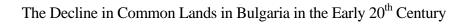




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The Decline in Common Lands in Bulgaria in the Early 20th Century

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## Abstract

Bulgaria has a long history of successful management of common property resources (especially forests and grazing land). The last decades of the 19th century and early decades of the 20th witnessed a breakdown in the institutions and cultures which supported this success, however. In this paper, we draw on interview data from four Bulgarian villages and available published statistical and other sources to develop a preliminary explanation of the institutions which supported the sustainable collective management, and the factors which undermined these institutions. These factors include changing agents' preferences, norms and the payoffs to various actions. We look at the impact of factors including increasing population pressure on land, state appropriation of village land, new possibilities for out-migration and market production, and rising social inequalities in producing these changes.

Key words: common pool resources, Bulgaria

JEL classification: P48, Q15, Z13

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I) Introduction

A significant literature has emerged in the past two decades on common pool resources (exhaustible, renewable resources, access to which is costly to limit due to size and/or collective or poorly defined property rights) (Ostrom, 1990, Taylor, 1987). This literature has focused on the institutional frameworks which make it possible to exploit such resources in a sustainable manner, and conditions under which previously sustainable practices may be undermined. The case of village common lands, or selski meri, in Bulgaria during the interwar period presents an interesting and little investigated case of common pool resources which, apparently<sup>1</sup>, had been used sustainably over a long period. However, during the interwar period the amount of land held as selski meri declined significantly. What changes led to the erosion of this common pool resource?

In this paper, we draw on interview data in three Bulgarian villages, as well as other (including legal) documents related to the selski meri, collected in local and national archives to investigate this question. We find that reasonably good conditions existed for the sustainable use of common grazing lands in the early 1900s. However, land fragmentation raised the payoffs to villagers for privatizing these lands, while there appear to have been few incentives for punishing such defections. Changes in state policy during the period clearly supported the reductions in the common pool resource base, but do not seem to have created it.

#### **II**) Theoretical Framework and Hypotheses

Problems of common pool resource use are often presented as a prisoner's dilemma. Because the resource is commonly exploited by individuals, costs of use are diffuse while benefits

<sup>&</sup>lt;sup>1</sup> We say Aapparently<sup>®</sup> because we have not yet located high quality data on changes in the extent of common pool resource use in Bulgaria prior to the interwar period.

are concentrated. Each individual, acting rationally, will choose to over-exploit the commonly owned resource, leading to the common property being an unsustainable form of ownership.

This sad story about the human condition has been countered by economists and political scientists over the past few decades. While common pool resource use may be unsustainable when individuals have "high discount rates and little mutual trust" and lack "the capacity to communicate, to enter into binding agreements, and to arrange for monitoring and enforcing mechanisms," these conditions are fortunately not ubiquitous. Instead, the newer literature finds that common pool resource users often communicate effectively enough to construct elegant institutional frameworks which can successfully foster sustainable use.

Empirically, what kinds of institutions contribute to successful outcomes? From a multitude of case studies, Ostrom distills six conditions: 1) Users are a clearly definable group, 2) users have an organizational framework through which they can devise and agree to a simple set of rules, 3) enforcement is shared by appropriators and appointed "officials", 4) the users= organization has a mechanism to adapt rules, 5) appropriators are legally recognized as owners of the resource, 6) other, especially more powerful organizations view the organization as legitimate. Ostrom notes that rapid, exogenous change can often undermine these conditions (Ostrom, 1992:304).

This literature makes a strong case that, under the right institutional conditions, individuals can overcome collective action problems and manage local resources in a sustainable way. Some of the institutional arrangements Ostrom has studied, including those in such industrial capitalist countries as Switzerland and Japan, have effectively managed resources for as long as 1000 years and continue to do so.

However, these designs, like other human constructs, can also break down. Even the most robust institutional frameworks may cease to function, in the face of substantial and rapid external changes. These changes may disrupt the institutional equilibrium by changing agents' preferences, norms, or the payoffs to various actions. New possibilities for out-migration or rising social inequalities, for example, may reduce the threat of retaliation against defectors (see Ostrom and Gardner, 1993 for an especially interesting study of the impact of changes in agents' relative power on common property management; also Oakerson, 1992), while technical change or new opportunities for marketing output may increase the payoff to defection (McKean, 1992:69).

Such an externally induced shock may not result in the collapse of the common property regime if satisfactory rule changes can be engineered. Whether the necessary rule change will occur will depend on the perceived costs and benefits to agents of the change. Those costs will include costs of organizing other agents to implement the change, the costs of collecting information needed to evaluate the change, and the constraints on change imposed by external political regimes (Ostrom, 1990:191). Ostrom finds that success is most likely when: appropriators share a common evaluation of harm resulting from failure to adjust rules, rule changes will effect agents equally, the value of continued access is high relative to information, enforcement and transformation costs, norms of reciprocity exist, and the appropriators' group is small and stable (Ostrom, 1990:211).

#### III) The Bulgarian Case: Selski Meri

The term "meri" comes from Turkish, where it refers to land owned by the state, but set aside for general, collective use by the population. Whether Bulgarian common lands date to the beginning of the Ottoman Empire or earlier is subject to debate among Bulgarian historians (P. Stainov, 1959; F. Milkova, 1970; E. Grozdanova, 1979). During the centuries from 1400-1700, the common lands were not subject to cultivation, individual use or sale.

The extent of village lands was officially established in the 16<sup>th</sup> century, but after that lands were increased by purchase by the village from the state (E. Grozdanova, 1979). In the Land Law of 1858, the state reiterated that village lands were not for sale, nor could they be cultivated or used for houses or gardens (F. Milkova, 1970). Instead, land was to be used collectively, by members of village, for grazing purposes. Perhaps this legal clarification suggests that there were already some

tendencies among villagers to encroach on this land during the Ottoman Empire. During this period, (despite the law) the lands were also subject to illegal appropriation by Turkish feudal rulers, and from the 1800s onward, the land was used by the central state to satisfy land claims of immigrants, war refugees, and the increasingly land hungry Bulgarian population. In the 19th century, for example, Circassian and Tartar immigrants were settled on the land (Grozdanova).

Making sense of figures on the size of meri is exceeding complicated: the size of country changed, some figures include all pastures along with the selski mera, some include village forests, and so on. The State Statistical Office provides one set of figures, which appears to include all municipal lands (forests in addition to meri). According to this source, at the end of the 19th century, municipal lands made up an estimated 29% of total land, while state and other "social" organizations controlled 13%. Other official data, which measure only pastures but include not just meri but also pastures owned by other entities and individuals, find 9.7 million decares in 1897 (Statisticheski Godishnik, 1911; 1914). (These numbers are approximately consistent with estimates of selski mera alone in 1868--10 million decares) (S. Botev, I. Kovachev).

At least in some parts of Bulgaria, the meri appear to have been central to household economies of the period. Households combined small-scale agricultural production on small private plots (owned or share-cropped) with collective grazing on common lands. Grazing far outstripped individual household needs. In 1870, the 116 households in Banitsa owned 2500 cattle and buffalo and 15,000 sheep and goats (22 and 129 per household, respectively). These animals provided food for Ottoman soldiers, and an important cash crop to local households. Given the small size of average land holdings, however, their production would have been impossible without the meri.

If the extent of village lands increased after the 16<sup>th</sup> century, and seems to have faced some tendencies to encroachment in the 19<sup>th</sup> century, more significant reductions of municipal land holding appears in the early 1900s. By 1908, municipal lands as a share of total land had fallen from 29% to 25%, (and other social land had fallen to 9-10%), at the expense of growing private land

holding, which increased, from 41% to 48% of land. Total pasture land fell from 9.7 to 9.1 million decares. Despite a net loss of territory after the First World War, a 1922 figure suggests about 9.2 million decares of mera. (Mera lands in the lost territories were probably offset by mera land coming mainly from newly annexed territory of Macedonia, as well as land taken from forests and other institutions). But by 1932, most sources suggest only about 4 million decares of selski meri remained (S. Botev, I. Kovachev, Bulgarsko Stopansktvo,1941).<sup>2</sup> In 1941, the Ministry of Agriculture and State Property reported a further 30% decline in (total) grazing area between 1935 and 1941.

### IV) Explaining the Changes:

A number of factors appear to be at work in the erosion of Bulgarian institutions of common resource management. Below, we consider several possible explanations for this decline. One possible explanation has to do with increasing population pressure on the land. Increasing scarcity of private household land may have raised the relative payoff to defection from the rules (marginal returns on additional land were very high) to such an extent that enforcement became impossible (one Japanese case reported by Ostrom (1990) faced this problem). Alternatively, as the population grew and more and more households added sheep to the commons, the rules may have ceased to ensure sustainability. At that point, defection would have become rational for all. If this is the case, the destructive impact of population pressure on common property management was not <u>inevitable</u>, but resulted from inadequate institutional adaptation.

A second cause of dissolution, might be found in the increasing integration of the Bulgarian economy into world markets. Access to global markets may have greatly increased the payoffs to plant cultivation by private appropriators, making defection from common grazing too lucrative to

<sup>&</sup>lt;sup>2</sup> But see also Statisticheski Godishnek, 1939, where clearly other land types were included in the figure.

resist. At the same time, increasing access to income-earning activities outside agriculture and rising inequality and mobility associated with this development may have made effective retaliation against defectors more difficult.

A final possible explanation, emphasized by Ostrom's framework, might be the villages' inability to sustain clear ownership rights over the commons in the face of claims by the central state. Appropriation of common land by the central state could have reduced the resource base below that sustainable under existing rules, setting off a reaction of defections. In addition, the state's legal right to interfere could have been used to promote the privatization of village land, either by commercially-oriented producers in the village when plant cultivation became more lucrative, or by the more numerous poor households as landholdings became smaller and more fragmented.

To examine the dynamics underlying the erosion of meri lands, we gathered data on relevant laws from the period, and carried out village studies in 4 villages in Bulgaria in 1995. These villages were chosen to represent a variety of conditions, including topology and proximity to urban areas. To understand patterns of common pool resource use in Bulgaria prior to World War II, we interviewed older village residents about their memories of mera lands and their use. We also searched local archives for documents related to these lands. In this paper, we draw primarily on the study of Banitsa, a village in the North-Western part of Bulgaria, about 20 km north of Vratsa. During the period of interest, most of the population of Banitsa was engaged in small scale agriculture, and most households relied on municipal property as an important input into this small scale production.

First, we consider changes in the official legislation regarding village lands during the early 1900s. Beginning in 1904, laws appear which impose centrally defined order on the use of the land and open up a legal channel for encroachment on the meri. They focus mainly on the issue of tilling of municipal lands. Although this was prohibited up until this point, legislators argue that there was

a serious problem with illegal tilling. By opening some legal opportunities for the tilling of municipal lands, they hope to control and rationalize such use. Over the period up to World War II, common grazing on the meri remained little regulated by the central state. Of course, local use often deviated from that defined by law, not least because the regulations changed quite frequently! The1904 law, v must be called of all producers (broadly defined to include any engaged in agricultural production with their own property, even if this is only a garden and livestock<sup>3</sup>). If the meeting approves division of the common, the separated portion must be divided evenly among all producers, and they must pay the municipality for it<sup>4</sup> over a period of three years. The division is subject to approval by district officials and finally by the Ministry of Agriculture. This law seems oriented to providing an order to existing encroachments of village land, but does little to protect land which is not officially distributed. One exception is the provision for a special ministerial commission which must approve the final division, confirming that it will not impede use of the remaining mera for common grazing. Access by livestock to water and travel paths must be maintained after division.

The 1907 law suggests that the 1904 law did not stop the illegal encroachments, however. It adds an article stating that in cases where massive incursions continue, the state can, without the permission of inhabitants, simply divide the land among producers. This law also begins the practice of regulating what is done on the divided mera lands. It requires that part of the distributed land be in consolidated parcels for use as improved pasture.

The law of 1910 and its amendments in 1912 and 1937 make some attempts to protect remaining municipal lands and further regulate the use of divided mera lands. One major change is that lands separated from the mera and divided for cultivation are no longer to be sold to producers, but only distributed for use. Under the 1910 law, the lands could only be used for the production of fodder or as improved pasture, but this article was dropped in 1912. Payment for use could only be

<sup>&</sup>lt;sup>3</sup> Teachers and spouses get half shares.

<sup>&</sup>lt;sup>4</sup> More precisely, the initial law divided revenues between the state (2/3) and the village (1/3) (Stoyanova, 1993). However, a 1907 amendment superceded this, and specified that all revenues return to the municipality.

imposed by resolution of the municipal council; otherwise use is free. Additional provisions were made for the renting of land to poor households. This law may have staunched somewhat the outflow of lands from municipal to private property, but it did little to protect common use.

To protect commonly used lands, the 1910 and 1912 laws clearly define the acceptable uses of lands: collective grazing of animals, division among inhabitants for cultivation (rental or sale) or use for the construction of municipal chitalishte, under a special law. The 1910 law required that municipalities measure and define boundaries of their municipal lands. This was to be done by a special commission of a state or okrug-level agronomist (commission president), the municipal mayor and his assistant, and 3-7 people representing the local population. The mayor, under the guidance of the municipal council and state agronomist, was made responsible for protecting meras from encroachment (by cultivators), fining the perpetrator. A specific, centrally defined regulation is also imposed on the common grazing use: The law specifies that grazing is free, unless a per head fee is approved a referendum of the municipal population<sup>5</sup>.

This legal situation remained fairly stable (although minor refinements continued to be passed) until 1943. The 1943 law excluded the local producers from participation in the decision to divide the commons, leaving this to the municipal council and the state district and ministry officials. The law further restricted the separation of mera lands for tilling to those households having fewer than 50 dk, and required (again) that they be used to support livestock production.

In Banitsa, the first reported measurement and description of municipal lands took place in 1901, that is, before the 1904 law requiring such measurement. Further measurement and redefinition took place in subsequent years, following the evolving legal protocols. The common lands reportedly originated at the time of the collapse of the Ottoman occupation (1878). The Village Meadow was reportedly purchased from the departed Turkish owner by villagers, specifically for common use by the village population.

<sup>&</sup>lt;sup>5</sup> A 1937 ammendment to the law allowed one additional use—by the Ministry of Defense.

In the period recalled by the local residents, municipal lands were divided into three categories: lands under cultivation, the village meadow, and common pastures. Part of the village land was, as permitted under central state law, distributed to individual households for cultivation. A precise link between local use and state law is a bit hard to see however. Informants report that land was distributed to land poor households (in conformity to the 1943 law) for a nominal fee, and that all others (except the most land-rich households) could rent land through an annual auction, providing an important source of revenue for the municipality. Apparently even the separated municipal lands could not satisfy the demand for land for private cultivation, however. Villagers refer to a rotation, such that when the three year use period expired the land would be allocated to another family, (perhaps they just rotated to even out quality?) and complain of favoritism on the part of the mayor in allocating this land. Another share of municipal land (the meadow) was used mainly to provide hay for the village bull.

Remaining mera land was used collectively by village households for pasturing throughout the year. But other sources of grazing land were also available. All land<sup>6</sup> was available for common grazing once crops were harvested, making private land into "social land" for this period. There was also pasture land available surrounding the village that "belonged to no one" (unlike mera land, which was clearly understood to belong to all villagers) and was likewise available to all.

In Banitsa, it is not clear how much the users participated directly in the management of mera lands. According to Alexander Hristov, "a narrow circle of people (the municipal council and mayor, presumably), they took the decisions. Whatever they decided, that's how it was. It was said that they followed some orders. We have not taken part in how the municipal land would be controlled or used." Georgi Kumovski also reports "we have not participated." At the same time, however, he and other interviewees note that they attended large numbers of village-wide gatherings: "I went a lot. It wasn't mandatory, but the people were curious and were close to the

<sup>&</sup>lt;sup>6</sup> In the case of Banitsa, this also includes municipal forests which were apparently mainly used for grazing.

people in power and the people in power paid attention to them" (Tsvetkov). At these meetings, (we) all "raised our hands and voted" (Kunovski).

Generally, in Banitsa through the village General Assembly, villagers seem to have participated in decisions such as whether to auction land for private use or when private land would open for common grazing. On a daily basis, the mayor and his assistants (elected on a neighborhood basis) seem to have been the decision-makers, but extensive consultations with local residents also appear to have been the norm .

The common grazing land appears to have had (needed) little management. Interviewees report that local use was governed "by traditions." Fees were assessed for grazing on a per head basis, depending on the type of livestock, and paid to the Municipal Council. Control of grazing is not otherwise mentioned by interviewees, except in the case of illegal grazing on private land in the crop-growing season. In such cases, enforcement was through both shaming (violating animals were taken to a central location, where they could be viewed) and fines. There are no reports of individuals grazing more animals than they had paid for, perhaps because the small community permitted easy verification, or perhaps because grazing land was not in short supply relative to the number of animals households wished to graze, making enforcement a low priority.

One question is whether this land meets the definition of Common Pool Resource. There seem two ways to how to understand property rights to this land. One way would be to consider all municipal lands as limited-access<sup>7</sup> common pool resources. Control of the sum of municipal land is, up to 1943, in the hands of the municipal General Assembly. They must decide whether to divide part of the land for private use, they allocate part of the land for maintaining the bull (which they commonly use), and they use the remaining part collectively, for grazing. But all three parts can be understood as collectively managed, with chosen uses including some unconventional (private) forms.

<sup>&</sup>lt;sup>7</sup> As distinct from open access—use was limited to residents of the municipality.

Alternatively, we could understand these lands as the property of a juridical person, the municipality. In that case, perhaps only the pasture lands are a CPR—the municipal authorities allocate this part to local producers, and they use it and manage it collectively, through the Municipal Council and General Assembly. Or, perhaps even those are just municipal property, on which the municipality charges a user fee.<sup>8</sup>

The local population seems to have had a mixed perspective on this issue. On the one hand, some interviewees describe municipal land as that which is used by the village as a whole, *either for common grazing or for temporary use in cultivation*"-"that land which is not private property<sup>9</sup>." Others made a definite distinction between municipal land (which was managed and rented out to producers by the municipal council) and "mera," the latter being defined as "the land surrounding the village which is used for grazing: common land." The "selska zemia" was accessible to all local inhabitants and was not managed by anyone in particular. The rules for its use derived from tradition.

Except under the most extreme interpretation (which does not seem to be supported by local understandings), the collective grazing land at least can be seen to meet the definition of a CPR. It is its (changing) use which we will analyze below. Did the grazing lands historically seem to meet Ostrom's requirements for sustainability?

It would appear that the Bulgarian village lands did meet a number of Ostrom's criteria for sustainable collective management, although the extent to which they did so appears to vary significantly by locality. In Gaitanikovo, (in the Gotse Delchev region) (Kozhuharova, 1992; Bogdanova, 1992) villagers participated in both the definition and enforcement of the rules of

<sup>&</sup>lt;sup>8</sup> In either case, we see a CPR-in-transition. In the period under examination here, governance of the municipal lands includes some forms of excludability: payment, fines. Over time, we see this moving a step further when part of the mera land is distributed to private individuals to cultivate as they please and finally the ability to purchase it. This completes the process of defining the property rights over these lands that were formerly CPRs.

<sup>&</sup>lt;sup>9</sup> In many cases, there is a lack of clarity in the minds of most residents about the distinction between land which is owned by social institutions (church, school, monastery, etc), by the central state and by the municipality itself.

appropriation. The law was reviewed annually by the village General Assembly and then signed by all attending. The annual revision should also have created a certain potential for adaptation in the face of changing conditions.

In Banitsa, participation seems to have been less active. Still, the villagers 1) were a clearly defined group of users, 2) had an organizational framework through which they could devise and agree to a simple set of rules (the elected neighborhood members of the Municipal Council and elected Mayor), 3) shared enforcement among appropriators and appointed "officials" (who could report illegal grazing or encroachment, to be punished by fines), and 4) had a mechanism to adapt rules (regular meetings of the General Assembly).

One difference between the Bulgarian case and those more frequently analyzed as CPRs is that the main form of defection is private appropriation of the resource base (the land), as opposed to excessive private use (exhaustion). The defection is driven by the same calculation as defections in other CPR models, however—costs of shrinking the resource base through encroachment are diffuse (spread over all users) while benefits are concentrated (in the encroaching household).

As encroachment increased in the early 20<sup>th</sup> century, why did some villagers not use the existing institutional framework to punish defectors and protect their common property? We consider the three types of explanations listed above, focusing on the relative responsibility in decline of meri of both state and villagers.

Given the outpouring of state laws and regulations related to selski meri over the period 1903-1945, the role and interests of the state in changing mera use must be considered. Above, we outlined two ways that the state might have contributed to decline. One way was through state appropriation of municipal lands. If such appropriations reduced the local common pool resource base below what could be used sustainably by municipal households, this could have set off a rash of defections—attempts to privatize land since collective use was no longer sustainable. Alternatively, local interests could have used the state to make institutional changes which disrupted the

sustainability of common use, again setting off a rush of defections.

Among Bulgarian historians, there is a great deal of finger pointing at state appropriations as the cause of mera decline. By late 1932 (although the start date is not clear), the state appropriated an estimated 2.5 million (of the 10 or so million) decares. In the early 1920s, the peasant-led BZNC government took municipal land for use in its agricultural reform. Other governments used municipal lands to create funds for "landing" landless households and for resettling refugees (about 4 million decares in 1932). Other municipal lands were taken for schools, and to support state cattle breeding and a state fodder reserve (S. Botev, I. Kovachev). Clearly, the numbers are inexact, because they add up to almost all the mera lands! Still, this illustrates in likely heavy impact of state appropriation on the institution of selski meri.

State interests in protecting common grazing lands are not clear. On the one hand, state documents suggest that the state was greatly concerned with the *protection* of common grazing lands as a basis for cattle breeding. Legislative changes defining a legal basis for private appropriation are said to have originated in concern that spontaneous appropriation would undermine grazing, and various aspects of the laws support this argument. At the same time, however, the state seems to have had an important interest in expanding crop (especially grain) production. Over the period from the 1900 to 1911, grain production expanded rapidly in Bulgaria, rising by one-third. Over the same period, sheep production rose 7%, while cattle production declined. In 1911, grain exports made up 11% of total exports, and the Prime Minister pushed for an emphasis on food processing in Bulgaria's industrialization strategy. But by the 1930s, grain exports had fallen to less than half of their 1908-1911 level (Lampe, 19xx;yy).

Still, there is little evidence that state actions left the villagers so little grazing land that collective grazing became unsustainable. In all of the interviews and scholarly papers on mera lands and use, nowhere did we find any suggestion of increasing overgrazing and exhaustion of lands.

Since state legislation seems to have responded to existing tendencies for spontaneous,

illegal encroachment, perhaps the dynamics underlying mera erosion originate with changes in the behavior of producers. Increasing scarcity of private household land or access to global markets may have raised the relative payoff to defection from the rules. Alternatively, as the population grew, the existing rules may have ceased to ensure sustainable use of common grazing areas. Finally, increasing population mobility or rising inequality among villagers may have made effective retaliation against defectors more difficult.

There is certainly evidence that encroachment exceeded the mera partitions permitted under the law. In 1912, in accordance with the 1910 law, a Commission was sent to Banitsa to measure the mera and compare its size to the official 1903 estimates. The Commission was made up of the regional agronomist-administrator, the municipal mayor, his assistant, and five representatives of the local population. The commission found 109 illegal takeovers, constituting about 900 dk<sup>10</sup>. Most of the illegal takeovers (about 70%) were of small amounts (2-6 dk), but there were also some very large takeovers (one of 60 dk and one of 80 dk). Lands deemed to have been taken illegally were returned to the municipality. The Commission document was signed by all members of the Commission, but notably the representatives of the local population signed the document "with a particular opinion," meaning that they disagreed in some way with the findings. Possibly they did not agree with the evaluation of which lands had previously been mera lands, possibly they had a different understanding of the legal basis for privatization of mera lands, or perhaps they were the ones who had grabbed the large parcels!

The next available official review of the mera took place in 1932. In this case, only the Municipal Council, the Mayor and his assistants perform the evaluation. Only 68 illegal seizures were reported, ranging from about .10 dk to about 10 dk. It thus appears that the tendency toward illegal encroachment may have been reduced in the period 1912-1932. Alternatively, perhaps the

<sup>&</sup>lt;sup>10</sup> In 1945, the mera lands were measured at 2080 decares. Even assuming that the mera declined by half in the period 1912-1945, illegal takeovers of 900 dk would appear to be a very significant incursion!

purely local commission was simply less likely to report all encroachments (there is some evidence of this below). Those found to have illegally seized land were either to return the land or purchase it from the municipality. Again, significant disagreement is registered with the findings. While the Mayor, his assistant and 6 Municipal Councilors sign without comment, one Municipal Councilor signs with a particular opinion, another signs but notes disagreement (he feels that illegally appropriated should not be sold, but returned to the municipality), and another refuses to sign at all. A final Commi on seized land, or if the seizures dated back to the early 1900s, land was to be purchased from the municipality. This document was signed without comment. Interviewees from Banitsa confirm increasing loss of mera land to cultivation. Todor Tsenkov, for example, reports that when he was a child, common pasture was "huge." After the 1912, he reports that mera lands were increasingly divided for cultivation.

Interviewees from Banitsa point to local dynamics underlying the reduction in common grazing land. Angel Benchov reports that "if you were 10 dk short and you needed to feed your family, you would add some land to yours..." Another interviewee, Alexander Hristov, notes that the municipality itself also contributed to reductions in the mera. He claims that his father received some land in 1920 at a municipal auction, where land was sold to raise money for the chitalishte. However, this land was eventually returned to the mera after central government officials found the sale to be illegal.

Rising pressures to encroach on mera lands could have resulted from the evolving structure of Bulgarian land holdings. In the eight years from 1926-1934, the share of holdings under 5 ha rose from 57% to 63%, while the share over 10 ha fell from 15% to 11% (Lampe and Jackson, 19XX). By 1946, 69% of farms were less than 5 ha. Most households were engaged in small-scale farming, mainly for subsistence, with most private land planted in staples of wheat and maize, which were needed for household use and to feed livestock during winter months. With farm size falling, marginal returns to appropriated common land (and payoffs to defection from common grazing use)

would have been rising.

While feeding the family probably also included sideline commercial production, commercial production remained relative weakly developed in most places. When grain production expanded in the early 1900s, marketed production expanded much less slowly. Requisitions and price controls during World War I and falling international grain prices in the 1920s CHECK further discouraged expansion of commercial production, and agricultural prices did not recover for decades. From 1936-1938, producer prices for Bulgarian crops remained at 66% of the 1926-1930 level. Still, some specialized commercial farmers clearly existed in some places (recall the appropriation of 50 and 80 dk plots of common land in Banitsa). Thus while rising commercial opportunities seem unlikely to have been the most important force underlying encroachment, there seems to exist a common interest among both poorer and better off households in moving mera land into private use.

While interviewees and historical documents make no mention of degradation of common grazing lands in this period, changing relative payoffs to cooperation (maintaining land in the common pool) and defection (appropriating it for private use) could also have been driven by falling payoffs to cooperation. Between 1926 and 1934, the number of livestock owned by Bulgarian households fell dramatically, from an average of 4.12 cattle and 19.16 sheep, to 2.75 cattle and 17 sheep (Statisticheski Godishnik, 1939). Despite the significant fall in the quantity of available grazing land, falling livestock production and other available pasture areas (which included private land in the off-season and marginal land that "belonged to no one") meant that common lands continued to be sufficient to meet the needs of the municipal population. Costs to defection, even aggregate social costs (as opposed to costs to the defecting individual), were low—perhaps so low that there was little incentive to punish defectors. Overall, the land was more valuable to many villagers if used for cultivation than if used for pasture.

There also appear to be a number of important interactions between state and villager

behavior in the period. Changes in state policy may have reduced the potential for villagers to punish defectors (illegal appropriators). By providing legislation which first legitimated private tilling of municipal land (subject to the approval of the local General Assembly) and later legalizing sales (privatization) of such lands, the state may have made it more difficult for local opponents of privatization to monitor and punish illegal encroachments, either because boundaries of common land became less certain or because the new laws created cultural legitimacy for previously unacceptable practices. The one comment by the Banitsa resident who refused to sign the protocol on illegal encroachments (see below) suggests that this dynamic may have played a role. He maintained that the protocol illegally recognized as private certain mera lands

Discussion of the Commission reviews and protocols also suggests impacts from the specific ways that the state did or did not enforce legal guidelines for municipal land use. When the 1912 review found a number of encroachments, the illegally appropriated land was returned to the municipality. The next review found fewer and smaller illegal appropriations, perhaps as a result of previous state enforcement of common property rights (or not; see above). But in 1912 the local commission allowed purchase of the illegally appropriated land, thus sending a signal that if you successfully appropriate you might become the legal owner eventually. Perhaps villagers responded to this signal-- the next review showed a great number of illegal appropriations of municipal land.

#### V) Conclusion:

New theories of collective action and studies of small scale common property resources emphasize that institutional structures, if properly formulated, assist populations overcoming collective action problems. Unfortunately, these cultures may be undermined by rapid and/or extensive exogenous change. Our study of the case of Bulgarian municipal lands suggests that a combination of diminishing value of the village lands under the pasture use regime compared to alternative uses, and state action, i.e. policy reform endorsing land privatization contributed to the erosion of the common pool resource base. We find little evidence, however, that this erosion contributed significantly to the degradation of remaining common pool resources prior to World War II. While reduced in size, the common grazing areas remained sufficient to support (declining) traditional use by the user populations.