

# From Power Misuse to Leadership in Bulgaria's Irrigation Sector<sup>1</sup>

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## 1 Introduction

Irrigated water and irrigation infrastructure are common-pool resources. Common-pool resource scholars have advocated taking distributional aspects and power relations into account when analyzing institutional change in common-pool resource management (Meinzen-Dick et al., 2002, p.652; Agrawal, 2001, pp.1650-1656). The way benefits are distributed among various actors is decisive, and the respective political weight of the latter can influence the likelihood of institutional change (Baland and Platteau, 1998, p.649). When social dilemmas are solved and new rules implemented, some people benefit more than others. Indeed, some may even benefit at the expense of others. Empirical evidence from Bulgaria supports the view that local actors use power asymmetries to maintain their benefits. Ostrom (2007, p.190) points out that, in contrast to the early stages in a process of collective action, inequalities in distribution of benefits may, however, reduce trust and cooperation later in the process.

It is a balancing act between leadership needed to start off collective action and the misuse of power that leads to personal benefits but decrease in trust, producing a downgrading effect on collective action, or in short destructive leadership. Ostrom (2007) posits in her theoretical framework variables affecting the likelihood of undertaking diverse forms of collective action leading to positive or negative results for others. The core relationships affecting cooperation are between reputation, trust, and reciprocity. In turn, eight structural variables influence these core relationships – one of them is the “heterogeneity of participants”. On the one hand, in the early stages of a process of collective action, some

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inequality is needed to simulate movement. On the other hand, in a later stage, heterogeneity of participants' interests and endowment can lead to power misuse, a cycle of opportunism and reciprocal distrust. This hampers in the end collective action. This contribution tries to shed light on this relationship between heterogeneity of actors and various forms of leadership.

Empirical evidence from a case study of Bulgaria's irrigation sector will show that various transactions in the irrigation sector, particularly the foundation of a water user association (WUA), and related decisions are affected by power misuse. The transactions show signs of destructive leadership. An open question remains, what determines whether a process is characterized by 'positive' leadership or 'destructive' leadership.

In the empirical part of this paper, I will highlight the incongruity between formal and effective rules as a transition-typical feature and one environmental determinant for the evolving of destructive leadership. The empirical material highlights that the incongruity of rules enables heterogeneous participants to misuse power asymmetries and, thus, maintain opportunistic strategies. Thereafter, I will present direct empirical evidence for low level of trust in formal actors and perception of corruption. This is typical for an environment where destructive leadership can evolve.

Regarding these empirical results, the paper continues to discuss the need of some heterogeneity, such as the appearance of well-educated and connected leaders to start the process of local cooperation. Yet, the remaining challenge is how to facilitate leadership in early stages of a collective action process without encouraging power misuse of individuals at a later stage.

## **2 Heterogeneity of actors**

The links between heterogeneity and collective action are complex (Heckathorn, 1993). A direct relationship between heterogeneity and the success in collective action is difficult to grasp (Vedeld, 2000). In general, heterogeneity can either facilitate or impede the process of social cooperation, for which there is the need to differentiate between particular forms of heterogeneity.

In line with Poteete and Ostrom (2004) who also opt for sorting out and conceptualizing various forms of heterogeneity, Veldeld (2000, p.3) distinguishes between five forms of heterogeneity.

- 1) Heterogeneity in the agreement on the legitimacy of the leaders,
- 2) in endowments (unequal access to land and common-pool resources),
- 3) in wealth/entitlements,
- 4) in economic interests,
- 5) in culture.

Veldeld (2000) concluded that collective action is often enhanced by political elites and leaders being a bit better endowed and a bit wealthier than the average community members. In addition, the degree of heterogeneity among political elite groups is of particular importance. Moreover, there is a need to distinguish between various forms of heterogeneity and its links to other characteristics, such as group size (Keohane and Ostrom, 1995; Poteete and Ostrom, 2004), contribution costs or characteristics of the resource (Heckathorn, 1993) in explaining collective action. Some forms do affect collective action positively, others negatively. Institutions can mediate the effect of some forms of heterogeneity either by compensating for or minimizing heterogeneity, for instance the design of institutional arrangement to cope with difference in location of member households (Poteete and Ostrom, 2004, p. 448). Extreme asymmetries in resource endowments among actors can imperil the success of decentralization efforts (Blomquist et al., 2005, p.9). But this general statement has to be qualified in one respect. When scrutinizing the influence of heterogeneity of participants, one has to differentiate between the early stage in a process of collective action and its later stages (Ostrom, 2007), see Figure 1. Some inequality of resource endowments is necessary to facilitate initiatives, by enabling some actors to bear the costs of taking a leadership role (Balland and Platteau, 1995, p.19). Those with greater endowments are willing to bear a disproportionate share of the initial costs of organizing institutional arrangements in order to stimulate movement. The presence of wealthy and knowledgeable participants early in the process may encourage trust. In turn, inequality in distribution of benefits in the later stages of cooperation may reduce trust and reputation and constrain the

emergence of further cooperation (Ostrom, 2007, p.190). Remaining questions are what exactly determines the border between early stage and later stage, and what degree of a certain form of heterogeneity is good in the beginning but hampering in a later stage of a collective action process.

Ostrom (2007) presents in her theoretical explanation of successful or unsuccessful collective action the links between 1) the trust that each participant has in the others involved in a collective action situation, 2) the investment others make in establishing and maintaining a trustworthy reputation, and 3) the probability of all participants using reciprocity norms. On the one hand, levels of trust, reputations for being trustworthy, and reciprocity are positively reinforcing. For instance, someone with a good reputation is regarded as trustworthy and the norm of reciprocity leads actors to stick to their promises, that is, behaving in a trustworthy manner. This reminds us of the frequently stated positive correlation between cooperation and trust towards strangers and beliefs about the fairness and helpfulness of others, as underlined by Gächter et al. (2004, p.523). Trust lowers the cost of working together (Putnam, 1993; Pretty and Ward, 2001; Baland and Plateau, 1998). A characteristic of actor groups fostering collective action solutions is that most appropriators must share generalized norms of reciprocity and trust. Collective action needs credible commitment, and one decisive requirement for that is trust among actors. On the other hand, the core links described by Ostrom mean that a decrease in trust, reputation or reciprocity can generate a “downward cascade”, leading to little or no cooperation (Ostrom, 2007, p.201). When a society is pervaded by distrust, cooperative arrangements are unlikely to emerge. Transition economists argue that experiences from the socialist era and the transition process following it have resulted in low and deteriorating trust as well as specific actor characteristics that constrain opportunities for collective action and the provision of public goods (Danchev, 2005; Gächter et al., 2004; Paldam and Svendsen, 2000; Rose-Ackerman, 2001). The empirical part will focus on this negative feedback loop whereby distrust hinders the

emergence of collective action, looking in particular at how power misuse and bad reputation may lead to distrust and to reciprocal opportunism, which further diminishes a reputation.<sup>2</sup>

The environment, i.e. the social context, determines whether actor's heterogeneity leads to the persistence of abusing individual power for private benefits. The incongruity of formal and informal rules and information asymmetry are typical for a transition economy and facilitate the cultivation of a milieu in which opportunistic behavior can persist. Opportunistic behavior, or misuse of power, leads to decreasing trust. The interdependency between misuse of power and decrease in trust represent a mutually reinforcing process—a downward cascade—that constrains collective action.

### **3 Leadership**

Leadership is “a process of social influence through which an individual enlists and mobilizes the aid of others in the attainment of a collective goal”, (Chemers, 2001, p. 376). Cooperation is the dominant institution today and therefore people also worry a lot about the prevalence of “bad” leadership (Kellerman, 2004). So far, modern social science has tended to take a one-sided view of leadership, emphasizing its positive and constructive aspects while avoiding its darker side (Padilla et al., 2007, Kellermann, 2004, p. 11). In either way, leadership is strongly related to the use of power (Kellermann 2004, p. 4) Olsson et al. (2007), Meinzen-Dick et al. (2002, p. 663), Johnson (2001), Calvert, (1992) and Olsson et al. (2004, p. 83) likewise found that leadership played a significant role in self-organizing processes in ecosystem management. Due to special skills, leaders can initiate key-processes. Hurrelmann et al. (2006) stress the role of appropriate mediating agencies involved, finding that, particularly in post-socialist countries with low social capital, well-educated and well-connected local leaders can initiate and maintain local cooperation.

In contrast to the work on the positive role of leadership, there is not much work dealing with destructive or “bad” or “dark side of” leadership. This type of leader is one who is abusive, who resorts to manipulation of followers, gains power and takes advantage of followers, and

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<sup>2</sup> Korf (2009) describes civil war situations, where opportunistic behavior and reduced trust may also lead to a form of reciprocal opportunism, described as seeking strategic cooperation; due to the particular characteristics of civil war, actors follow rules out of fear instead of conceiving them as fair.

exploits and employs followers only for her/his own self-interest (Luthans, et al. 1998, p. 187). Destructive leadership, or what Andersson and Ostrom (2008, p. 75) call “local tyrannies” is a system dominated by a local leader or elites who only change rules for their own advantage. Yet the transition from positive to destructive leadership is blurred. A group needs to solve coordination problems and as a change in leaders is difficult and costly. Thus leaders do always have some leeway for side-payments and other private benefits (Calvert, 1992).

Kellermann (2004) specifies seven groups of destructive leadership: 1) incompetent, 2) rigid, 3) intemperate, 4) callous, 5) corrupt, 6) insular and 7) evil. One advantage of this typology is to identify inflection points at which an intervention might have stopped the destructive leadership.

Padilla et al. (2007: 179) define destructive leadership as a long-term performance according to outcome related features:

- 1) Destructive leadership is seldom absolutely or entirely destructive: There are both, good and bad results in most leadership situations.
- 2) The process of destructive leadership involves dominance, coercion, and manipulation rather than influence, persuasion and commitment.
- 3) The process of destructive leadership has a selfish orientation; it is focused more on the leader’s needs than the need of the larger social group.
- 4) The effects of destructive leadership are outcomes that compromise the quality of life for constituents and detract from the organization’s main purpose.
- 5) Destructive organizational outcomes are not exclusively the result of destructive leaders, but are also products of susceptible followers and conducive environments.

Especially this last point will be highlighted in the empirical part of this paper where the incongruity of formal and informal rules and the decrease in trust are used to characterize a conducive environment that facilitates the emergence of destructive leadership.

Only recently, interest in destructive leadership has grown. One example is Hogg (2005) who follows the social-identity theory of leadership and analyses the processes that encourage or inhibit leaders from abusing their position of power. He describes factors that influence a

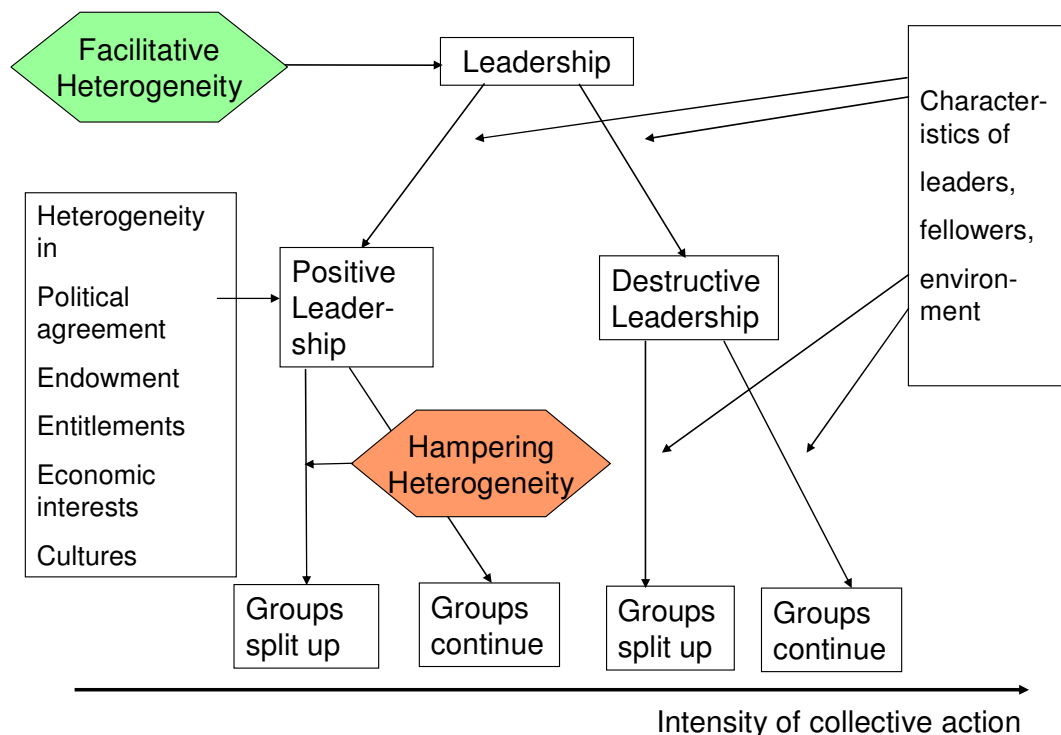
process that transforms prototype-based leadership into power-based leadership. He concentrates on groups with which people identify too strongly. Factors such as a too strong trust in the leader that can make it possible for the leader to get away with anything, or the structural role differentiation including the risk of the separation of the leader from the rest of the group. The latter may by distance and isolation allow the leader to gain compliance through the exercise of power over others. Andersson and Ostrom (2008, p. 75) highlight exit costs of resource users as one determinant for the existence of destructive leadership.

Luthans et al. (1998) ask what the reason is why post-communist countries, as Bulgaria, are particularly susceptible to the power of “dark” leaders, even after the demise of communism. They conclude that the historical and cultural foundations are decisive combined with current economic, social and political crisis. One characteristic is the fact that destructive leaders in these countries traditionally use the unlimited power of the former Communist Party to maximize their own political survival. Political networks, although not with the communist, but with the reformer party, are evident in the formation of a WUA in the empirical case presented in this paper. Another important fact is that as young leaders were eliminated in the old days and therefore the recently leader successors have not been developed or mentored. The result is a generation without leader capabilities. In post-socialist countries leaders are also a substitute for the institutional vacuum and their followers perceive that they provide security. Luthans et al. (1998, p. 192) raise the same question as I do in this article. Are leaders predisposed to the bad side of leadership or are they transformed into destructive leaders by circumstances and a societal environment which calls for this? I am in line with the Luthans et al. (1998, p. 12) that destructive leadership is a function of the situation.

Padilla et al. (2007) stress the simultaneous existence and interaction of certain characteristics of leaders and of the followers, as well as a conducive environment to enable destructive leadership. Particular interesting is the discussion of four environmental factors that make destructive leadership possible: instability, perceived threat, cultural values and absence of checks and balances and institutionalization (Padilla et al., 2007, p. 185).

In times of political and economic instability, as can be found in the post-socialist countries of Central and Eastern Europe, leaders can enhance their power by promising radical change to restore order. Further, the more the people perceive threat the more they are willing to accept assertive leadership. Another factor of the environment is the cultural value. Here, empirical material from Bulgaria, showing the high level of individualism (Theesfeld, 2004) is underlined by Luthans et al. (1998) who propose that destructive leaders are likely to emerge in cultures that endorse the avoidance of collectivism as opposed to individualism. Ineffective institutions and governance mechanisms to control constraints leaders too little and allows them to misuse their power. Another important fact is that once in power, destructive leaders will consolidate their control by undermining existing rules (Padilla et al. 2007).

Leaders are like everyone else, thus the context may foster bad behavior (Kellermann, 2004). Figure 1 shows the relationship between heterogeneity and leadership in relation to an increasing degree of collective action. After providing empirical evidence that the Bulgarian WUA example can be understood as destructive leadership, determinants from the social context that allow these destructive leadership to evolve are analysed.



**Figure 1: Heterogeneity and Leadership**



#### **4 The case study: Bulgaria's irrigation sector**

In Bulgaria's irrigation sector, the Irrigation System Company (ISC), a state firm, has a monopoly on the irrigated water supply. Irrigation systems based on market coordination, such as trading water rights or quotas, do not exist. Irrigation sector management is centralized. Decisions are implemented top-down, and there are no opportunities for the agricultural water users to participate. The ISC is responsible for the management, operation and maintenance of all state-owned irrigation and drainage systems in Bulgaria. Twenty-three regional branches operate semi-autonomously, but answer to the head office in Sofia, especially for financial control. Water guards are the village representatives of the ISC. From the viewpoint of the water users, especially the small ones, the water guards are often the only visible ISC personnel.

In order to find solutions for Bulgaria's deteriorated irrigation infrastructure and the rising demand of farmers for better, more reliable water provision, an irrigation sector reform was initiated in the late 1990s. Collective action management solutions have been propagated for more sustainable resource use by the Bulgarian government and the World Bank. One outcome was that the Bulgarian government enacted two laws: the Bulgarian Water Law, implemented in January 2000, and the Water User Association Act, which came into force in March 2001. Their aim was to cope with unreliable irrigation water provision and appropriation and to incorporate local self-governance and collective action, which should be accomplished by reforming and decentralizing the centrally planned water sector and increasing the involvement of local actors. Most of the established water user associations, however, were only formally created. In practice, they were neither functioning nor familiar to the farmers in the respective villages. Regardless of these formal efforts, little collective action in the irrigation sector has been observed in Bulgarian villages, and present formal attempts do not seem to have found common ground where collective action can grow. Instead, ongoing deterioration of the facilities is observed, and only a small percentage of the fields equipped with irrigation devices are actually irrigated. Chaotic water appropriation rules and insecure and ineffective property rights prevail (Theesfeld, 2004).

The empirical material supporting the argument presented here was collected in six months of empirical fieldwork, subdivided into three phases spanning two and a half years from 2000 until 2002. In addition to interviews with experts in Sofia and with representatives of the regional administration, two kinds of case studies were conducted: 1) In the first research phase, 17 village case studies were conducted in three regions of Bulgaria exemplary for their natural water conditions, farm and crop structures, and size of irrigation devices (for details see Theesfeld, 2005). They provided an overview of the irrigation situation in the villages and allowed for a rough analysis of the main hypotheses. 2) In the two following research phases, four contrasting in-depth case studies were chosen out of the 17 original case studies, according to three main criteria: location in the irrigation command area<sup>3</sup>, variation in farm structures, and a locality's state of establishing water user associations. The selections, especially as regards the state of establishing water user associations, had to be made according to preliminary information, which was specified and verified during the case studies. Two irrigation command areas were selected in the Haskovo region in South East Bulgaria. In each area, two villages were chosen, with one village located directly behind the water dam (top-ender) and the other further back – at the middle or tail-end of the canal and river system. In order to guarantee the anonymity of the individuals involved, abstract abbreviations for the villages were set up.

Village A is a top-end village in the first irrigation command area. As in all other villages, subsistence producers cultivate vegetable and forage crops on their small plots of less than 0.5 hectares. Besides them, the majority of agricultural land is cultivated by two agricultural cooperatives, one socialist-successor cooperative, or a red cooperative, and one newly founded reformer cooperative, or a blue cooperative. In Village A, the production specificity

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<sup>3</sup> An *irrigation command area* is a superior spatial unit, defined as an area where one main water source, such as a dam, provides the water to irrigate most of the surrounding arable area. In such irrigation command areas, at least one main distribution canal runs from the water dam through a number of villages. Water storage basins along the main canal serve as reservoirs to secure water for the next village. A network of side-canal and ditches divert water from the main canal. The water consumption of villages located at the tail-end of such irrigation command areas depends on the preceding villages' water use. There are irrigation command areas in which tail-end villages have minor alternative water sources. Such sources, for instance additional microdams, are independent from water use of the village located at the top-end position in such a command area. An irrigation command area is the spatial unit used when analyzing irrigation-water interrelationships among various villages.

regarding irrigation water needs is defined by a large group of Turks, almost 40 families, producing tobacco on small plots. Tobacco is a crop which does not need many irrigation turns, but the crucial turns have to happen within a certain time slot. According to the official documents of the ISC head office in Sofia, one water user association (WUA) has been established.

Village B is a middle-end village in the first irrigation command area. Its agricultural structure consists of a socialist-successor cooperative, a big tenant and midsized family farms. The existence of one WUA has been reported.

Village C is a top-end village in the second irrigation command area. A socialist-successor cooperative and one newly established cooperative farm the land. Its production specificity is that seasonal workers come into the village to produce pickles, which need a comparatively large amount of irrigation water.

Village D is a tail-end village in the second irrigation command area. It has three big agricultural producers competing for lease contracts: one successor cooperative, one newly established cooperative and one big tenant.

With the help of explorative and qualitative methods in the first two research phases, I analyzed the institutional changes taking place in Bulgaria's irrigation sector. Among other aspects, the rules-in-use which govern the daily practices of irrigation were investigated and examples given. In the third research phase, more standardized quantitative methods were conducted to elucidate selected relationships.

#### **4.1 Destructive leadership in Bulgaria's water user association**

Different ways in which actors exercise power inappropriately can be conceptualized as misuse of power, that is, the intentional exercise power to pursue private benefits. Hence, misuse of power is the individual expression of the opportunistic behavior of different actors. If it is used by an individual to obtain an pseudo-collective goal we can talk about destructive leadership. Table 1 summarizes examples of transactions in the irrigation sector that are affected by misuse of power. Transactions are understood here as not being restricted to situations in which resources are actually transferred in the physical sense of delivery, but

also seen as social transactions necessary to establish, maintain, or change social relationships. Social transactions are necessary for the formation and maintenance of the institutional framework in which economic activities occur. Transactions are also formulated with reference to Hagedorn et al. (2002, pp.4-6), who give an example of the “leaching of nitrates into the groundwater on sandy soils” as a transaction related not only to nature, but also to the farmer and the public or community concerned. Based on these definitions, renting in a plot from a cooperative refers to a transfer of property rights. Likewise, with the formal recognition of a founded WUA or of a Constituent Committee for a WUA, certain property rights are transferred to the respective actors, such as the right to decide on the territory to be served and, therewith, which clients to exclude. Finally, one party’s withholding of documents that are needed by another is a social transaction, hindering the formation of a new institutional framework.

**Table 1: Transactions in the irrigation sector affected by destructive leadership**

Transactions in the irrigation sector	Actors involved actor I ↔ actor II	Specific decisions affected by power misuse
Renting in plots from the cooperative	Water users ↔ cooperative	Who gets plots at top-end position along the canal?
Starting an irrigation turn	Water users ↔ neighboring water users at the canal	Who irrigates first, and who violates the water appropriation rules?
Paying for irrigation water	Minor water users ↔ water guard Major water users ↔ ISC regional office	Who refrains from paying, or who pays less?
Releasing water into the canal	Water users ↔ water guard Water users ↔ ISC regional office	When is the water released, i.e. favoring whom?
Closing the barrage of a microdam	Fish farmers ↔ water users	For how long is water not released into the irrigation canal?
Providing uncleaned irrigation canals to the water users	ISC ↔ water users WUA ↔ water users	How can maintenance work be reduced to a minimum?
Establishing a constituent committee to found a WUA	Initiators ↔ water users	Who is involved in the initiative, and how are operational rules set?
Withholding necessary documents needed to transfer water dam use rights to a WUA	ISC ↔ constituent committee	When should necessary documents be provided, and how can the procedure be prolonged?

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The following section elaborates a bit more on the last example of Table 1, founding a WUA, and questions concerning who is in the management and how certain water users can be excluded, depicting destructive leadership. In 2000, in case study Village B, non-villagers founded a WUA according to the Cooperative Law. The only precondition was that the founders had to be landowners of plots located alongside the main distribution canal, which serves a number of villages. The way in which this WUA was founded was inscrutable for the population of the respective village. For instance, the leader of this association refused to name the other six founders and members. Most of the villagers were in fact unaware of the possibility of establishing a WUA, much less knew about the formal existence of a WUA in their village. The villagers, rather, spoke of this organization either as a private water firm or as a tenant renting the canal system. They were only aware that the water guard was from their village, without knowing the other parties involved. As it turns out, however, the water guard was the father of the leader of the association. Since there was at least one connection to one of the villagers, an uncertainty and uneasiness in discussing this topic was evident during the study. Information asymmetry was striking, as villagers knew hardly anything about the formal existence of the WUA. Thus, the situation resembled one of open access, with efforts by an individual to exert some authority – but largely, as we will see, for its own benefit. The effective water ordering and appropriation rules in the village show that the WUA was not an effective company. During spring of 2001, the water guard employed five pensioners for five days to clean the canals, which was the only maintenance work for the season completed by the WUA.

The leader of the WUA took advantage of the information asymmetry that existed between him and the villagers. Even prior to his involvement with the WUA, he held a leadership position in the Youth Organization of the Peasant Party, which had held governmental power in coalition with the Union of Democratic Forces (UDF) from 1997 until 2001. The UDF aimed to increase its political influence in the rural areas by supporting political adherents to found

WUAs in rural areas. Due to his political engagement, this future leader of the WUA had access to various kinds of information and could participate in a course offered by the World Bank, in which he was trained in establishing WUAs under the Cooperative Law. He used his powerful position, good contacts, and supplementary knowledge to establish the WUA. The prestige he had earned by establishing a WUA in fact furthered him in his political career. He gained extra income for the collection of water fees and made an additional profit by not spending adequate funds for maintenance work. According to the definition of destructive leadership, as local leaders who only change rules for their own advantage, this is a typical case.

It became evident that the mere implementation of new formal rules - such those under the Cooperative Law for founding WUAs - without respecting local power structures could again lead to an misuse of power by those individuals already occupying advantageous positions.

#### **4.2 Conducive environment with incongruity of rules**

One environmental factor that make destructive leadership possible is the incongruity of rules. In transition countries, a large discrepancy can be observed between formal political intentions and informal, effective institutional change at the local level. This incongruity represents a transition-specific feature.<sup>4</sup> The simultaneous change from a centrally planned to a market-oriented economy and from a communist-determined to a democratic political system created an institutional vacuum in Bulgaria, among other countries. In Bulgaria, this was the result of numerous economic, political, and institutional constraints, such as the unpredicted fall in output, unsuccessful attempts to stabilize the economy, limited law enforcement mechanisms, limited implementation capacities for formal rules, and weak public administration capacities (Roland, 2000; Nenovsky and Koleva, 2002, p.49). Chavdarova (2002, p.68) contradicts the argument of mainstream economists, arguing that informal institutions have filled up the formal institutional vacuum. In fact, informal institutions form the core of present Bulgarian society. Compared to other Eastern European transition

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<sup>4</sup> Yet, this incongruity of rules can also be observed in other parts of the world, such as in the case described by Mwangi and Ostrom (2009) regarding institutional reform in Kenya's dryland ecosystem, where newly

countries, in which formal institutions provide more orientation for their people, the Bulgarian state could not provide a vision for its people and, to a large extent, formal actors lost their reputations and trustworthiness (Theesfeld, 2005; Dobrinsky, 2000).

Korf (2004) also refers to the gap between formal and informal rules but, due to his focus on civil wars, he develops a more nuanced view. Korf starts from the definition that rules are constantly made and remade through people's practices. Formal institutions may be "re-interpreted, re-negotiated and re-practised in the local action arenas" (Korf, 2004, p. 172).

Korf (2009) develops the concept of hybrid institutions, among other aspects, expressing that a pure distinction between formal and informal institutions in the practices of social interaction would be artificial. There are, rather, multiple and contesting rules for governing. This hybridity of rules and structures may also hold true for Bulgaria's transition period, characterized by the coexistence of multiple and incongruent formal and informal rules.

The incompatibility of formal rules and everyday practices creates a no-man's-land, which lays the groundwork for illegitimate redistribution of power and wealth (Chavdarova, 2002, p. 72). The high degree of incongruity between formal and effective rules provides conditions under which opportunistic behavior is able to expand and persist. Likewise, the dynamic nature of effective rules and the ambiguity of multiple rules, as described by Korf (2009), bears the risk that rules can become resources manipulated by powerful actors. These are favorable conditions for destructive leadership.

Misuse of power is understood here as the individual expression of opportunistic behavior and, thus, is almost synonymous with opportunistic behavior<sup>5</sup>. According to Ostrom et al. (1994, pp. 37-50), an institutional analysis relevant to field settings requires an understanding of the effective rules, or rules-in-use, used by individuals. All rules are the result of implicit or explicit efforts to achieve order and predictability among humans. Rules-in-use govern the patterns of interaction among the different actors in a system and represent the set of rules to which participants would refer if asked to explain or justify their actions to fellow

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established formal rules for resource access and decision making have contradicted the cultural norms that otherwise underpin Maasai society, whose members rely on the ecosystem for their livelihoods.

<sup>5</sup> Opportunistic behaviour is defined by various expressions of self-interest-seeking relying on guile, including calculated efforts to mislead, deceive, obfuscate, and otherwise confuse (Williamson, 1996, p.378).

participants. The rules-in-use and opportunistic strategies develop and change interdependently. On the one hand, effective local rules provide a basis for opportunistic strategies. On the other hand, because of opportunistic strategies certain rules-in-use are manifested, so that those effective rules reflect previously existing opportunistic strategies. The latter situation is illustrated by Hagedorn (2004), who points out how the laws and property rights that came about through agricultural land reforms in Central and Eastern Europe reflect the relative bargaining power of the actors involved. The incongruity between formal and rules-in-use also applies to Bulgaria's irrigation sector.

### **4.3 Incongruity of formal and effective rules in the irrigation sector**

In this section, the incongruity of formal and effective rules for one of the studied tail-end villages is analyzed with the help of empirical material. Similar signs of incongruity were observed in all case study villages. The examples can therefore be regarded as typical ones. As will be shown, limited sanctioning and enforcement mechanisms as well as practically non-existent monitoring mechanisms provide favorable conditions for power misuse and destructive leadership, which is observable in both actual water appropriation practices and maintenance work. Furthermore, the chaotic water ordering, monitoring, sanctioning and maintenance rules provided in the following, show the need for security. This has been described by Luthans et al. (1998) as typical for post-socialist country and leads to the fact that people are susceptible for destructive leadership.

#### *4.3.1 Water ordering and appropriation rules*

Water users have to put in an advance order with the local water guard if they want to irrigate. The formal rule stipulates that the guard must collect a certain amount of orders before he can open the barrage and fill the canal with water. Nevertheless, compliance with this rule varies. Informally, no farmer can rely on irrigation water via canal being delivered when needed, even if he orders it well in advance.

Another issue is that usage rights to the canal system and the water dam belong to different people. The dams are often rented to private individuals who farm fish in the reservoir behind the dam. Formally, the stock of fish should not reach a level that would initiate competition for



water between irrigation and fish farming. Normally, farmers in the respective village want to irrigate and order water, but the tenant of the water dam does not divert water into either the canal or the river. Based on this situation, the informal rule appears to be: when the canal is filled, irrigate to be on the safe side, whether you have ordered water or not. The water guard tries to collect the fees afterwards. The first formal rule - a farmer who orders water and pays in advance has the right to irrigate - does not work in practice.

If water is scarce and farmers, despite their orders, do not receive water via canal, some may join forces and engage in a so-called rebellion: a group of them goes to the barrage and opens it. This generally leads to fights between them and other water users.

In addition, the ISC regional branch offers verbal advice to the water guards in ranking the crops for irrigation. For instance, only the pickles should be irrigated from 5 p.m. until 8 p.m. During the day, priority should be given to eggplants, tomatoes, and peppers. Corn ranks third as it needs a lot of water. It should mainly be irrigated late at night. Most cases of irrigation practice, however, do not reflect these regulations. A statement taken from an interview summarizes the second rule-in-use regulating the irrigation sequence: "Whoever is ahead of you at the canal is the first to irrigate. That is the [unofficial] law." This is a common situation: farmers who extract water from the head of an irrigation system can obtain more water than those located at the tail-end (Ostrom, 1990). Most of the interviewees described the situation as chaotic. The problems of water allocation among neighboring villages are the same as those for small-scale water users sharing one canal. A typical situation involves a tail-ender ordering water. When the canal is filled, everyone ahead of him irrigates, and the tail-ender faces a water shortage, even though he ordered the water and may have even already paid for it.

The third rule of irrigation from one canal is specified by sheer physical force. Physical violence among the users of an irrigation system is symptomatic of inadequate assignment of spatial or temporal irrigation slots to appropriators.

#### *4.3.2 Monitoring rules*

There is almost no monitoring system for water appropriation. This situation leads to farmers guarding their fields around the clock. First, farmers wait for the water in the canal to reach their plot so that they can immediately start irrigating before another farmer begins. Second, they must supervise while irrigating, otherwise another farmer diverting water from a top-end position can start irrigating, leaving them insufficient water to complete their irrigation turn.

Water storage basins are filled overnight to secure the availability of water in all villages belonging to one irrigation command area. If water flows into the canal system at night, it immediately motivates farmers to irrigate at night too, often in an attempt to avoid payment. Such illegal irrigation is usually discovered by daylight, but farmers simply claim that neighboring farmers flooded their fields, which cannot be proven to the contrary.

#### *4.3.3 Excludability and sanctioning rules*

Water users who have not paid the water fee cannot technically be excluded from water diversion from a canal. There is no graduated and credible sanction mechanism of the kind described by Ostrom (1990, 1992) in the design principles for enduring, self-governing, common-pool resource institutions. Formal sanctioning power is generally lacking. For instance, the one water guard that worked in the village during the irrigation season 2000 to 2001 carried no authority. Nonetheless, he made use of social sanctioning measures to force people to pay the water fees, shouting in front of their houses - loud enough for the neighbors to hear - as a way of embarrassing the water users into paying.

Another event serves as illustration. During the summer of 2002, a group of irrigators refused to pay in advance. Consequently, the water guard stopped the water flow into the distribution canal. A group of farmers then went to the barrage, where the water is distributed between the river and the distribution canal, and opened it on their own. During this violation, they broke the mechanism of the barrage. Technicians were needed to repair it. Although the ISC caught some of the violators, they were not sanctioned, much to the regret of the water guard.

#### *4.3.4 Operation and maintenance rules*

Maintenance practices are largely affected by the ambiguity of ownership rights to the irrigation infrastructure and lack of clarity regarding responsibilities. Problems resulting from the transformation of the irrigation infrastructure stem from ambiguous property rights on the medium-scale infrastructure, including midsized canals, pump stations, and microdams. Maintenance duties are not clearly assigned among the various entities, such as successor agricultural cooperatives, municipalities, the ISC, WUAs, and water users. No distinct formal rules for operation and maintenance work have been laid down. The maintenance guidelines for WUAs are particularly fuzzy, even though they form the basis for granting the use rights to the infrastructure. These guidelines are not followed, however, and neither the ISC nor the water users control the maintenance work done by a WUA's management. Accordingly, there is a discrepancy between the need for maintenance to secure long-term system operation and the actual work conducted.

Routine maintenance is generally delayed until the system's complete deterioration. Holes and cracks in the concrete canal linings are not repaired, stolen concrete plates are not restored, and broken devices to regulate the water flow are very rarely replaced. Additional water outlets are largely missing, and their installation is not planned. They would help serve the growing number of individual water users that have resulted from an increasingly scattered crop production structure. Maintenance work is dominated by 1) urgent and temporary repairs carried out provisionally and 2) freeing the canals from dirt, trash, weeds, and brushwood for the upcoming season only, rather than its needed.

Further explanations of farmer reluctance to take on responsibilities and maintenance duties include prevailing free-rider behavior and the mental model of superordinate authorities as being responsible. The ISC regional branch occasionally cleans the canals to be able to serve its clients. Likewise, several of the WUAs conduct minimal, shortsighted maintenance work to justify their collection of water fees.

The following observation was made regarding the few cases in which water users have cleaned the canals themselves. Only a minor share of those who promised to participate actually did. Instead of working as a cooperating group and cleaning the whole canal, they

cleaned on their own in front of their own plots. Furthermore, upon closer examination, it is striking that most of them started to clean the canal at the beginning of their plot, but only as far as the water outlet serves it. The outlets are usually located at the centre of the plots and, in most cases, consist of illegal holes made in the concrete linings. The remaining canal line of the farmer's plot would be left untouched, overgrown with weeds and brushwood. Once the farmer cleaned the canal up to the outlet, he had no private benefit to clean further, even though this would serve the collective benefit. This observation indicates not only the individualism of those who participated, but also their lack of ability and willingness to cooperate. This is in line with Luthans et al. (1998) who also stress that individualism is a cultural characteristic that favors destructive leadership.

#### **4.4 Conducive environment with decreasing trust and reputation**

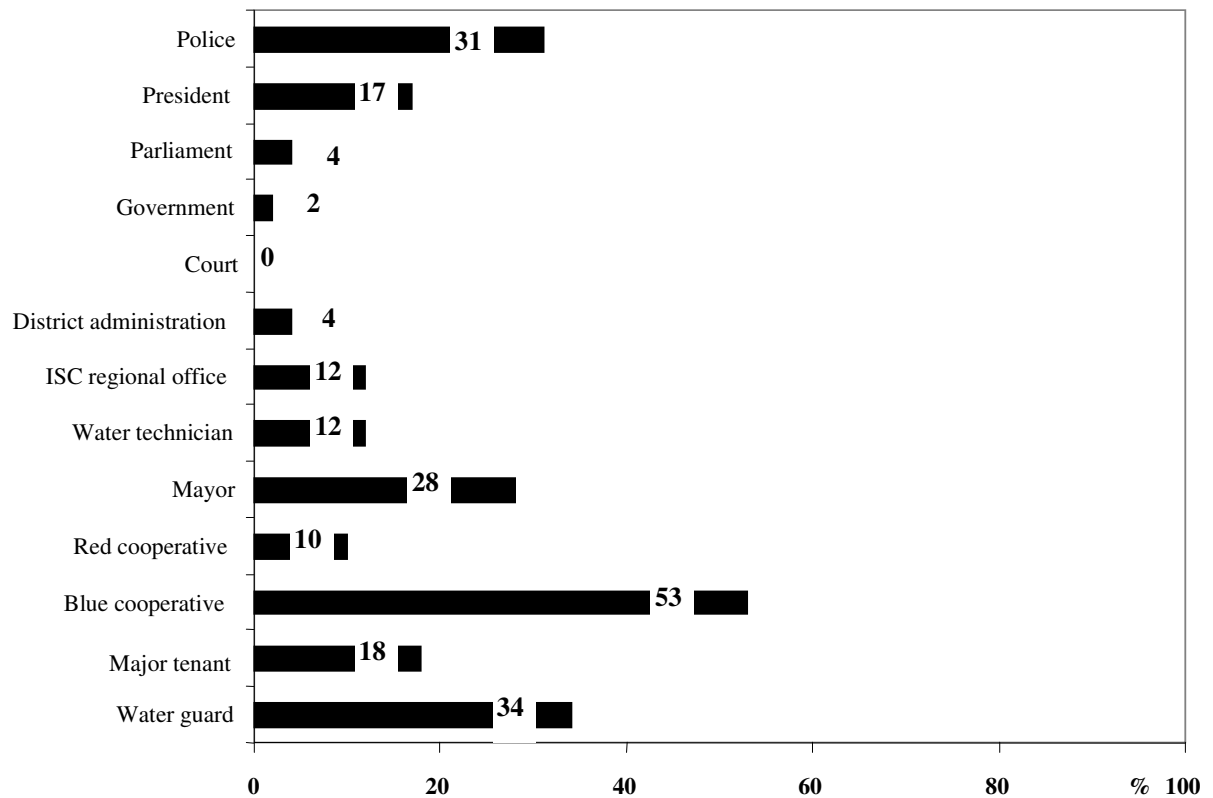
This section provides selected empirical evidence for decreasing trust and the development of bad reputations, expressed as perception of corruption in Bulgaria's irrigation sector. Distrust as part of a cultural value is according to Padilla et al. (2007) a factor that make destructive leadership possible. Moreover, as described by Ostrom (2007) it leads to a aggravating process whereby distrust hinders the emergence of collective action.

##### *4.4.1 Distrust in formal actors*

Standardized questions were included in the questionnaires used in the third phase of field research to assess *special trust* in formal actors. One question was: *Whom do you trust?* A list of organizations was presented, starting with national formal organizations and ending with local authorities.

Figure 2 shows the aggregated results of a sample of 52 interviewees representing all four villages. The generally low level of trust in formal actors is astonishing. There is almost no trust in the parliament, the government, the court (0%), or the district administration. The average trust in local authorities is higher than in any of the formal authorities at the national level; nonetheless it is low. Interestingly, trust in the mayor is even lower than trust in the police, both being the only two authorities representing the national government at village level. This gives an indication of the weak trustworthiness of mayors in their villages,

although they are elected representatives. In addition, the data in sum show that a share of 46% of the interviewees does not trust any formal authority at the national level and a share of 19 % does not trust any local actor.



**Figure 2: Share of local people having trust in formal actors**

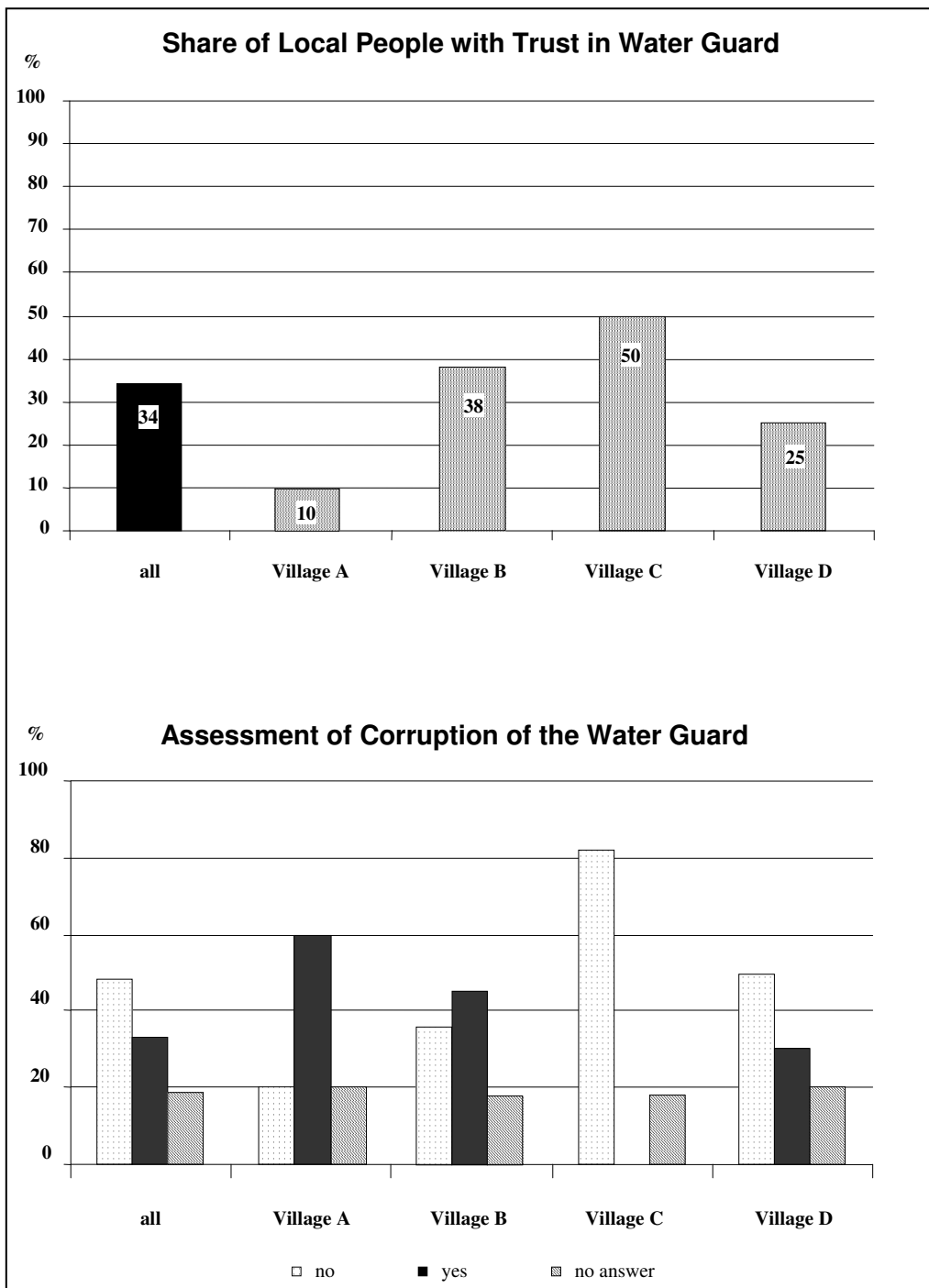
#### 4.4.2 Bad reputation

An aspect of interest to the present analysis is the reputation of an actor, in particular, the correlation between considering someone corrupt and not trusting him, as shown in Figure 3. Paldam explains this correlation as follows: “When people do not trust institutions, it is for good reasons. The best existing proxy for low trust I have been able to find is corruption” (2001, p.3). This underlines why corruption should be considered in an investigation on trust. Thus, inquiries were made about the villagers’ perceptions of the corruption of various formal actors: *In your opinion, how many members of the following organizations are corrupt?* The scale ranged from ‘none,’ ‘a few,’ ‘many,’ ‘the majority,’ to ‘everyone,’ and ‘I do not know, or ‘no answer.’ The same list of formal organizations and authorities was presented. The all-

village distribution of relative frequencies of a sample of 42 interviewees revealed that the majority of members of the parliament, and especially of court members, are considered to be corrupt. With regard to the corruption of individual local authorities, 26% identified the mayor, 33% the water guard, and 43% the red cooperative manager as corrupt. At least for the mayor and the collective managers, persons which are elected or chosen, this shows that leaders always have some leeway for side-payments, as described by Calvert (1992).

Processing the analysis of individual local authorities, we have chosen to focus on the assessment of the water guard among the four single-village distributions along with the all-village distribution, as shown in Figure 3. With the corruption assessment of the water guard, a major difference becomes noticeable between the all-village distribution and the four single-village distributions. The differences among the four single-village distributions of relative frequencies are explained according to the heterogeneity of the local communities. In Village A, the water guard is known for accepting side-payments, which is reflected by the survey result of 60% of interviewees assessing him as being corrupt. In contrast, as the figure indicates, nobody perceived the Village C water guard to be corrupt. He is a poor Russian immigrant and not in a powerful position to ask for bribe money. This shows that, at the local level, survey data may vary noticeably depending on the individual case.

Another consideration shall be added at this stage: the fact that an interviewee is not sure whether a formal actor is corrupt implies that this actor can hardly be trusted. As shown in Figure 3, the Village A water guard is the least trusted compared to the other villages' water guards and is considered to be the most corrupt. The Village C water guard, on the other hand, is the most trusted; none of the interviewees perceives him as corrupt. Although there are variances among the four single-village distributions, the maximum share of 50% of local people with trust in the water guard is low. As described above, the water guards are the people who best understand the irrigation system, and most of them have long-term experience. Their involvement in collective action solutions for the irrigation management is crucial, but constrained, as they do not enjoy the confidence of local actors.



**Figure 3: Correlation between trust and corruption**

## 5 Conclusion

The provided example of the establishment of a WUA illustrates destructive leadership in Bulgaria's irrigation sector. In line with the literature on heterogeneity of actors and leadership, the empirical evidence from the Bulgarian case study has shown that it is not

sufficient to look at the characteristics of a leader to determine her/his affinity to destructive leadership. It is likewise important to check the characteristics of the followers and the environment, i.e. the social context.

In post-socialist Bulgaria, there is no common ground, such as trust, where cooperation can grow. Moreover, I observed an aggravating process between destructive leadership or misuse of power, on the one side, and decreased trust and reputation, on the other, that continuously constrains the development of collective action. Under these preconditions positive leadership can not evolve. Already the initial stage of collective action is, thus, hampered. Empirical material proves that the attempts of the World Bank and the Bulgarian government to establish WUAs has not been effective up to now at the local level in terms of successful collective action. If nevertheless leadership evolves and initial groups are formed, there is a high risk of destructive leadership. Post-socialist societies have experienced over 40 years of socialist systems and two decades of transition, which have distinctly shaped their mental models and action patterns, as exemplified in their low level of trust in formal actors. This is an indicator for a culture that is more susceptible to destructive leaders (Luthans et al., 1998).

Missing institutionalization is according to Padilla et al. (2007) a conducive environmental factor which allows for destructive leadership, too. I have shown in this paper that especially for post-socialist countries the incongruity of rules allows for power misuse.

The transformations from positive to destructive leadership and from facilitative heterogeneity to hampering heterogeneity in a collective action processes need to be studied further. Some factors, such as trust or incongruity of rules might influence both.

Policy measures and advice is typically based on development models focusing on the positive attributes of leadership for collective action. Yet, the risk of destructive leadership has to be considered likewise. When leadership is studied in its interactions among characteristics of leaders, follower and environment, there are more options to influence some of these elements. We need to know more about the determinants for the evolving of destructive leadership in order to draw political recommendations. For Bulgaria's irrigation sector, one way to overcome the cycle of power misuse and reciprocal distrust is a more



Careful selection of the leader of WUAs. If people are selected who are well respected within the village community and who have a high reputation, this may lead to norms of reciprocity that foster cooperation. The chances of finding such leaders would be higher if information asymmetry could be reduced, with more people having access to the necessary information needed for WUA foundations. The remaining question is in how far these leaders would start to behave in a self-interested manner, once they are in power.

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