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Aspects of Weakening Cooperation in the Israeli Moshav

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Abstract

This paper explores the attitudes of members of three moshavim located in different parts of Israel regarding the reasons for the weakening of the cooperation within their cooperative association and settlement. Major reasons include government policy and the inability of the moshav cooperative association to enforce the rules of cooperation. Major internal causes are concerned with conflicting interests of different moshav members due to economic changes, including changes in specific agricultural branches, and issues concerning loans given to farmers. Reasons such as production quotas, employment patterns, and education do not significantly contribute to the weakening process, though there are differences in the importance of these reasons between the three moshavim. Some differences in attitudes were found on the basis of age, education level, and type of agricultural branches. The overall transformation in the economic, social, organizational, physical, and environmental attributes of the moshav raises a major question regarding its future survival as a unique type of rural cooperative settlement.

Keywords: moshav, weakening cooperation, agricultural branches, Israel

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Introduction

The moshav is a rural smallholders' cooperative settlement. Its original goals, formulated in the early 1920s, revolved around egalitarian principles manifested in equal distribution of land and capital among the smallholder units. It was imbued with a collectivist spirit (Schwartz, 1999), expressed among other things in a cooperation system designed to handle joint purchasing and marketing, underwrite loans of individual farmers and the community as a whole, and provide assistance in times of crisis. Operating under a legal status, the moshav is a cooperative association of units that share common economic interests, rights, and obligations (Applebaum, 2002).

Agriculture has been the mainstay of the moshav for many decades, but in recent years its importance in the Israeli economy has declined, as has its support by the state and its ideological appeal. This has led to a modification of income and occupational structures, changes in land cultivation and land holding, suburbanization, loss of municipal autonomy, and the weakening of cooperation among farming households. In this context the aim of this paper is to study some of the underlying reasons for the weakening of cooperation in the moshav, by investigating the moshav members' attitudes regarding past and present processes of change.

The paper begins with a brief summary of theoretical issues concerning changes in the rural space, with a special emphasis on the moshav. This is followed by a discussion of the meaning of rural cooperation and the reasons of its weakening, and then a review of the experience of the moshav in Israel. The third section deals with the farmers' attitudes regarding weakening cooperation and its underlying reasons. The paper concludes with an attempt to place the local experience within a larger perspective.

The Process of Change in the Rural Space

The General Process

Changes in the rural areas of developed economies and the resulting restructuring of economic occupations and income sources are triggered by a number of factors (Bryden and Bollman, 2000; Evans and Ilbery, 1993; Marsden, 1998; Sofer, 2005).

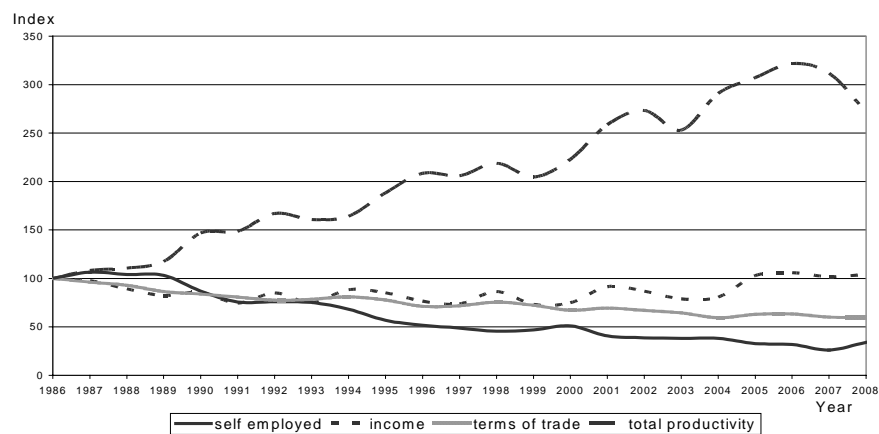
1. Increased efficiency and productivity of the agricultural sector, resulting in reduced demand for labor, coupled with burgeoning food surpluses.
2. Deteriorated trade terms for the agricultural sector. A process culminating in declining net income from agriculture and a decline in the relative importance of agriculture in the national economies.

3. Heightened receptivity among farming households to alternative sources of income, due to the acquisition of vocational training and higher education.
4. Improvement in transport infrastructures and technological changes that have enhanced the relative advantages offered by rural locations and facilitated the access and commuting of rural residents to urban-based employment.
5. Counter-urbanization and suburbanization, which have brought about changes in the demographic and occupational profiles of rural settlements.
6. Regulatory policies that circumscribe the flexibility that farming households need in order to respond to changing economic conditions.

Altogether, these factors lead to a redeployment of rural resources, diversification of rural activities and a shift towards a multifunctional rural space (Holmes, 2006), conditioned, among others, by the distance of the settlement and the farm from an urban hub of employment (Bowler et al., 1996; Sofer, 2001).

All these processes have been operating in Israel and have led to changes and adjustments in the agricultural sector in recent years. In 2007 agriculture contributed a mere 2.0 percent to Israel's GDP, compared with about 4.8 percent in 1980, and almost 20 percent in the 1950s (Ministry of Agriculture, 2009). Productivity has significantly increased in terms of output per unit of labor and capital, and even per unit of water. However, there has been a decline in all other indicators: worsening trade terms, decline in the income derived from agricultural production, and decline in the number of self-employed farmers (**Figure 1**). In 2009 the total number of people employed in agriculture was just under 65,000, about 2.1 percent of the total actively employed in the country, while the majority of rural dwellers were employed in the tertiary sector.

Figure 1: Selected indicators for the agricultural sector in Israel, 1986-2008



The resulting changes can be seen as a restructuring process of both the rural space and the rural community, where new strategies of survival, particularly farm diversification and pluriactivity, have been developed to cope with the changing conditions. The outcomes include the penetration of industrial, commercial and service-sector businesses into villages, and growing rate of commuting to urban centers of employment (Sofer and Applebaum, 2006).

Changes in the Moshav

There are 408 moshavim (plural for moshav) spread throughout the country, comprising about 35 percent of all rural settlements in Israel. The average moshav contains between 60 and 100 family holdings. The amount of land allocated to each farm unit differs according to the region and the dominant farm enterprise, varying between 3 and 15 hectares, but in principle it is equitable within each moshav. The moshav's plan was based on several principles – both ideological and practical (Rokach, 1978; Schwartz, 1999), all of which have been undergoing transformation with the changing reality:

1. The land allocated is nationally owned, leased to the settlers for a paltry sum with an automatic option for renewal or transfer to heirs. Individual farms cannot be divided and can only be transferred as a single unit.
2. Means of production were planned in a manner that would enable the families to carry out most of the farming without recourse to hired labor, and to obtain income solely from agriculture, at a level comparable to that of an average urban household.
3. A system of cooperation and mutual aid was established to handle joint purchasing and marketing, underwrite loans to individual farmers and the community as a whole, and provide assistance in times of crisis. The formal multi-purpose cooperative society took over the management of all village affairs, including municipal matters. Membership in the cooperative society was a prerequisite for farm ownership.

The moshav has been undergoing a series of socioeconomic transformations for the last several years in response to the declining role of agriculture within Israel's economy, the reduction of state support for agriculture, and the attrition of the ideological appeal of the rural settlement system: Modified income and occupational structures, selective migration and suburbanization, loss of municipal autonomy, altered forms of land cultivation and land holding, increased crop specialization and dissolution of cooperative aspects (Applebaum, 1990; Schwartz, 1999; Kimhi, 2009). Some farmers chose to enlarge their scale of operations by informally subleasing land from neighbors who prefer to reduce the amount of land they cultivate, or to discontinue farming altogether. Capital investment increased, mainly in advanced labor-saving technology, while self-labor has been gradually

replaced by wage labor, particularly low-paid foreign labor. Others chose to adopt pluriactivity as the major income-augmenting strategy (Kimhi, 1994; Sofer, 2001). While some family members continue to operate farms, others manage businesses on the property, or work outside of the moshav. Moreover, while the number of members who worked in agriculture in the old moshavim (those established before the creation of the state of Israel) was once higher than in the new moshavim (which are populated mostly by new immigrants), this gap has weakened in recent years (Ben Dror, 2004).

In the last two decades the moshav has experienced changes in the demographic and social composition of its population, as a result of a revised government policy (Applebaum and Rimalt, 1995). An expansion program brought nearly 10,000 new non-agricultural households – an increase of about 35% – into the moshavim in a single decade. Although the rules of the program are the same for all moshavim, the influx of the new households is more noticeable in the near-metropolitan areas than in peripheral areas, and is therefore regarded as a process of suburbanization. The newcomers are young families with a relatively high level of education and white-collar occupations, whose main aim is to improve their lifestyle. They usually establish urban-style neighborhoods with modern infrastructures, which contrast with the traditional rural houses and agricultural buildings.

Altogether, the economic, social, and demographic transformations have an effect on the moshav residents and particularly on the form and degree of cooperation among them. The rest of the paper is dedicated to these issues.

The Weakening of Cooperation

The General View

In the western world the phenomenon of agricultural communities that have a “commons cooperation system” has been gradually reduced in recent years. Commons refers to institutional devices that prevent individuals from having primary decision-making power over the use of resources (Andelson, 1991; Ostrom, 1992). For a commons cooperation system to exist and survive, in our case the moshav association, it is necessary to agree on rules, on the one hand, and sanctions against those breaking the rules, on the other. The commons systems that have sustained are based on awareness that the system's resources are limited (Andelson, 1991; Oakerson, 1992; Vogler, 2000); under this arrangement, the use of resources for an individual does not contradict the interests of the other members of the community (Hardin, 1991). Oakerson (1992) suggested that when the community is small, the commons system will survive because community

members know each other and are therefore ashamed to break the rules, such as in the Hutter communities in Canada and the US (Katz and Lehr, 1999). The existence of homogeneous common ground such as religion, ethnicity, and education facilitates the harmony between the individual and the commons interests. All in all, for the common organization to survive, each member must believe in the value system of the commons (Kanter, 1972; Oved, 1989; Zilkin, 1983). The disintegration of the commons, and in some cases their collapse, is the outcome of three main processes (Kanter, 1972; Oved, 1989):

1. The influence of the external economic and social environment, which is subject to the continuous process of change over time.
2. The difficulty of maintaining the commons rules in a capitalistic competitive world.
3. The change in members' age; the influence of the older members decreases and the young generation has less commitment to the commons rules.

On the whole there is always the risk that the commons systems will not survive because of the difficulty in imposing their rules on individual members due to changes in the economic conditions and social homogeneity, both of which weaken the common interests (Hess and Ostrom, 2001; Vogler, 2000; Zilkin, 1983;). Thus for the commons cooperation system to survive, it is necessary to introduce controlled changes to its rules and to adjust them to the changing economic and social environment.

The General Reasons for the Weakening Cooperation in the Moshav

The cooperative association in the moshav had two major roles: First, supporting production activities through marketing and the provision of inputs and credit; Second, the role of a municipal authority (Applebaum, 2002). With time, and especially since heavy debts became associated with the financial crisis of the mid 1980s, farmers have refrained from using the association's services in an increasing number of cases (Schwartz, 1995; 1999), a move that signifies the decreasing importance of the association and of cooperation. Moreover, the combined tendencies of decreasing number of active farms, increasing farm size for active farmer, increased farm specialization, and increased reliance on off-farm income sources lead to increased heterogeneity and polarization within moshav cooperatives and affected the degree of farmers' will to cooperate (Kimhi, 2009). In general, the major reasons for the weakening of cooperation can be divided into three major groups: internal reasons specific to the moshav, debts and allocation of quotas, and the shift to specialized farming.

Internal reasons. Three types of difficulties characterizing cooperative organizations are relevant to the moshav (Zusman, 1988; Zusman et al., 1989):

- a. Moral risk: Members may invest in risky projects on their farm, knowing that they may be bailed out from failures by other members.
- b. Members may market their products individually, against the initial principles of the cooperative association.
- c. Agency costs: Lenders regard the cooperative association as guarding their interests, and they may be against lending money through the association to members facing economic difficulties.

Indebtedness and production quotas. In the 1950s the principle of “mutual guarantee” was introduced, whereby a moshav member is financially liable to other moshav members (Schwartz, 1995). In the mid-1980s, the collapse of the purchasing cooperatives, the organization that provided loans to the moshavim and the farmers, intensified farmers' difficulties. A large number could not pay back debts, and farmers who were not in debt refused to provide credit to those indebted, or to pay their neighbors' debts under the mutual guarantee principle. Yet, the issue of mutual guarantee was somewhat blurry. It was backed by a state guarantee that operated on two levels: first, it permitted the survival of the principle by covering some of the farmers' and marketing organizations' debts; second, it impaired the cooperatives' control mechanisms on the allocation of credit by promising to cover debts. In time this principle has been abolished in almost every moshav.

Similarly, the policy of production quotas, introduced to support weak farmers and control the volume of production, was faced with a dramatic increase in agricultural productivity, large production surpluses and decreasing producer prices (Gvati, 1981; Schwartz, 1995). The quota allocation within each moshav was arranged by the local cooperative association, which adjusted quotas according to the farmers' production capacity, and transferred quotas from strong to weak farmers when required, or to young farmers who wished to develop their own farms (Schwartz, 1995). Since the economic crisis of the mid-1980s the policy has changed and quotas have been imposed only in the dairy and poultry sectors, leaving all other farmers to compete on the markets.

Farming specialization. With the shift towards specialized monoculture farming (Kimhi, 2009), the interest among farmers to cooperate in purchasing inputs and marketing outputs has largely declined or completely disappeared. Some farmers have extended their activities through sub-letting land from their fellow members, while others reduce their activities to become part-time farmers, or leave agriculture altogether (Shores, 1989; Sofer, 2001). The outcome is that only a fraction of the moshav members are involved in agriculture and they cultivate most of the moshav's agricultural land (Haruvi, 1989; Sofer and Applebaum, 2006). Thus production factors, such as land and water are now unevenly allocated, and

the differentiation between farms has reduced the readiness of farmers to cooperate on production issues.

Altogether, all types of cooperation has diminished significantly in an increasing number of moshavim, due to the decrease of internal mutual interest and the lack of any policy of enforcement by the cooperative association (Grossman, 1996; Schwartz, 1995; 1999).

Farmers' Attitudes towards the Weakening of Cooperation

Methodology

In order to study moshav members' attitudes towards the weakening of cooperation and their interpretation of this process, data were collected by means of a random survey questionnaire from 73 moshav households divided between three moshavim. These represent about 30 per cents of the moshav households that are or were active in agriculture after 1980: 27 households in a moshav in the central region, 29 in the northern valleys and 17 in the Upper Galilee. All three moshavim were originally characterized by high degree of cooperation and mutual guarantee. Table 1 presents the major characteristics of the each moshav. The northern valleys moshav's farms are larger and are mainly operated by their owners compared with the other two moshavim. The farms of the moshavim in the Upper Galilee and the central region are mostly into crops farming on subletting lands, while the northern valleys' moshav is characterized by livestock. It should be noted that there are differences in character among the agricultural branches; for example, dairy farming is capital-intensive and its production quotas enable a stable income along time, while crops are more seasonal and labor-intensive by nature.

Table 1: Number of farms, number of farms operated by owner, farm's size, and the agricultural branches in each of the three moshavim (2007)

Moshav location	Number of farms	Farm size (ha)	% of farms operated by owner	% of farms with activities by agricultural branch		
				dairy	livestock	crops
Central region	148	2.6	36	20	6	66
Northern valleys	90	8.2	77	23	48	11
Upper Galilee.	115	2.0	12	-	10	100

The questionnaire deals with aspects such as farming facilities and production activities, types of land use and non-agricultural businesses on the farm, farms loans and debts, aspects of cooperation, and farmers' attitudes towards cooperation; only a small part of these are discussed below. As usual with such

surveys, we are largely dependent upon the farmers' ability to respond reliably even on issues that are 20 years old. It should be also noted that there are differences between farmers and between moshavim, which averages cover somewhat.

It should be emphasized that the farmers' responses are based on the current interpretation of historical processes some of which are more than 20 years old. The historical interpretation is the view of the interviewees regarding past processes and their outcome. Their responses are more than anything else their perception and interpretation of what has happened since the mid 1980s, what are the major factors that contributed to the changes in the form and degree of cooperation, and what is perceived to be cooperation in the moshav today. Notwithstanding these reservations, and the limited number of surveyed households, we can cautiously indicate some aspects concerning cooperation and its perception.

Farmers' Attitudes

The survey respondents were asked to rate their degree of agreement with each of a series of 17 reasons for the weakening of cooperation in the moshav (Table 2). The degree of agreement was ranked: 1 = do not agree at all; 2 = do not agree; 3 = partly agree; 4 = agree; and 5 = fully agree. The mean values for each reason are presented for the total sample as well as for each moshav, in ascending order according to the total sample. The total number of responses for the various questions ranges from 44 to 63: 17 to 22 in the central region, 17 to 25 in the northern valleys and 11-16 in the Upper Galilee. The means are shown also by age (23 to 29 responses, and 21 to 34 responses for the groups below and above 65 respectively), and by education level (21 to 33 responses and 21 to 29 responses for high school and above high school respectively). A mean of 3 or more suggests agreement with the specific reason.

The reasons can be grouped (Table 2). Thus, reasons 1-3 deal with production quotas, and reasons 4-6 concern employment and education, all of which do not contribute significantly to the process of weakening of cooperation. Reasons 7-11, which are related to conflicting interests among moshav members, scored mean values above 3 suggesting that farmers largely agree with these reasons. The case for reasons 12-16, characterized by the cooperative association's inability to enforce the rules and regulations of cooperation, is similar. The highest mean value was given to the "government policy" reason, an attitude most probably linked to the decrease in subsidies to farmers, increasing interest rates on loans, and the diminishing support – and in some cases disappearance – of the farmers' marketing organizations.

Table 2: Mean level of agreement with reasons for the weakening of cooperation in the moshav, by age and level of education and by moshav location

Reasons	Total Sample (n=63)	Age		Level of education		Location of moshav		
		< 64	65 +	High school	Above high school	Central region (n=22)	Northern valleys (n=25)	Upper Galilee (n=16)
1. Lack of transfer of production quotas among farmers by the cooperative association	2.47	2.43	2.50	2.32	2.63	2.61	2.17	2.73
2. Transfer of production quotas among farmers by the cooperative association	2.55	2.78	2.29	2.55	2.57	2.71	2.45	2.43
3. Distribution of production quotas by the cooperative association without any standard criteria	2.66	3.00	2.32	2.75	2.60	2.78	2.58	2.62
4. Establishment of non-agricultural businesses by moshav members	2.73	2.38	3.14	2.82	2.64	3.42	2.50	2.38
5. The desire of moshav members to increase their agricultural production	2.75	2.67	2.85	2.64	2.89	3.26	2.60	2.29
6. An increase in the education level of the moshav members	2.75	2.72	2.78	2.86	2.69	3.05	2.53	2.55
7. Loans given by the cooperative association without any standard criteria	3.14	3.42	2.83	3.33	2.96	3.21	3.05	3.18
8. The transition from a mixed to specific farm product created conflicting interest among farm owners	3.31	3.15	3.45	3.41	3.21	4.05	3.45	1.93
9. Loans given with high interest rates	3.42	3.81	3.00	3.70	3.23	3.50	3.17	3.64

Reasons	Total Sample (n=63)	Age		Level of education		Location of moshav		
		< 64	65 +	High school	Above high school	Central region (n=22)	Northern valleys (n=25)	Upper Galilee (n=16)
10. The cooperative rules were not suitable to the economic changes	3.42	3.52	3.32	3.39	3.43	3.60	3.39	3.37
11. Marketing of the agricultural products independently	3.49	3.28	3.73	3.63	3.33	3.44	3.52	3.50
12. Lack of enforcement of the cooperatives rules and regulations	3.51	3.44	3.57	3.65	3.36	3.21	3.68	3.64
13. Inability of the cooperative association to collect debts	3.52	3.72	3.35	3.55	3.48	3.05	3.96	3.50
14. Inability to operate sanctions against farm owners who do not comply with the loan terms and disobey the cooperative rules	3.61	3.61	3.61	3.69	3.50	3.10	4.08	3.56
15. moshav members putting their private interest before the public interest	3.77	3.93	3.63	3.81	3.71	3.67	4.04	3.50
16. Lack of loan payment to the cooperative association	3.85	3.90	3.80	3.77	3.93	3.55	4.25	3.60
17. Governmental policy	4.02	4.11	3.93	3.96	4.07	4.06	3.86	4.21

Note: The numbers in the table are mean agreement scores based on the following scale: 1 = do not agree at all; 2 = do not agree; 3 = partly agree; 4 = agree; and 5 = fully agree.

Differences based on age and education (where older people prefer a higher degree of cooperation, and education level may affect the way weakening cooperation is interpreted) were examined as well (Table 2). The four major reasons for which these two groups significantly differ are 3,4,7 and 9. The older members (65 years and over) agreed that non-agricultural activities on the farm contribute to the weakening of cooperation process ($t = 2.22$, $df = 46$, $p < 0.05$), and

the younger members ($t = 2.40$, $df = 48$, $p < 0.05$) believed that the issue of high interest rates on loans is a major factor in the weakening process. Members with a lower level of education were more inclined to indicate loans given without standard criteria and high interest rates on these loans as the major two reasons for weakening cooperation. The differences regarding all other reasons are insignificant.

An observation of the means for each moshav separately (Table 2) shows that in the central region moshav, the reasons related to the shift from agricultural to non-agricultural businesses (reasons 4 and 6) and changes in the composition of the agricultural branches and their size (reasons 5 and 8) contributed to the weakening of cooperation more than in the other two moshavim. This result can be largely explained by the location of the moshav, close to the urban hubs of employment and business opportunities. In the northern valley moshav reasons related to the inability of the cooperative to impose the rules and the sanctions (reasons 13 to 16) contributed comparatively more to the weakening of cooperation. This can be attributed to the fact that in this moshav strong sanctions were historically imposed on rule breakers.

Factors Affecting Farmers' Interpretation

There are a number of factors that may affect farmers' interpretation of the process of weakening cooperation, such as the type of farm they operate and the level of debt they have experienced. The comparison of the level of agreement of farmers in debt with those without debts reveals one major reason on which they differ significantly: inability to enforce sanctions against farm owners who do not comply with the loan terms and disobey the cooperative rules. Examination of the level of agreement of those in debt, by the size of debt is shown in Table 3. The group of those who have low debts differs significantly from the other two regarding the reason "high interest loans". The pattern regarding the other two reasons is fairly similar among the three debt groups. The mean level of agreement of farmers with a high level of debt is lower than that of the other two groups. Thus, it is possible to argue that farmers without debts strongly believe that the inability of the cooperative association to enforce sanctions against farmers who are not willing (or cannot) pay back their debts is an underlying factor in the process of weakening cooperation.

In order to strengthen these findings, it is interesting to examine what moshav members think about the impact of four major elements of cooperation on their farm (Table 4). The degree of influence of each element was measured on a scale of 1-5: 1 = caused significant damage; 2 = caused some damage; 3 = did not cause damage and did not contribute; 4 = positively contributed; 5 = contributed significantly. Therefore, a value below 3 represents a negative influence; a value between 3 – 3.5 represents lack of influence; value of 3.6 and above, which none of the elements reached, represents a positive influence. The findings suggest that for

Table 3: Mean level of agreement, analysis of variance, and post hoc comparisons for the three major reasons for the weakening of cooperation by levels of debt

Reason	Level of debt			Analysis of variance	Significance
	High (a)	Medium (b)	Low (c)		
High loan interest	3.88 ^c	4.11 ^c	2.25 ^{a, b}	F(2,18) = 7.30	< 0.01
Inability of the cooperative association to collect debts	2.30 ^b	4.08 ^a	3.25	F(2,24) = 5.67	< 0.01
Inability to enforce sanctions against farm owners who do not comply with the loan terms and disobey the cooperative rules	2.20 ^b	3.83 ^a	3.25	F(2,23) = 4.67	< 0.05

Note: The superscript letter indicates the group(s) that differed significantly in the post-hoc comparisons.

moshav members, the element of mutual guarantee had a negative influence on their farm, while the other three had a neutral impact. These findings are linked to the fact that the majority of the interviewees had a low to medium level of debt and that they were guarantors for those with high-level debts, with the associated consequences. Further analysis (not shown here) shows differences in impact among all the main three branches – dairy farming, livestock, and crops – for the four elements of cooperation.

Table 4: Mean degree of influence of elements of cooperation on the farm

Element of cooperation	Total sample			Central region			Northern valleys			Upper Galilee		
	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD
Mutual guarantees	67	2.81	1.14	24	2.83	1.20	26	3.15	1.05	17	2.24	1.03
Collective marketing	66	3.30	1.16	24	3.50	1.06	26	3.42	0.90	16	2.81	1.56
Credit allocation by cooperative association	66	3.33	1.11	24	3.33	1.05	26	3.50	1.17	16	3.06	1.12
Mutual assistance	64	3.33	0.74	23	3.33	0.77	26	3.42	0.58	15	3.20	0.94

Note: The degree of influence is measured on the following scale: 1 = caused significant damage; 2 = caused some damage; 3 = did not cause damage and did not contribute; 4 = positively contributed; 5 = contributed significantly.

Comparison between the three moshavim (Table 4) shows that for the Upper Galilee moshav the values express relatively more negative or neutral impacts compared with the two others. The negative impact of collective marketing for this moshav might be related to the fact that most of its agricultural activity is in the crops branches and the individual farmer may be able to gain better revenue by self marketing. Additionally, there is an important role to the purchasing organization to which any moshav belongs. It seems that the moshav in the central region belonged to a more cautious purchasing organization compared with the other two, thus its members debt level was somewhat lower.

Conclusions

Farmers' interpretations of the underlying reasons for weakening cooperation revolve around three main mechanisms: government policy, conflicting interests of moshav members following economic changes and inability to restore enforcement of rules of cooperation by the moshav cooperative association. The shift to specialized farming has increased the risk level that farmers face in their production process; specialization means that different branches have different production interests and much less common interests. Furthermore, in most moshavim the cooperative association is unlikely to allocate credit at favorable terms to the farmers. In this situation, coupled with the unpleasant experience of the farmers in debt, either their own or those of fellow moshav members, it seems inevitable that the will to cooperate will decline. The older members, however, have a higher tendency to identify themselves with the rules of cooperation while the younger ones see cooperation, especially in its original form, as an obstacle to farming and non-farming expansion of operations and to economic success.

Comparison between the three moshavim shows that in the central region moshav, the reasons related to change from agricultural to non-agricultural businesses and changes in the composition of the agricultural branches and their size contributed to the weakening of cooperation more than in the other two moshavim. This result can be explained by its locational advantages and its history of efficient cooperation among farmers. In the Northern Valley moshav reasons related to the inability of the cooperative to impose the rules and the sanctions were found to be a major contributor to the weakening of cooperation. The possible explanation can be attributed to the fact that strong sanctions system against rule breakers historically imposed in this moshav were probably efficient.

The dissolution of cooperation in the moshav seems to be almost complete; not much is left of the original principles. One may argue that some cooperation could have lasted longer had these principles been adjusted to the changing external and

internal conditions. However, it seems that the moshav has lost some of its unique structural and organizational features, based on the original principles, in favor of more flexible frameworks. Notable among these is the transition from the cooperative model of organization to an individual smallholder farming model; from a cooperative association-led settlement to an individual-driven agricultural production. Despite its inherent structural inflexibility, the moshav and its households have found a way to adjust to the changing economic environment by deviating from its original principles. While some of these principles have been relaxed by relevant public institutions, others have been circumvented by moshav households. The resulting mismatch between the formal structure of the moshav and its practical day-to-day operation creates a sense of uncertainty regarding its future, and is one of the sources for a wider public debate among interest groups concerning the future of the Israeli rural space.

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