published papers in the Journal of Rural Studies, study of strategies in domestic farm appendices has been stand as an alternative model for future and stability of rural settlements (Kinsella, Wilson, De Jong, Renting; 2000, Daskalopoulou & Petrou, 2002; Chaplin, Davidova, Gorton, 2004). That’s in this way that what has been highlighted by Peck, Theodore, Brenner (2010) - domestic farms still have high flexibility to deal with economic, social and environmental pressures. So far, three categories of strategies for domestic farms have been defined (Evans, 2009): 1) farms which are dealing with problems and are generally involving; 2) farms which are in income generation and capital accumulation step; and 3) farms which have found entertainment functions and working in farms is considered more as entertainment and leisure time passing. Recently, Van der Ploeg, Laurent, Blondeau, Bonnafous (2009) have presented empirical evidence of fixed patterns branching in European agricultural businesses. In detail, regarding that in many other farms like Industrial renovation paradigm in aspects of production compression, extension of crop and specialty aren’t applied. This action was called "The Developmental Trend of Agricultural Business", by Evans (2009), adapted from Bowler’s work (1992). Six main lines in this connection are identifiable: 1) development of industrial agriculture by conventional products cultivation; 2) resources expansion for new agricultural products or services; 3) resources re expansion for non-food / fiber products in farm; 4) resources re expansion for non-farming and out-of-farm employment; 5) continuing agriculture in the same trend as previous one, and accepting it's low-income; 6) farming as hobby and leisure and semi-Retire. Meanwhile, Munton (1990) previously identified seven related elements that counted response to changing farming conditions: (1) farm affairs (farm economic principles change: for example, we increased the number of sheep, but decreased milk production contracts (2) labor (by replacing domestic labor, we will reduce costs, even with this, we will save more labor); (3) the business structure (with change from individual operator to partnership, we will reduce taxes) (4) chairmanship (renting land and earning income and reducing cost); 5) Land size (buying and adding to incomes and selling land and reducing costs); 6) economic (increasing or decreasing the centrality of income from outside resources and changing the economic base of business to domestic farms); 7) diversifying (increasing gained revenues from Non-Agriculture activities in farms: catering, product sales and lodging). Most researchers have paid attention to selection lines 1 and 6 in Evans’s division and 1 to 5 in Montana’s division. Meanwhile, government support policies have opened up other developmental alternatives for being selected by farmers. Evans (2009) states that codification of developmental lines by the government and development agencies has made it easier for us to examine way of "being multi-activity" in domestic farms, which most have involved with most agricultural utilization. For example, European Union’s supportive policies in 1988 directly and indirectly encourage farms to plant: with the aim of increasing agricultural income and maintaining the rural population. Multi-activation includes out-of-field employment (or extensively part-time agriculture) and diversification within farm (Evans and Ilbery, 1993). Hence, researchers also should focus on selective lines 2, 3, 4 in Evans’s division and lines 6 and 7 in division of Manton. We should not consider common multi-activity in the world (the existence of another gainful activity) the same as be part-time (the time devoted to farming) in domestic farms in Iran.
should be distinguished among multi-functionality, multi-activity, diversification and part-time keywords). Because in countries where they have high level of multi-activity in domestic farms, there are low part-time features: like America, Europe, New Zealand and Australia. In fact, agricultural low utilization (less than 5 hectares) and a relative Dispersion in agricultural resources (most of the country's regions do not have favorable conditions for cultivation: deserts and mountains) does not allow farmer to be full-time presence in farm, so he must inevitably engage in other occupations, and this does not have any Connectivity with multi-activity. In other words, be part-time is one of the main elements of Iran's agricultural life from past to present and it isn't a new approach. Meanwhile, aging of employed population in agriculture and inability for Continuous presence in farm has doubled compulsion for being part-time of domestic farms in Iran (Rezvani, 2004). It can be said that most of new elements in Iranian agriculture such as dairy, poultry, greenhouses industrial complexes and tourism units are not parallel with multiplicity and tendency to beneficial activities; but agriculture section cannot be expanded and farmer has been forced to create such activities.

2.2. Embeddedness of domestic farms maintaining strategies

As it was said, studies related to domestic farms maintenance strategies often rely on theoretical models that farmers behavioral complexities aren't considered in it (Edwards-Jones, 2006; Galt, 2008; Feola and Binder, 2010). Two sets of these studies are recognizable: First, studies about farmers' behavior that are rooted in specific disciplines and merely merge and measure a set of different factors (biophysical, economic, and psychological) (Faola and Binder, 2010; Jain et al., 2015). Second, studies that often use "rational actions" models based on economic theories, with this assumption that farmers in all circumstances make rational economic decisions (Feola, Lerner, Jane, Montefrio, Nicholas, 2015). Social embeddedness theory is considered as a substitute for rational actions assumptions - first was introduced in 1940s, and then revived by "Mark Granovetter" sociologist and in 1985 was widely used in paper. In contrast with this idea that economic humans shape their own business decisions independently of social forces, social embeddedness theory states that economic institutions and behavior are limited within social communication (Granovetter, 1985). Now, this imagination has been strengthened in minds that people's success and failure in life is not limited to their financial ability and their property, but it depends more on how they interact with other members of community. Various studies show that access to information, use of guidance and, most importantly, financial assistance, are sources and benefits that are gained through social interactions. According to Granovetter's view, in social embeddedness, persons do not necessarily act according to a preset edition of social categories, and social interactions are not universal; each economic action has its own social context which any sample of it cannot be found elsewhere. In other words, person's economic action is embedded in a network of real social relationships and isn't in an abstract market (Granovetter, 1985). General goal is for supporting this idea that "agriculture is local and specific for a particular region morerather than it's mechanized, integrated, large-scale, and getting expertise in production" (Azuma & Fisher, 2001). Granovetter is well aware that the impact of social relationships on economic behavior can be very different from the impact of institutional arrangements (rational action) or generalized morality (normative approach), since essentially responsibility of social relationships is creating trust in economic life (Granovetter, 1985). It is that way people act locally and have certain relationships with different actions and are more interested in working with those who they know and in other words, are acquaintance. Granovetter distinguishes between strong links (i.e., the bond among close friends) and weak links (i.e., the link among acquaintances). He believes that cohesion of different groups in a social system depends on their weak links, not on strong ones. Because weak social links extend familiarity circles in society and provide interaction between different groups. In other words, weak links with members out of group can facilitate information flow and success of group members. He argues that weak links are crucial for individuals' cohesion in modern society. In addition, in explaining trust-building, Grenoble argued that trust which has been created through positive social relationships and based on dedication to moral obligation and thought, and not from dailyconsiderations, can help to economic
growth and prosperity. Of course, social embeddedness also have overlap with ecological and spatial aspects (Murdoch, Marsden and Banks, 2000). In fact, farmers’ decisions are embedded within domain of a socialized structure that can be defined not only in terms of historical, cultural and social resources, but are also definable based on spatial and specific ecological and biological resources. It is necessary to know that as social cultural factors embeddedness, decisions of farmers are also affected by other actions; it includes promoters, rural developer, local authorities and the market (Barnes, Thomas, Willock & Hall, 2013). However, the paper will also address personal values and beliefs that regardless of any form of social relations embeddedness, have sustained agriculture, and see it as a basis for forming social interdependencies.

3. Research Methodology
3.1. Geographical Scope of the Research
Experimental purpose of this paper is studying three mountainous regions and valleys, namely, Grained, Khary-Boujhan and Khanlogh in north of Neyshabur county (Fig. 1). Due to Binalood height exist in north of the city and consequently favorable climate conditions, abundant water and desirable soil, gardening has a special boom. The main landscape of Neyshabur's Gardens is dedicated to plum product cultivation and is considered as main pole of plum production in province and also country. From Approximately 3,600 hectares of plum cultivated land in Neyshabur are harvested about 55,000 tons of plums each year (Tasnim News Agency, www.tasnimnews.com/fa/news). Due to establishing a large part of garden areas in mountainous and semi-hilly areas (valleys), smallholder utilization system (small-scale and low-interest land) overcome in this area and as a result Plum cultivations done part-time. (Due to the lack of consolidated statistics, medium level of utilization through experimental and field observations is estimated with less than 1000 meter; of course, many garden lands are co-productive and have a six-dong document, thus small sizes are aggregated and in practice it seems larger, however utilizations are too fragmented and in smallholder shape). Gardening in Nishabur, like other parts of the country, In addition to political and ideological strategies is subjected to continental irregularities and market fluctuations. Such pressures, coupled with rural overpopulation and low production average, have created vague perspectives for gardening in this area, especially in plum gardening. In fact, gardening has a dual status: on one hand, pressures such as necessity for using modern gardening methods, drip irrigation, and garden species improvement, direct it towards development and evolution. On the other hand, contradictions such as sharp decline in gardening income, labor issue, agricultural machinery weakness, and benefits of other conventional products (pistachios and saffron) direct to peasant methods. In recent years, instead of expanding new production methods, it has reverted to past production methods. Technical technique and machining level (mechanization) and also division of labor in garden units is low. Compared to done work for plum cultivation, production level is low and products don't have good quality and therefore they are sold with the lowest price. With of garden lands is low (there is no sign of concentration and aggregation of land as the most important form of developed and modern agriculture), on the contrary, land dispersion and numbers of fragments are much. The gardener, in addition to gardening, also needs other activities, such as Animal husbandry, agriculture, handicrafts and has not been created any proficiency in these aspects. The domesticics either director of the garden unit or source of labor supply and mainly local sales. In general, reproduction process is simple; it is always repeated with previous scale without capital accumulation.
Production cooperatives and suitable specialized companies are not formed which part of gardening operations, including harvesting and processing be assigned to them, or as so-called be outsourced and through it capital circulation in production and distribution, and furthermore special skills and innovations in domestic farms be created. Although Neyshaburi's plum cultivator, because of capitalism, does not have possibility of expanding and developing gardening activities, but he has turned to other elements of capitalism, namely non-agricultural occupations and mainly services jobs, and gained revenues from it, though negligible, invests in production and so has hope for durability of plum garden. Moreover, previous production relations in field of gardening play an important role in stability of plum cultivation in Neyshabur: Common rules for water division, labor and machinery exchange, shareholder, local middlemen and regional market. In addition, some personal and customary incentives act as an infrastructure for maintenance of domestic gardens, which we will further explain in detail. (Table 1)

<table>
<thead>
<tr>
<th>Study area</th>
<th>holdings</th>
<th>Area plum grove (ha)</th>
<th>production rate (ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gerineh</td>
<td>1277</td>
<td>1022</td>
<td>15841</td>
</tr>
<tr>
<td>Kharv-Bujan</td>
<td>2250</td>
<td>1800</td>
<td>27900</td>
</tr>
<tr>
<td>Khanlogh</td>
<td>500</td>
<td>400</td>
<td>6200</td>
</tr>
</tbody>
</table>

Qualitative research methodology and Of course, in this paper, the Grounded theory was used based on a case study. The Grounded theory is a holistic and systematic approach, which examines every phenomenon in its real world, and thus introduces new theoretical elements that in set of existed theories is unique (Warren, 2002). In other words, The Grounded theory is a method for constructing a theory, where hypothetical assumptions aren't sufficient (as in social common researches), but it uses actual data for conclusion (Glaser and Strauss, 1967). The basis of qualitative method used in this research, which is considered in Interpretivism paradigm, emphasizes on patterns visibility and categories of data, contrary to the fact that these tags are imposed on data. In qualitative research sampling, which is called purposive sampling or theoretical sampling (Strauss and Corbin, 1998), the researcher's aim is selecting cases which due to purpose of research are full of information and can help researcher to form his theoretical model (Connell, 2005). In this work, stratified sampling was used to identify different types of farmers and also theoretical sampling was used for identifying Officials' and Counselors' point of views. According to Brewer's point of view, Garrett and Rinaldi (2002), they typically have believed choosing 20 till 30 contributors for identifying a coherent set of cases and achieving theory saturation be enough. That's
some cases which no new information is obtained through it.

However, Holloway and Gallivant (2006) believe that 40-45 contributors are enough to study. The information was collected through interviews and is semi-structured and in-depth, and in order to ensure number of participants, 60 people were interviewed in three studying areas, including full-time, part-time and retired farmers, and Local authorities(Dehyar) and councils. In process of collecting information, 10 people from rural and agricultural development consultants (including experts from Jihad-e-Agriculture office, governorate, housing foundation, environment
and natural resources, committee on relief and cultural heritage, handicrafts and tourism staffs) were selected for interview; this point was which we gain a theoretic saturation in it (Table 2).

Table 2. Main characteristics of people selected by study areas.

<table>
<thead>
<tr>
<th>characteristics</th>
<th>Gerineh</th>
<th>Khvor-Bujan</th>
<th>Khanlogh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time Farmers</td>
<td>3</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Part time Farmers</td>
<td>12</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>Retirees</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>27</td>
<td>16</td>
</tr>
<tr>
<td>% of holdings managed by male farmers</td>
<td>%64.70</td>
<td>%66.66</td>
<td>%75</td>
</tr>
<tr>
<td>age</td>
<td>18-72</td>
<td>25-67</td>
<td>67-21</td>
</tr>
</tbody>
</table>

The interview questions were consist of: 1) How do you manage your farm and how have working structure evolved in order to reproduce farming in this collection? 2) Which strategies and tricks have you chosen to maintain and sustain farming activities? Why have you chosen these special methods? And (3) how are some of economic, cultural, social and natural factors interfering in designing, limiting, strengthening or enabling such a particular strategy? According to Stress's principles (1987) in the grounded theory, raw data was coded, categorized, conceptualized and combined in three phases: open coding, axial coding, and selective coding. In open coding step, Initial concepts (more than 100 concepts), in axial coding step (more than 50) major categories along with core category were derived. In selective coding step, along with a careful examination of data and two previous steps' coding, data were analyzed in depth and theory was presented. It should be noted that data encoding has been done manually (Compton & Beeton, 2012). Finally, categories that were obtained in content analysis phase and also were distinguished, were interpreted in a coherent and interconnected system (Strauss & Corbin, 1998). In Figure 2, open codes, sub categories and categories related to causal, context, intervening conditions, axial phenomenon and strategies and related consequences have been presented.

4. Research Findings

4.1. Plum gardens survival strategies in Neyshabur: be part-time, renting, partly multi-functionality and not outsourcing.

What is evident is that agriculture changes in last few decades have not been linear, as we see various strategies appearance in this section. It should be noted that researchers about prediction of small-scale and domestic farms disappearance which have been competed with pressures of market and have been already globalized have been believed on a kind of overlapping among various agricultural strategies and domestic farms sustainability and In other words, have changed their position about domestic farms inability in today's irregularities. Such a view is related to mobility of being multi-functionality in small-scale farms for economy tolerance in particular agricultural systems namely market flows and unpredictability. Being multi-functional here refers to other beneficial activities that are associated with agriculture, whether inside or outside the farm, such as tourism. But structure of gardening activities in Neyshabur should be considered separated from general agreement on domestic farms being multi-functional in recent studies and tendency towards beneficial activities inside and outside the farm. One of the people argues that:

"Our land and garden are totally 500 meters ....... This amount is too low that my wife and I must inevitably do day job........we work for our neighbors and relatives. ......... If we had this chance to do laboring in city, we will surely do it. 

"(Part-time farmer, Ms., 23, Khanlogh, interview 5)."

Most of the garden lands are small in this area, and therefore gardeners do not have full time attendance conditions. Therefore, Plum cultivation in Neyshabur has a part-time functionality and rural have reduced their time for working in gardens through addressing other occupations. Aaccordingly analyzes of agricultural restructuring in Neyshabur, not through being multifunctional, but also through being part-time should be done. On the other hand, be part-time in gardening activities is an old, well-known Function
and inseparable part of rural life in Neyshabur and is not new. So, operators had been thinking for other ways of earning money.

Gardening is livelihoods in Neyshabur, and based on domestic labor and essentially by low use of machinery, mainly for responding to needs, and then selling it in local markets. One of the people believed that:

"[Due to small size of earth and high population of domestic] without outlabor [and relying on ourselves] we do all works in garden .......... We are small gardener [and yeoman] with the father and mother and brother and sister get out of work............. It's not worth to employ a labor........ The cost of living is so high that there is no possibility for expanding anything else [i.e. equipping gardens]." (Full time farmer, sir, 30 year old, Chaharbagh, interview 3).

Of course, some Plum cultivators are employing daily-paid workers, especially those with more land than others. One of the people believed that:

"We have about a hectare of gardens .................. as long as I can and I can get out of it [alone and with my domestic] ............. The work of agriculture and gardening in a period of time requires cooperation of several people........ Otherwise it won't work........... I have to get a worker........ .... [I must say at other times] if I can [even] I will work for others." (Part-time farmer, sir, 30 year old, Chenaran, interview 5).

Therefore, use of daily paid labor is not permanent, and is mainly carried out in the harvest season, and intensity of work is reduced by start of the cold season. Meanwhile, one of the people believed that:

"Although our land is low and we have small gardens ........... but [because of my age] I cannot work ...... I apply workers more........ ..I myself do light works. " (Retired farmer, Ms., 72, Gerineh, interview 7).

Local residents believed that peeling and drying plum is an intolerable task, and it needs a lot of effort; it is necessary to apply a daily paid labor; if done late, the remaining plums on trees will be polished and spoiled. This is a household job and therefore is done more by women.

The Neyshabur plum has a global reputation; a large part of the product is exported (UAE and Pakistan). But Plum cultivators sell processed products more to local dealers rather than traders. Some of renters have turned to hiring and often do non-agricultural jobs. One of residents has stated:

"My garden is very small ....... [Due to lack of sufficient capital] I can't handle it alone ...........I work in a partnership manner. And in the end, we divide the profits ... Gardening isn't sufficient to supplylife expenses........ I'm a servant at school........ I even peel plums for plenty of peoples and I do a daily paid job. " (Part-time farmer, Ms., 54, Up Kharv, interview 12).

It can be said that pressures are to some extent that, instead of promoting production method, has been gone back to previous methods of peasantry (Sharing and working half). Of course, there are exploiters who have been isolated far away from village and farming and migrated to urban areas; now, they contribute to gardening as part of paternal inheritance. This group also assigns all activities related to administration of the inherited gardens to others.

Findings of research show that a limited portion of Neyshabur gardens has gradually developed into multi-functionality. If we notice to local residents' speeches, then these actions cannot be considered multi-functional:

"[How many years have we been] cultivating apples, pears, sour cherries and walnuts amongst the plum trees ........ We try to use all the land....... To raise income. "(Farmer All, Sir, 20, Kharvebala, Interview 11)."In the past, we had changed our way from Plum cultivation to apple cultivation....... In recent years, Apple market has been badly damaged .... .... we cut apple trees and replant plum ....... We had to add animal husbandry to our gardening activities." (Full-time farmer, sir, 30 year old, Cheharbagh, interview 1).

As previously mentioned, there is no possibility of modifying production method and efficiency - due to lack of financing and lack of liquidity- it is possible that Plum cultivators will be more likely to act like old obsolete methods (quasi-feudal), and in other words, they become more pedigree: multi-cultivation, cultivation along with tree and crops, combining animal husbandry with plant. Although some plum cultivators have proceeded to change in pattern of cultivation and even purchase more land and improve gardens; but this is not an improvement, but a solution has been adopted to solve problems of lack of money and in result poverty.

Gardening community in Neyshabur is not complicated because of production management uniformity, and we are facing with a single class
namely peasant yeomans. Gardening in Neyshabur is facing with crisis of production method; being yeoman has turned gardening more in to an amusing and pleasuring gardening, rather than making it as an economic activity, and while farmer will spend time and expenses on this way, he will earn the least utilization. So, most households have other jobs except gardening (part-time gardeners, livelihoods, and often elderly and retired). Gardeners have been surrounded by plum cultivation or resistance to be alive. Plum has a lot of fluctuation and has lost its justification to gardeners. Gardeners have noticed these losses ahead. But due to deep root of plum cultivation in the area, it’s hard for them to leave it. In other words, rural consider gardening as an inseparable part of their life, even if they have the lowest economic profit. Most plum cultivators’ lands are their paternal inheritance. It is believed for appreciating a lot of efforts which gardeners have done to protect gardens and have arrived to our generation, so we must be aware of keeping it. Of course, there are a few numbers of people who have been able to use agricultural equipment and facilities because of large lands and needed capital and have a reasonable production level (modern full-time gardeners, and often urban capitalists).

Now, with reference to gained interviews, the social classes of gardeners in Neyshabur will also be qualified for third feature to identify the personality of the rural community in the area. A very small group that is not present in village and often goes to their gardens at weekends or holidays (villa and second homes), they are doing gardening more for amusing and they are in gardens for leisure purposes. Since they try to maintain garden function and maintain the process of product harvesting and cultivating, they outsource most of gardening affairs and not completely (part-time gardeners, retired and resident in the city). One of these gardeners explains:

"I have about two hectares of gardens ....... I live in Mashhad........ I do not do anything to manage it......... Every year I rent it....... I’m at the garden for rest and spending my spare time. "(Part-time farmer / resident of city, Sir, 57 year old, Bojan, interview 1).

4.2. (Vacancy) social embeddedness or mutual interactions in Neyshabur and (none) sustainability of garden activities

The high percentage of yeoman’s’ utilizations in Neyshabur does not mean that plum cultivators, like past process, are gardening and are convinced by low income and have not completely evolved; or, in today’s advanced and competitive world, gardeners have no intellectual and mental growth ability and they do not understand any change. Regarding that each domestic member is trying to play a role and, along with gardening, deals with other high income jobs (Service jobs and mostly in city): That is, the rural domestic does not pass peasant life and acts in a Non-capitalist and commercial space. Meanwhile, Mann and Dickinson (1978) have stated that "agriculture will naturally change towards capitalism." McLaughlin (1998) also suggests that survival analysis of domestic farms should take place through ecological systems or Darwinian evolutionary theory: namely pre-capitalist period, transition period, and capitalist era. It is worth noted that it happen simultaneously with implementation of land reform and breaking structure of agricultural landlord in Iran (Ajami, 2005), and especially Neyshabur in the phase of transition from peasantry to development of capitalist relations. But developing countries, including Iran, are facing with serious obstacles at transition stage, which they aren’t discussed in this paper; therefore, changes are slow. However, utilization of individual land plots, domestic engagement in production activity has effects and consequences that in general have prevented from development of social relations related to production in Neyshabur gardens. Because existed obligations in wider domestic impede individual motives and desires for investing or wealth accumulation; due to multiplicity of users, gained revenues should be divided. Nowadays, the main problem of gardeners in Neyshabur is lack of liquidity and credibility. Many gardens are managed in a co-operation manner and do not have a six-dong document, which is why they are not acceptable for bank guarantees. One of the people believed that:

"We are the real garden growers [old gardeners] who are now in this condition ....... We have no income to invest........ We have to provide garden and our families in the same way. We cannot change anything...... Now some gardeners have been sampled........ Those who have previously migrated from village and acquired capital in
city........... With a lot of capital, they built new gardens or developed their paternal inheritance........ [Of course] have aimed........... But we are not able to continue working in the same way as past ....... any money can't be earned in this way. *(full time farmer, sir, 46 year old, Chaharbagh, interview 6).

This is while other countries - especially those which have close condition to us - have taken a step forward and managed to forge the presence and entry of capital into the sector and, consequently, the modification of production method. For example, Mediterranean countries (such as Greece, Italy, Spain, and Portugal) have inevitably used part-time and multi-Multi-activity actions in transition from traditional methods to commercial ones because of being mountainous and the small size of their land (here, olive gardens); but they immediately rebuilt themselves through movement toward a wider network of interdependencies between farmers and their various spaces (Moragos-Fayos, 2014). This characteristic, is along with the issue of establishing cooperation relations beyond members of a domestic and among individuals in a social group; Fukuyama (1995) suggests the hypothesis that in a collectivist culture, possibility of forming large-scale and complex economic investments rather than individualist societies where anyone except domestic members are not trustable is more. Outsourcing is one of the most prominent elements of interdependence of olive groves in the Mediterranean region that includes Contracting relations *(i.e., those who undertake some affairs such as harvesting, plow, pruning, fertilizer, processing, and packaging and product marketing Gangland) among local gardeners and local cooperatives. The depositing of gained revenues through non-agricultural businesses in local cooperatives by members or olive growers has provided opportunity to carry out many in-garden operations through cooperative contract or specialized companies. Mediterranean olive growers, in this orientation, in addition to cost savings, have access to a sustainable source of skills and specialized service providers for innovating and producing high-quality products. Although at the same time as land reforming, new institutions such as rural production cooperatives, cultivators, and agricultural companies in the agricultural sector expanded, but they weren't Compatible with realities of peasant life, and thus failed to attract public trust and somehow act responsibly. Neyshabur is a plum grower is inevitably a director because he decides what to do for his production factors; he is also a worker because he and his domestic are working on the ground; and most importantly, he is an investor because he himself funds for cultivation and work. Gardeners are always rancher, but with all effort which we make to cultivate plum, unfortunately, because of lack of a specific place for buying and packing products, brokers buy them at the lowest price. While second industrial town of province (the Khayyam industrial town) is located in this city, unfortunately, there is no factory in the town that processes and packages plum product and increase the quality of production. Gardeners don't like to criminatrawliness of many institutional mechanisms in the production path till products distribution, and it is introduced as the main cause of low price in product and consequencedecrease in household income. While they emphasize what is highlighted by Granovetter (1985) * these arrangements are not trust-maker and are just as a replacement for it. Specially designing places for guaranteed purchase and factories for processing and drying plums do not facilitate gardeners’ economic action. But what shapes economic behavior and is an incentive for capital accumulation is A part of trust which must would have existed in market for working in it. Therefore, institutional arrangements lonely cannot play a decisive role in economic life. The source of this trust is also social relations; we are more interested in working with people who we know. The above interpretations do not mean that mutual trust and interdependence are not among the gardeners of Neyshabur, and opportunities for mutual cooperation remain unused. Plum cultivation in Neyshabur depends on specified informal arrangements that are rooted in past social relationships. Of course, in Neyshabur city, as in other parts of country, there is a kind of collective support among rural families or relatives and neighbors: labor exchange and common use of equipment and machinery. In addition, water source is common (rivers or wells) and there is relationships for division and how to be used by gardeners oover years. In some cases, there are also sharing half working dividing of
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profits in equal shares and owners, workers, and owners of agricultural machinery are involved in utilization of plum gardens. As much as possible, is tried to sell produced products to brokers and related dealers in order to avoid misuse and fraud in market; most of products are distributed locally (mostly to big gardeners who buy and sell dried fruits). However, Granovetter (1985) believes that a particular form of prior interdependence can be an obstacle for maximizing economic action because of preventing of development in more effective social relationships. Because in networks with strong relationships, such as close relationships in production and sales, there are numerous instances in which members uniformly have limited knowledge about many issues. In fact, any new information with a potential value often comes from outside the group. But formation of these weak relationships needs to trusting, because we talk about the beginning of communication with people and thoughts that we are not familiar with. Mediterranean gardeners are also affected by paid parachute and supplying financial resources of Common Agricultural Policy of European Union (CAP), which is responsible for providing financial resources for the social and structural policies in small farms and Market setting and prices. That's while government compensatory and supportive programs, in the form of bank loans and cheap facilities, were awarded to people who did not deserve because of lack of back guarantee for small beneficiaries. The lack of financing mechanisms and the lack of market infrastructure have been led to development of intermediary businesses, and in other words, an inefficient dealing but revenue generated during production and distribution chain, so through bought products cheaply farmers can't gain his own real right. The Neyshaburi's plum cultivators has stated that if the gardeners are not supported, the active force in this sector will inevitably migrate to cities and turn to unproductive jobs, which will lead to destruction of gardening. Being expensive about traps, fertilizers and agricultural implements are one of the most important problems for gardeners, but there is no agricultural subsidy. It should also be said that intellectual basis of agricultural policies in Iran was how to maintain pre-capitalist production method and cultural characteristics of peasants. Designed projects for development of villages, With the base that small is beautiful, as theoretical backing of programs and policies, have mostly forms of small business and thus do not allow agricultural structure to be restarted and adapt itself to new conditions. In general, production has been hit in Neyshabur, and in such situation villagers are expected to abandon their gardens, however they have not abandoned production, but have been forced to turn to past obsolete production methods and they lose Progress.

4.3. Why Sustainability of Small gardens in Neyshabur: Livelihood, Cultural, Social and Natural – Physical factors

Although mutual trust and interdependence have played an important role in survival of garden systems in Neyshabur, but certain forms of individual motivations and personal preferences, regardless of their social relationships also in gained interviews, encourage and provoke gardeners to cooperative action and, consequently, maintaining Neishabur's domestic gardens. A summary of it is as follows:

Financial and livelihood concerns: Many gardeners recognize the uneven landscape of plum gardening. Gardening is facing with a crisis in production method. Plum cultivation with current method has not been able to reproduce development from inside, and in many cases, some of the simplest things, such as product collection, have become a major and time consuming problem. Bad Supply of produced products in market, which stems from abandonment of agricultural production, is a clear reflection of vague future for plum gardens. Nevertheless, the rural continue to work continuously in plum gardens, spending their lifetime on a small piece of land, and doing the least utilization. In this regard, one of the people believed that:

"Well, we have the intention of selling land and leaving the village ... What expertise and profession do I have to work in the city? ............ Garden is domestic economy turning............ That's why I've stayed here........ Of course, there are a lot of difficulties....... It's always the same and many previous generation and more previous ones, they also lived in this way and this process is continuing. "(part-time farmer, sir, 51 year old, Up Kharv, interview 16)
Attachment to paternal Inheritance: most gardens have been moved over generations and have arrived to present gardener; they are very valuable because ancestors endure hardness and difficulty to keep it, and simply cannot be neglected and leave it. Gardening is an ancestral work, and water and soil is respectable for people. One of the people emphasized:

"This is our ancestors' business. ......... It's our destiny [working in garden] .........There isn't any for going and leaving it........... It is necessary to spin from one generation to another and remain constant .......... we can't go elsewhere. " (Full-time farmer, sir, 47 year old, Up Kharv, Interview 20)

Tendency to tree and garden and village: tree and garden are production hearts and village is heart of life. Plum trees are permanent inhabitants of these villages and this is understood by villagers' attachment to trees. people of this region have always been plum cultivation, and because of their predecessors' business, they Have fanaticism to plum gardens, and strongly opposed to changing their use and sale. To the extent that Neyshabur is considered plum capital of Iran, they want to make a national registration of gardens in order to not to be endanger and remaining persistent. One of the people emphasized:

"I believe that we have to keep paternal inheritance [tree and garden] ... as I have done it ........ but my children because of small garden and don't having desire for working or doing it as amusement ........ I think that we should keep sanctity of trees' age [and efforts which have been made to grow it] and stay here [and treat them]. "(Farmer full time, sir, 53 year old, Down Kharv, interview 17).

Investing (Earning Profit): It's true that most gardeners are in poverty and have to keep their domestic and gardens just with low income and product. But some people have significant investment in plum gardens, wealthy people who have abandoned village for many years and have been occupied in another business in city, with high financial backing, built or bought gardens within economic scale, apply new gardening techniques, drip irrigation and garden division based on the type of product and have reasonable earnings. One resident of city said:

"I live in city .......... My work and investment is in village........ Urban facilities cannot be easily neglected ........ from economic opportunities for gardening and generally for village too................ I am comfortable with this lifestyle [access to urban facilities] and also income [Access to gardening business opportunities] " . (Part-time farmer, sir, 30 year old, Cheharbagh, interview 1).

The Importance of hubby and Fun: In some cases, gardening has no commercial aspect, and in the past it has been more in need of everyday needs and today it has become more entertaining and entertaining. It is worth mentioning that in recent years, many retired and newly arrived people are having fun with the construction of second homes in the gardens, along with gardening. Of course, some villagers, because of small amount of land and low interest, have traditional gardening, entertainment and livelihoods. One urban citizen believed that:

"I live in Neyshabur .......... I don't want to earn money through gardening........ I feel good when I go to garden with my domestic in the weekend.......... I'm having fun and doing garden work. " (Part-time farmer, sir, 49 year old, Gerinsh, interview 5).

Gaining reputation and searching for the best: buying land and adding to garden, a lot of workers, mechanizing garden, dripping irrigation, and raising the quality of product, in addition to earning more, brings the reputation and prestige and has a social status. One of the people believed that:

"I have reputation here ...... They all know me [because of my business].......... I have worked 67 years old....... It's not too little time to get out of water and soil very well." (Part-time farmer, sir, 67, Chenaran, interview 7)."

Natural and physical characteristics: In plum gardens, water quotas (in some places like Khanlosh); there are agricultural implements and equipment that have lasted for many years to come together and have been worked hard to be prepared. Passing by such privileges has been difficult: where there is not enough land and spreading gardens is far from the mind, so that we can have share of water and facilities.

It should not be forgotten that effect of neighborhood and vicinity of studied villages with city center, namely Nish Pur, on maintenance of domestic gardens is undeniable. One of people believed that:

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"Our village is not far from city [and it has solved close access to facilities] ....... I also work here, and I have kept my father's garden [the property and equipment that is very difficult to collect]........... Most importantly, I have a healthy life ......... besides this, whenever I want to go to city, I can do it........... [Therefore] I do not see any reason to leave land and countryside. "(Full time farmer, sir, 30-year-old, Down Kharv, interview 1).

5. Discussion and Conclusion
We began our research with the question that why we see plum cultivation continuation in villages of Nishabur - despite the sharp fluctuations of market and inevitable global and climate pressures and overall non-economical production. In the following, the strategies for keeping domestic and small scale farms and its embeddedness in Nishabur as guiding line and somehow understanding how to reproduce gardening units was investigated. The obtained results beyond rational action and economic theoretical perspective showed that cultural and social factors play an important role in reproduction and continuity of plum domestic gardens. Of course, territorial embeddedness and ecology - common water and earth resources - and adherence to utilization privileges and its contribution and also its proximity to city, have big effect on survival of gardening. In addition, gardeners believe that monopoly of plum production in the world belongs to city of Nishabur, and the soil and water characteristics of the region are in such a way that it offers a high quality product and its sample is not found anywhere; therefore, we must try to keep this advantage. Unfortunately, social embeddedness in the garden of Nishabur does not allow communication with various actors in the field of gardening activities. Although relatives and neighborhood, domestic strong ties act as a valuable resource for keeping plum gardens, as stated, societies that have strong links have higher incentives and they are more ready to help each other; But with help of Granovetter in networks with strong relationships, such as close acquaintances, there are numerous instances in which members have the same limited knowledge of production, processing, and sale issues. Any new and potentially valuable information often comes from outside group. The channels for entering this information can be a weak relationship, which acts as a bridge between various networks of actors in field of product production and sales. Because of local cooperation's, the production process in Nishabur has been and continues for many years, but always with the lowest interest and profit (So that poverty is institutionalized and continues). Evidences show that no horticultural operations are carried out by specialized companies or by outside persons, such as co-operatives, businessmen, and therefore access to external service knowledge providers for product innovation and, most importantly, financial supply chain and capital is limited. The central role of lack of trust and social capital in gardening systems weakness should not be easily neglected. Nevertheless, the maintenance of domestic gardens in Nishabur focused on the strategy of making the business part-timely. In the meantime, gained revenues from non-agricultural employment and mainly services in gardening sector are invested and provide a good basis for continuation of production process. In the meantime, the Nishabur work market has had a significant impact on non-agricultural employment due to the Khayyam Industrial Park. However, non-agricultural resources could have been deposited as experience by other countries in form of cooperative activities, and granted facilities resulted from this move spend for assignment of some agricultural operations and costs reduction. Getting expertise of operating units and access to the latest technology of harvesting and processing, access to marketing and sales services. In addition, cash subsidies granted to local residents (45,500 toms monthly) are invested without any plan spend on purchasing of consumer goods or in garden, which as other countries experience, could be capital for investing and this encourages gardeners to get a loan, and subsequently buy new and efficient equipment. On the other hand, capital supply chains and the horticultural contract could be a supporter for older people and even newcomers, and eliminate horticulture from recreational and fun. Generally, location-based approaches in form of social and territorial embeddedness have provided a good framework for analyzing how reproducee of small gardens in Nishabur. The findings of present research in Nishabur revealed structural changes in agriculture, and in particular, gardening in rural areas: being part-time create diversity of agricultural and horticultural community; they reveal small and medium-sized landowners, landowners, retirees and limited urban newcomers; and simple communication of gardeners with local actors in field of production (and poor links with outside): the lack of cooperatives and specialized factories in order to supplying capital.
and external companies in order to export. Development planners don't have more than two ways for future planning interventions in condition of overcoming and peasant economic domination to the entire rural community. First, recognizing the present forms of local development that is rooted in culture and social commitments and traditionally surrounded by strong inter-group communication, because by recognizing internal mechanisms and satisfaction of present of production method, the minimum durability of village is guaranteed and Immigration does not occur (Shakesmith and Roningen, 2011, p. 285). Second, eliminating barriers to deconstructing traditional interactions and expanding a social network of gardeners, and communicating with different actors in the field of production and attracting trust of local residents about organizations and external professional companies.

Acknowledgments: We are very grateful to the honorable directors of the Agricultural Organization, Natural Resources, Housing Foundation, and Local Authorities in the counties of neyshabur for their sincere cooperation with the authors of the study. The current paper is extracted from the master thesis of the first author (Somayyeh Soleimani) in the Faculty of Geography and Environmental Sciences, Department of Rurban Planning, Hakim-e-Sabzevari University, Sabzevar, Iran.

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چکنگی بازتولید کشاورزی: شرکی بر راهبردهای بقای باغ های آلوده در روستاهای کوهستانی شهرستان نیشابور

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تاریخ دریافت: 30 دی 1395
تاریخ پذیرش: 14 مهر 1396
تاریخ پذیرش: 14 مهر 1396

چکیده مبسوط
1. مقدمه
ساخت بخش کشاورزی تجاری مدرن همواره از رویکردهای راهبردی سیاست‌گذاران دولتی و متخصصان توجه در دوران پس از جنگ جهانی دوم بوده است. در کشور ما هم از سال 1340 به بعد بخش کشاورزی به جولانگاه آزمون های متوالی در عرصه مهندسی اجتماعی به وسیله نخبگان سیاسی و فنی‌سالارهای دولتی تبدیل شده و در پاسخ به شرایط عالی از بهبود در بخش کشاورزی، تولیدات و خدمات مربوط به کشاورزی به شدت افزایش یافته است. با افزایش تولیدات نیاز به افزایش کشاورزان برای خود راهبردهای تولید و پذیرش زمین بهبودیافته است. در اینجا، از هواپیما، تجربیات سازمان‌های مربوط به کشاورزی و مطالعاتی که در این زمینه انجام شده‌اند، استفاده می‌گردد. به‌طور کلی، دستاوردهای استراتژیک برای کشاورزان و نیز فعالیت‌های بسیاری در زمینه‌های مختلف کشاورزی باید به‌طور مداوم توسعه می‌یابد.

2. مبانی نظری
عجلتاً سه طبقه‌بندی بر اساس خاصیت ویژه و مشخصات کشاورزان به تعریف گذاشته شده است:

1) کشاورزان کوچک مقیاس که در برابر تغییرات و فشارهای قدرتمند، می‌توانند به صورت اقتصادی و سیاسی از دست بکشند.
2) کشاورزان کوچک مقیاس که در مرحله درآمدزایی می‌باشند و دارای میزان درآمد و درجه اجتماعی رو به بهبود است.
3) کشاورزان کوچک مقیاس که در مرحله تکثیر می‌باشند و دارای میزان درآمد و درجه اجتماعی رو به بهبود است.

3. چکنگی بازتولید کشاورزی
چکنگی بازتولید کشاورزی به‌طور مداوم در زمینه‌های مختلف کشاورزی باید به‌طور مداوم توسعه می‌یابد. به‌طور کلی، دستاوردهای استراتژیک برای کشاورزان و نیز فعالیت‌های بسیاری در زمینه‌های مختلف کشاورزی باید به‌طور مداوم توسعه می‌یابد. به‌طور کلی، دستاوردهای استراتژیک برای کشاورزان و نیز فعالیت‌های بسیاری در زمینه‌های مختلف کشاورزی باید به‌طور مداوم توسعه می‌یابد.
یکی داست، زیرا در کشورهایی که سطح بالایی از چندفعالیتی را برای خود انتخاب کردند، مشاهده می‌شود. در کشورهایی چون آمریکا، اروپا و نیوزلند و استرالیا، مواردی از این نوع رخ داده نمی‌رود. برای دریافت این صنعت، نیاز به تحقیق مستقل و استفاده از چندمنظوره از ابزارها و روش‌های مختلف وجود دارد. ۳. روش تحقیق

رویکردی ارتباطی و ارضی در قالب مفهومی بررسی مطرح است. این روش در تحقیقات واقعیت‌ها و اهمیت اصلی، نیاز به تحقیق مستقل و استقلال بودن را نشان می‌دهد. هدف اصلی این تحقیق تجربه‌گیری و تحقیق بررسی نشاندهنده از این نوع رخ داده نمی‌رود. برای دریافت این صنعت، نیاز به تحقیق مستقل و استقلال بودن را نشان می‌دهد. هدف اصلی این تحقیق تجربه‌گیری و تحقیق بررسی

نتایج تحقیق

در مجموع، رویکردی ارتباطی و ارضی در قالب مفهومی بررسی مطرح است. این روش در تحقیقات واقعیت‌ها و اهمیت اصلی، نیاز به تحقیق مستقل و استقلال بودن را نشان می‌دهد. هدف اصلی این تحقیق تجربه‌گیری و تحقیق بررسی

کلمات کلیدی: آلو، باغ، بسترمندی، انگیزه‌های فردی، توجه و قدرتی

از همکاری سوسولان و کارشناسان سازمان های حزب کشاورزی منابع طبیعی، بنا به مسکن و همچنین فناوری‌ها و دیگر منابع و کارشناسانی که در پژوهش‌ها و تحقیقات عملیاتی حضور دارند. پژوهش‌های مختلف برگرفت از پایان نام کارشناسی ارشد، خانه سیاست‌سازی، اقتصادی و علوم محیطی، گروه برنامه‌ریزی، و برنامه‌ریزی بررسی و روستایی انتخاب می‌شود.

ارجاع

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