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## Patterns of institutional change for sustainability in Central and Eastern European agriculture

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# **PATTERNS OF INSTITUTIONAL CHANGE FOR SUSTAINABILITY IN CENTRAL AND EASTERN EUROPEAN AGRICULTURE**

**FRANZ GATZWEILER**

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## **ABSTRACT**

In this paper, the author discusses two different beliefs of how institutional change towards sustainability in agriculture and environment works: the institutional view and the evolutionary view. Both perspectives are studied in the context of restructuring the agricultural sectors and rural environments in Central and Eastern European Countries (CEECs). The specific nature of the *agri-environmental problem* calls for specific institutions and may require a specific building process. Case study results are presented showing the effect of EU accession on institutional change towards sustainability in several CEECs. The results provide evidence that the quality of institutional change required for sustainability goes beyond the building of legislative frameworks and requires more time than was envisaged by the roadmap to accession. Finally, the paper explores the role of social and human capital stocks in rural areas of CEECs outlining a number of differences in environmental governance in the agricultural sectors between various CEECs.

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## 1 INTRODUCTION

The Central and Eastern European Countries (CEECs) are not merely subject to transition. Transition takes place in the context of EU accession and is part of evolutionary change, which are both relevant driving forces of institutional change. Transition in the agricultural sectors of the CEECs was brought about by liberalisation, privatisation and restructuring, i.e. elements of a market economy were introduced by building new institutional frameworks to change the political and economic systems. Accession refers to the forces of institutional change, which reflect the new institutionalist perspective and supports causality of institution building from top down. It starts from the belief that the government plays an important role in establishing and enforcing property rights that produce trust as well as in establishing peace between antagonistic groups (Levi, 1996). The thesis regards social capital<sup>1</sup> as subordinate in reasoning and merely as a by-product of institutional incentives.

From among the CEECs, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia successfully fulfilled the Copenhagen criteria<sup>2</sup> for accession that on 13 December 2002 the European Council terminated the accession negotiations and scheduled these countries to enter the EU as full members on 1 May 2004. Accession involves the prioritisation of criteria that need to be fulfilled. In agriculture, the CEECs continue to be confronted with the multiple challenges of institutionalising multifunctionality – a problem that is closely connected with agri-environmental sustainability and the requirement to develop adequate institutions and policies for the joint production of agricultural and environmental goods and services. This challenge goes beyond the “daily” difficulties of transforming the political and economic systems. Therefore, while adopting the *acquis communautaire*, environmental tasks have not always top political priority for CEE governments. Poland's resignation from agri-environmental programmes to be introduced as part of SAPARD<sup>3</sup> is just one example. Dealing with agri-environmental resource problems in the CEECs is more demanding than initially thought. Transferring the western legal and administrative frameworks is important but not sufficient for achieving sustainable agriculture in CEECs.

The evolutionary process of institutional change, in contrast, can be related to the “social capital thesis” which states that social capital is necessary and sufficient for explaining societal outcomes (Ostrom, 2001). It is necessary because low institutional performance corresponds with low social capital. Evolution refers to forces of institutional change, which can be explained by history and the legacies of the past. Institutional reform paths which were taken (or not) are effected by the stock of material, physical, financial and human resources. For example Bulgaria and Romania, which were less successful in transforming their political and social systems, show the persis-

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<sup>1</sup> Ostrom (2001) defines social capital as capital which is created by conscious effort and for which time is spent now, to increase productivity later. Social capital is the stock of shared understandings, norms, rules and expectations that groups bring to a recurrent activity which produces a flow of future income benefiting some and harming others, creating opportunities, and constraining events.

<sup>2</sup> In 1993, at the Copenhagen European Council, the Member States agreed that 'the associated countries in central and eastern Europe that so desire shall become members of the European Union. Accession would take place as soon as an applicant is able to assume the obligations of membership by satisfying the economic and political conditions required'. These are referred to as the Copenhagen criteria.

<sup>3</sup> Special Accession Programme for Agriculture and Rural Development

tence of an old state elite, which is used to neglecting environmental regulations” (Baker, 2001). Dobrinsky (2000) describes the transition crisis of Bulgaria as a result of the historically deeply rooted economic relations between Bulgaria and USSR and their collapse during transition. Opportunism and rent-seeking have been further obstacles to institutional change. They both originate from traditional codes of conduct and other informal institutions (e.g. described by Theesfeld (2001) for the Bulgarian CEESA case and by Peukert (1998) for Lithuania).

The collapse of the communist party and the political transition to democratic governments committed to market-oriented reforms marked a specific regime change at the constitutional level (Haggard, 1997). However, this did not automatically alter the informal and formal routines of society (Hedlund, 1999). Thus, the institutional environment existing after collapse of the communist party would also leave paths open to former centrally planned economies.

A central question of this paper is, which forces shape institutional change for sustainability<sup>4</sup> with special reference to CEECs. The author explains the building of institutions and the resulting constitution of new types of environmental governance in agriculture and discusses the strategies and the challenges involved in this process.

## **2 ACCESSION, EVOLUTION AND INSTITUTIONAL BUILDING**

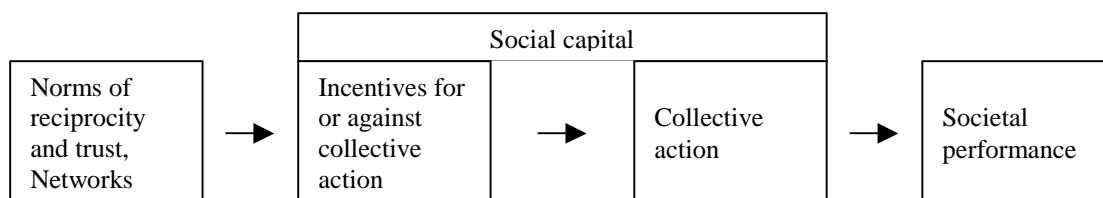
In this chapter, the author applies Krishna’s (2002) analysis of social capital and the origins of development and democracy to the processes of accession and evolution in CEECs. Accession is largely discussed from the angle of the forces of institutional change, i.e. from the new institutionalist perspective supporting the causality of institution building from top down (Figure 1). It starts from the belief that governments play an important role in establishing and enforcing the property rights (thus enabling trust). Likewise, they are responsible for establishing and keeping peace between otherwise combative groups (Levi, 1996). The political structure determines behaviour and attitudes of citizens and social capital may rather be caused by government institutions than by voluntary organisations. Levels of social capital can be altered through structural change. This thesis regards social capital as subordinate in reasoning; it is a mere by-product of institutional incentives. From that the question raises, which institutional arrangements provide effective incentives for building trust and facilitating collective action. North (1990: 78) believes that the (formal) institutional framework is essential in shaping the acquisition of knowledge and maximising activities of organisation. However, he also concedes the importance of enforcement structures that come along with the formal institutional framework. The institutionalist perspective is supported by Knack and Keefer (1997) who revealed in a cross-country investigation that trust and norms of civic cooperation are stronger in countries with formal institutions that effectively protect property and contract rights. Formal institutional rules, that constrain the government from acting arbitrarily, are associated with the development of cooperative norms and trust. Other authors (De Soto, 2000; North, 1981; North and Thomas, 1973) support this view and come to the conclusion that where states permitted citizens to as-

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<sup>4</sup> Institutions of sustainability here refer to institutions that enable sustainable management of natural resources in the field of agriculture and the environment.

sociate freely and supported free entrepreneurship by instituting appropriate rules and legal systems, economic growth had been most progressive.

**Figure 1: The Institutional Perspective**



Source: Krishna (2002)

The institutionalist perspective is also supported by Bowles (1998) who (beside other authors) claims that policies, constitutions, markets and other economic institutions, apart from allocating goods and services, exert also substantial influence on the evolution of motivations, values, preferences and thereby “social capital” in large. The do so by

- (1) having framing effects. People make choices depending on whether the identical feasible set they face is generated by a market-like process or not;
- (2) controlling reward structures of markets. Paying people to perform a task, which they willingly might have done without payment, can undermine motivation. This kind of extrinsic market rewards prevents fundamental desires for feelings of self-determination (intrinsic rewards) which are associated with positive motivational effects;
- (3) effecting the evolution of norms (social capital). Economic institutions influence the structure of social interactions and thus effect the evolution of norms by altering the returns to relationship-specific investments, such as reputation building. This may affect the kinds of sanctions that are applied in interactions and may change the likelihood of interaction of different kinds of people;
- (4) structuring the tasks of people and, consequently, affecting their capacities, values and psychological functioning;
- (5) altering cultural learning processes, the ways people acquire values and desires, rearing and schooling children as well as informal learning rules, e.g. conformism.

In the context of accession to the EU, forces of institutional change are those released by the need to comply with the *acquis communautaire*, the legislative body of the present EU. Hereby, problems arise from the conflicts between formal and informal institutions and the difficulties of matching formal requirements with conditions “on the ground” (see Chapter 2). At the beginning of the CEE transition process, optimism prevailed assuming a more or less rapid implementation of numerous economic and political reforms. According to the experiences made in several CEECs, however, transition

in terms of democratisation<sup>5</sup> processes and the building of institutions has made less rapid progress than initially expected and has shown its own dynamic. Often suggested types of institutional reform were either replications of institutions operating in the EU and/or transaction cost minimising systems (Ibrahim and Galt, 2002). This approach paid little attention to accession-related aspects as well as evolutionary and path-dependent aspects of the transition process in the new Member States and the governance problems that are likely to be produced. The speed of legislative harmonisation with the environmental *acquis* and the level of formal compliance differ considerably in these countries (European Commission, 2000). A general conflict generated by the concurrence of accession and transition is the gap between formal compliance with the *acquis* and the capacity to implement and enforce legislation, e.g. to coordinate specific agri-environmental policies. The present environmental *acquis* is a product of a political bargaining process in which the new members did not take part.

The adoption of the *acquis* and legislative harmonisation in CEECs may be characterised as an important step for building institutions that will, among others, guarantee sustainability in agriculture and environment. However, legislative adoption and harmonisation will remain symbolic as long as implementation and enforcement of the laws remain weak or absent. Policies can only be effectively implemented and enforced if downstream changes are made. Communities need to be equipped with more resources and powers to strengthen their role in monitoring and enforcement of agri-environmental schemes. Farmers need to be rewarded and motivated. New priorities and working methods are required for civil service agencies. Administrative capacities need to be improved and there needs to be concerted organisation of participation of all actors of the agri-environmental action scenario, including farmers, civil servants and politicians.

That means, accession is both a courtesy and an obstacle in the process of structural change. Only after formal harmonisation with the EU *acquis*, the new member states will make increased efforts to craft institutions that respond to and match with the specific needs of their environment, countryside and people. The Copenhagen Conference in December 2002 made clear that at present “harmony with the EU” is more important than “harmony with nature”. In many environmental areas, especially water quality, emissions, and waste treatment, implementation periods have been extended. But, although CEECs were encouraged to include agri-environmental measures in their rural development plans (within SAPARD), the environmental issue did not receive high priority (Zellei, 2001).

The evolutionary processes of institutional change can be related to the “social capital thesis” which states that social capital is necessary and sufficient for explaining societal outcomes. It is necessary because low institutional performance corresponds with low social capital. The thesis is largely based on a study by Putnam et al. (1993), who analyse the performance of regional governments in North and South Italy which were newly formed by a common set of legislative reforms and endowed with the same administrative powers and relatively equal financial resources. Neither economic variables nor state structures mattered for explaining differences in institutional performance. The

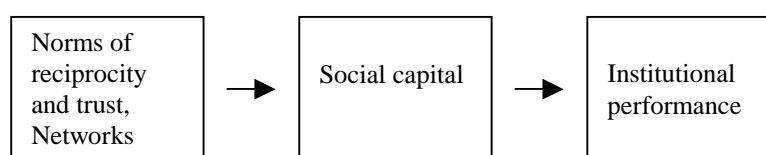
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<sup>5</sup> Democratisation refers to the shift from one- to multi-party parliamentary systems with democratically elected and accountable governments. It requires the abandonment of the principle of state centralism in favour of decentralisation and the development of a civil society.



thesis argues that societies well supplied with social capital will be able to adapt to new organisational forms more readily than those with less social capital. Such societies will also be able to innovate organisationally since a high degree of sociability will allow a wide variety of social relationships to emerge (Fukuyama, 1995). This hypothesis, referred to as the “social capital thesis”, also stipulates that democratic institutions (such as good governance) cannot be built from top down. They must be built up in the everyday traditions of trust and civic virtue among their citizens. This view assumes levels of trust as given and not subject to change. Social capital is regarded as exogenous to the institutional building process.

**Figure 2: The Social Capital Thesis**



Source: Krishna (2002)

In the Central and Eastern European context, evolution refers to a force of institutional change which can be explained by history and the legacies of the past. Institutional reform paths which were taken (or not) are affected by the stock of material, physical, financial and human resources. For example, Bulgaria and Romania which were less successful in transforming their political and social systems (and therefore do not belong to the first wave of accession countries), show the persistence of an old nomenclature, “which have a history of eschewing environmental regulations and who have proved themselves to be the least public spirited section of society” (Baker, 2001). Dobrinsky (2000) also describes the transition crisis of Bulgaria as a result of the deeply rooted economic relations between Bulgaria and USSR. The dependence of Bulgaria’s economy on trade with the Soviet economy constituted a major economic handicap. The CEECs have dealt with the challenges of establishing new institutions in agriculture and the environment with varying success and by adopting different strategies. One reason for this variation can be found in the legacies of central planning. The collapse of the communist party and the political transition to democratic governments committed to market-oriented reforms marked a specific regime change at the constitutional level (Haggard, 1997). However, this did not automatically alter the informal and formal routines of society (Hedlund, 1999). Thus the institutional environment that existed following the collapse of the communist party also defined the paths open to former centrally planned economies.

A third thesis assumes intermediary links between social capital and institutional performance. The assumption is made that for social capital flow from grass-root associations and localised social networks to decision-making at higher levels, mediating agencies are required which mediate the effects of social capital and translate it into collective action that is directed towards particular ends. Even where social capital is abundant, interest representation may remain unresolved and social capital may remain disconnected from state institutions performance without the agency function of political

parties or other forms of mediating agency (e.g., mutual aid groups, labour groups). Until interests are formulated and aggregated appropriately, the potential for collective action remains latent and unexplored. Whether associationism and dense networks of civil society weakens or strengthens democracy depends on the quality of the mediating links and the quality of the functions of mediating agencies. Specific knowledge and competencies are required to fulfil the tasks of the mediating agencies. These tasks range from coordinating performance and reviewing objectives in dynamic circumstances to building relations with key decision-makers of the state and the market.

**Figure 3: The Mediating Agency Perspective**



Source: Krishna (2002)

To sum up, one important lesson is that the institutions of social capital and institutional framing conditions are not connected linearly and causalities between both are not unidirectional, e.g. trust defines its institutional environment and vice versa. Furthermore, neither social capital nor other institutional structures can be regarded as exogenous to the process of delivering societal performance. They are interrelated. The cases presented in the following chapter provide evidence for all three hypotheses. In CEECs, social capital patterns can consist of networks of few privileged actors who have good connections with political and market players. In the majority of rural communities such prominent actors are either absent or ageing, which makes it difficult for social capital to develop. Therefore, general and specific institutional performances for solving environmental resource problems in agriculture are weak. The reform of structures and state institutions has made progress in all CEECs. However, the reform has often stuck at national and subnational levels without being able to provide incentives for collective action, which is a necessary precondition for solving environmental problems in agriculture. Societal performance has been disappointing in that respect. The reasons for the disappointing outcomes of solving environmental resource problems in agriculture are (1) unfavourable social capital patterns, (2) the absence of mediating agencies which translate social capital into collective action and (3) the institutional reforms of the legal and administrative system which are not far-reaching enough.

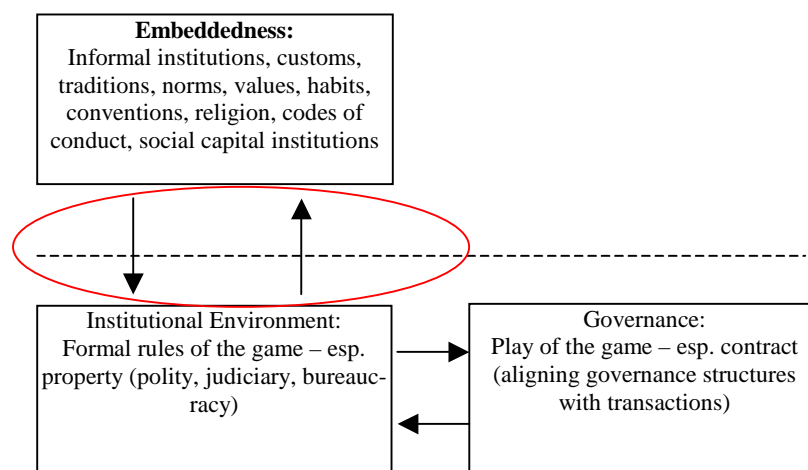
### 3 LINKING INFORMAL AND FORMAL INSTITUTIONS

The optimistic tendency at the beginning of the Central and Eastern European transition process assumed a more or less rapid implementation of numerous economic and political reforms. After more than a decade of transition, we now know that democratisation<sup>6</sup> and the building of institutions for sustainability have been less rapid than initially ex-

<sup>6</sup> Democratisation refers to the shift from one- to multi-party parliamentary systems with a democratically elected and accountable government. It requires the abandonment of the principle of state centralism in favour of decentralisation and the development of a civil society.

pected. From an institutional economics perspective this can be explained by the varying frequencies of change of institutions at the different levels of society. Whereas the accession process has provided evidence that legislative frameworks and formal institutions can change fast, the evolutionary forces of change need time. The question here is, how informal institutions, e.g. trust, norms, values, religion, etc. (Williamson, 2000) influence formal institutions, such as property rights and vice versa. In Figure 4, this question refers to the arrows between the “L1” and the “L2” level of institutional analysis. North (1990) argues that the tensions between altered formal and persisting informal institutions produce outcomes that have important implications for the way economies change. Therefore, if we assume that the institutional framing conditions in CEECs are generally set, institutions at the embeddedness level also need to adapt if new forms of environmental governance in agriculture are sought. For changing institutions at the embeddedness level, processes of learning essential.

**Figure 4: Linking informal and formal institutions**



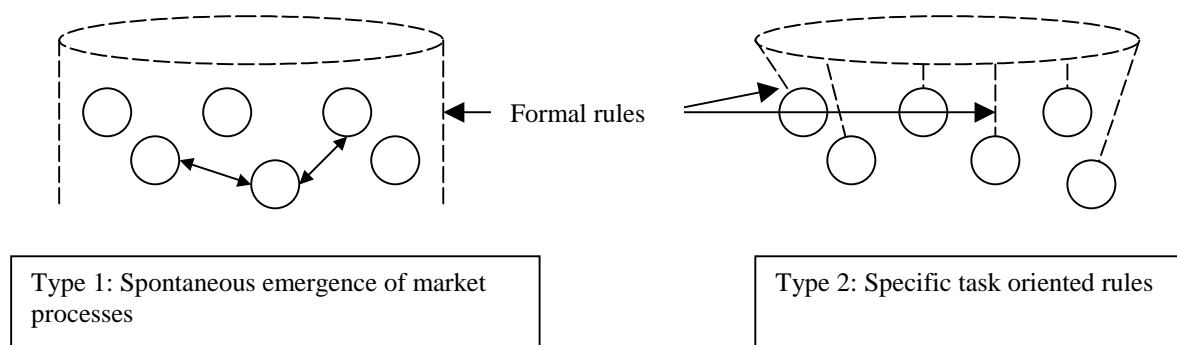
Source: Adapted from Williamson, 2000

In the following, I investigate potential interrelations between informal institutions and formal institutions. Hayek (1976) distinguishes between informal institutions, which belong to the realm of the “micro-cosmos of rules”, and formal institutions, which belong to the “macro-cosmos of rules”. Proceeding from Gatzweiler and Hagedorn (2002), who referred to the “adequate scope of action (for institutions) to evolve spontaneously” and the “mismatches among institutions at different levels”, evidence has to be provided of the effects of informal institutions on formal institutions in the process of institutional reform. Mummert (1999) elaborates two different types of institutional reforms. The first type resembles the scenario described by Gatzweiler and Hagedorn (2002) as “sufficient scope for action”. It characterises a type of institutional reform referred to as “market order-oriented institutional reform”. This type of institutional reform aims at constituting economic systems that allow for the emergence of spontaneous market order. The second type of institutional reform is “task-oriented” and aims at establishing formal institutions regulating specific tasks. Whereas the first type of institutions refer to public law which governs the hierarchical relationships between the state and private actors, the second type regulates the conduct of private actors towards each other, e.g. within organisations. Both types of institutional reform can be characterised as follows:

- 1) The “sufficient scope for action”-type of institutional reform (market order-oriented):
  - Institutions allow for market coordination to evolve spontaneously,
  - Institutions do not regulate the fulfilment of certain tasks,
  - Institutions merely forbid the use of certain means,
  - Actors act according to individual preferences,
  - Individual actors are free to pursue their personal aims,
  - Rules do not prescribe any specific tasks,
  - Rules shall enable market processes to emerge spontaneously,
  - What matters is the comparative performance of the economic process.
  
- 2) The “specific task-oriented” type of institutional reform:
  - Formal institutions are directed towards specific tasks,
  - Formal institutions need to be very specific,
  - Rules describe the ends actors need to pursue,
  - Formal institutions sometimes describe the means actors are allowed to use,
  - The efficiency of specific tasks has to be ensured,
  - What matters is how compliance to formal institutions is efficiently created.

Sources of conflict between informal and formal institutions in both scenarios can arise when *de jure* and *de facto* rules do not match. This is the case with the institutional reform of type 1, when informal institutions contradict the formal framing institutions, e.g. when social norms restrict the exchange of non-pecuniary items like taking interest for lending money (Mummert, 1999: 12). Type 2 institutions have larger potential for a conflict between formal and informal institutions, e.g. formal rules that prescribe the reporting of criminals to state authorities and informal rules that prohibit to do so and instead prescribe to protect the criminal if he/she belongs to one’s own social group. The same informal rule may be effective when the risk of reporting is too high or when theft is a morally accepted act under conditions of general poverty. Another example conflicting formal and informal rules given by Mummert (1999: 9) is that job appointments in state bodies have to be strictly based on the qualification of candidates but may actually be made according to the traditional norms and conventions of nepotism.

However, according to Mummert (1999), not the contradicting content between formal and informal institutions is a source of conflict, rather the missing subordination of informal institutions into formal institutions. For type 1, the potential of conflict between formal and informal institutions is determined by the normative content of informal institutions. This normative content in informal institutions is decisive for support or non-support of market processes, for the size of the group to which these informal institutions apply and for the degree to which societies are fragmented.

**Figure 5: Two types of institutional reform**

The less fragmented societies are, the greater will be the positive supporting effect of informal institutions on the market dynamics. In fragmented societies, e.g. many transition countries, economic processes will take place only within isolated groups. Moreover, in the context of institutions of sustainability (Gatzweiler et al., 2001), it is in the first line the legitimacy of formal institutions and the mechanisms by which the formal institutions are set and changed, that means the political institutions, the similarity of informal institutions with formal institutions, rather. Thus the central question is whether the actors have agreed on a particular set of political institutions. The extent to which contradicting informal institutions matter depends on the degree to which the cooperation problem of a society has been overcome and the likelihood of such consensus is negatively related to society's fragmentation. Therefore, the dualism of formal and informal institutions is unavoidable and leads to the situation in which we are confronted with the task of mutual co-adaptation and where we are "living in two worlds at once" (Hayek, 1973/93): "We must constantly adjust our lives, thoughts and our emotions, in order to live simultaneously within different kinds of order according to different rules". We must constantly adjust the "micro-cosmos rules" to the "macro-cosmos" rules to a certain degree.

Wegner (1998) refers to the importance of informal and formal institutions in an attempt to explain the changing nature of environmental politics. He differentiates institutions according to their origin of emergence (to which governance structure they belong) and to their formal or informal nature and relates market external and market internal institutions to formal and informal institutions (Figure 6). Market external institutions (e.g., property rights) are institutions which are required for the functioning of a governance structure and which include (in case of formal institutions) market regulating policies (e.g. environmental directives, sanctions, licenses), as well as legally relevant conventions and customs. Market internal institutions are brought forth by the actors of the market (or another governance system) without involvement of the government. They facilitate transactions and/or controls of private contracts and include codes of conduct and conventions (in case they are informal institutions), model contracts and general terms and conditions (e.g., for business and trade) as well as usual business practices, habits, or customary law.

**Figure 6: Origin of emergence and formal or informal nature of institutions**

Origin of emergence		Institutions	
		formal	informal
Governance	Market internal	General terms and conditions, model contracts	Codes of conduct, custom, usual practice, customary/common law
	Market external	Policies, interventions, restrictions for private property rights	Legally relevant conventions, customs

Source: Adapted from Wegner (1998)

This division is useful for explaining the changing nature of environmental governance, e.g. from a control-and-order or regulative governance to shared responsibility and co-operative environmental governance (Holzinger et al., 2002). In environmental politics, internal and external institutions are being linked because of the various “externalities”. The market is not able to handle the various transactions between nature and the human actor. Therefore, interventions “give nature a voice or right” and provide regulations where market forces fail. In the light of increasing complexity of environmental phenomena, the regulative approach, however, may not be sufficient. The socialist command and control regimes had some of the strictest environmental laws, which were largely inefficient due to lack of administration, implementation and enforcement capacities. Hence, sufficient social capital and a mature civil society have to develop before environmental governance will change. Such change would imply to rely increasingly on informal institutions (e.g. customs, which prohibit people to throw away rubbish or pollute the landscape) in order to distribute responsibilities for a sustainable environment by cooperating with non-state actors, such as environmental NGOs. This process strongly requires the reliance on informal institutions that justify and legitimate a new mode of governance to evolve.

#### 4 CHALLENGES OF BUILDING INSTITUTIONS IN CEECS

The following section provides examples for the challenge of building institutions (in agriculture and the environment) in ten CEECs. Many examples are taken from findings of the CEESA research project<sup>7</sup>. Others relate to general challenges of institutional building and problems related to the (deliberate) mismatch of formal and informal institutions and the search for new forms of environmental governance in agriculture. The crux of the problem for organisation and institutional building in agriculture and environment is that initially actors at both national and local level had incomplete or no information about which institutions would be appropriate and most effective to solve the problems of environmental resource use in agriculture. Initially, actors did not have experiences from similar situations in the past. To reduce this uncertainty, **learning** (from trial and error) (Popper, 1972/1992) is a crucial ingredient for building institutions. Human beings learn only with regard to problems or conflicts (Mantzavinos et al., 2001) and therefore, problems should be seen as a chance to learn. Holling and Sander-son (1996) investigated the role of adaptation in social and ecological systems and come

<sup>7</sup> Central and Eastern European Sustainable Agriculture (CEESA) research project funded under the EU 5<sup>th</sup> Framework Programme

to the conclusion that human systems of property rights built around deterministic ecosystem models. Therefore, they are not flexible in their application or crafted in light of the temporal or special demands of natural systems. Furthermore, they conclude that until modern human institutions are built on ecological dynamism and designed to flex with natural variability, their principle impact will be to impede nature, not to sustain it. The former “Soviet rule” in CEECs had produced societies that were built on the principles of non-dynamism, non-flexibility, strict order and control – characteristics that probably contributed to the collapse of the system. But also the type of environmental governance practised by the EU in the 70s and early 80s can be characterised as a command-and-control or regulative approach (Holzinger et al., 2002).

In contrast to CEECs, in western societies the regulative approach to environmental governance was not part of a centrally planned system and did not prohibit the participation of relevant stakeholders. The history of environmental governance has considerably changed since the 70s, it now involves “new instruments” which allow for shared responsibility, partnership and cooperation between state and non-state actors (Baker, 2001). In contrast, the former centrally planned countries were characterised by closed, simple, and uni-directional decision-making processes, excluding those who were not members of the political club and rejecting constructive criticism which might have indicated system change. Structures of policy formulation were non-reflexive and inflexible, unable to react to change and learn from mistakes. The command and control systems were particularly weak in solving problems created in the environmental field. Environmental problems were easily put aside and sometimes solved by giving financial support. The growing inability to deal with the complex consequences of environmental destruction (and loss of social cohesion) seemed to be a result of the shortcomings of simplistic regimes that largely excluded the people from the processes of decision making and institutional change. By excluding learning mechanisms from the policy cycle, these regimes were obviously unable to initiate necessary innovation.

In the former socialist countries, individuals had neither access to specific ecological information nor proper opportunities for social learning: processes as communication was deliberately disturbed by, e.g. limited freedom of speech or censorship of mass media. Providing financial or technological support for ecological conflict resolution in Hungary is just one example of the state’s attempt to control the growth of social capital and keep it in the ideologically predefined role<sup>8</sup>. As a result, problems were solved (or better put aside) without fair comment, protest or active participation by the civil society. Building of a civil society itself was thereby obstructed. The attempt to abolish the differences between the city and the village (one of the aims of Lenin’s socialist cultural revolution) during the socialist transformation is another far more striking example. As a result, traditional social relationships of rural societies, systems of traditional norms, values and other social constraints, human networks and local communities were systematically destroyed, broken up and rearranged (Persanyi, 1990) (Annex, Box 1).

During the socialist era, people built social networks and came to own arrangements within a political system that was obstinate and could not be easily changed from bottom up. Social networks, such as the family or a circle of friends, played an essential role. Under socialism, a system of large-firm paternalism evolved, which was specific for rural areas in the GDR since the 1970s (Laschewski and Siebert, 2002). Beyond produc-

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<sup>8</sup> The state expected environmental organisations to cooperate but not to protest against its policy.

tion and employment, the large agricultural firms provided a wide range of activities, such as administrative and social services, building and construction, food processing, technical and cultural services and transportation (BMELF, 1991). Thus, they run child nurseries, canteens, holiday homes and camps as well as clubs (e.g. for horse riding) Furthermore, they often initiated cultural events for the community (Zierold, 1997) and social events for pensioners.

During transition, a **sense of disorientation and low communal morale** among the people of many rural areas in East Germany and CEE countries was brought about by the radical political changes, the collapse of the collective and state farms, unemployment and other disruptions (European Parliament, 1999). Finally, there has been the feeling that social engagement would not be publicly accepted and honoured, but would in many cases be even regarded as attempt to "search for individual profits" or as "support and stabilisation of the socialist system" (Rodewald, 1994). Brauer (2001) argues that the call for self-reliance and egoism immediately after unification has also contributed to the fact that collective action has got a negative notion. Theesfeld (2001) reports similar attitudes from rural areas in Bulgaria, where collective action in the irrigation sector of Plovdiv has received a bad image and a barrier for people to collectively get involved in building new irrigation institutions.

In the early 1990s, most CEE countries established **new constitutions** and fundamental rights were granted. Despite these rights and general provisions of public participation, a **void** has remained **between the legislative framework and the practice of public participation**. This is especially evident with respect to procedures to facilitate public involvement in law- and rule-making and in the drafting of policies, programs and plans at national and local levels. Environmental problems are a matter of public concern, and a majority of people in CEECs are willing to invest into the quality of future environments even at the expense of present wealth. However, there is great uncertainty about the potential ways of solving these problems. Hungarians and Macedonians, e.g., are convinced that NGOs provide the most efficient organisational structure for solving environmental problems, whereas Romanians think that local governments are the best organisational and institutional solution to environmental problems (REC, 1998). The **institutional void** between legislative framework and local participation is not only due to cut off or missing public participation. Different **velocities of change** can have similar impacts. In many CEECs, social learning at local levels could not keep pace with rapid changes occurring at national and international levels. For the management of natural resources, this discrepancy was fatal as it prevented systematic management by local authorities. Institutional void refers to a phenomenon that is typical for CEECs in transition, especially in the light of EU accession. Institutional void describes a situation in which change takes place at the administrative and legislative levels and at the very local levels of society, leaving the connecting **meta-levels of institutional building** empty. The non-existence of farmer organisations, environmental NGOs or other environmental action groups provide evidence for this void.

#### 4.1 THE POLISH CEESA CASE - REPUDIATING NITRATE POLLUTION FOR THE SAKE OF FORMAL HARMONISATION?

The Polish case is a good example for a strategy of defining down (or repudiating) an environmental problem for the sake of compliance with the environmental *acquis* of the EU. It illustrates how the accession negotiations have transformed the political status of



the farm pollution problem in Poland. The Polish case analysed the problems with the transposition and implementation of requirements imposed by Directive 91/676/EEC known as the Nitrate Directive. The SAPARD Programme offered funds for the implementation of the Nitrate Directive. In March 1998, the European Union officially launched accession negotiations with Poland and the results of the subsequent screening process confirmed the assumption that Poland would not be able to implement the requirements of the Directive up to the provisional date of accession. Therefore Poland requested a grace period of 8 years. The EU, in response, encouraged Poland to reconsider the request and to establish an implementation programme, since it considered the transposition of the environmental *acquis* into national legislation a major task that should be given priority. It suggested to implement the Directive within four years. In spite of the earlier assessment, Poland decided that, with the view to current water pollution levels, it would not be justified to designate the areas vulnerable to nitrate pollution of agricultural origin. Hence, an implementation programme was not prepared. However, the Institute of Meteorology and Water Management prepared a report on “The designation of zones vulnerable to nitrate pollution from agricultural sources” stating no serious problem of nitrate pollution from agriculture and confirming the quality of Polish waters to be generally better than that of most EU countries (Karaczun, 2002).

In their attempt to “harmonise” with the EU, discrepancies such as the different storage capacities proposed by Polish and EU law (6- and 4-month capacities, respectively) do not seem to receive much attention. Karaczun (2002) concludes that instead of negotiating on specific issues in which both sides try to solve the environmental challenges of accession, position-based negotiations are carried out in which both parties endeavour to achieve superiority. “This might lead to the situation that Poland tries to find a legal interpretation” allowing to proclaim the fulfilment of all accession requirements in this field. These diplomatic and rhetoric sleights, however, cannot belie the continuing lack of coordination and cooperation between local and central authorities and between the relevant ministries as well as the missing training capacities for civil servants, farmers and trainers in the field.

#### 4.2 THE CEESA CASES IN LITHUANIA AND SLOVAKIA - CHALLENGES OF IMPLEMENTING THE NITRATE DIRECTIVE

In light of accession to the EU, the actual environmental problem targeted by the Nitrate Directive in Poland, Lithuania and Slovakia was often perceived as existing merely in terms of transposing legislative frameworks or it was defined down to a temporary and subordinate problem. The average limits on nitrogen use and the density of livestock set out in the directive are lower in these (and other) CEE countries. This was explained by the decrease in productivity (especially the decreased number of livestock) after 1990 and the general path of extensification from which the accession countries came.

This example nicely illustrates the evolution of a law which was meant to restrict the environmental impact as a result of intensive agriculture intensive agriculture in the EU15 and that is now prescribed for the new member countries that have very diverse environmental and agricultural starting conditions. Because of the generally low production intensity in CEE agriculture (during transition), it was assumed that there would be no insurmountable problems with the Nitrate Directive before accession. The efforts before accession, however, concentrated on formally complying with the *acquis communautaire*. The implementation of the Nitrate Directive shortly before accession is

therefore more an issue of technical transposition than a serious debate on real environmental mitigation. The abandonment of the long transition periods, which were initially applied for and are necessary for solving environmental problems, provide further evidence.

Another problem evident in all CEE countries is the lack of financial resources. Funds provided by pre-accession programmes are very limited. Farmers, for instance, are not able to finance the construction of manure tanks and banks are unwilling to provide loans for “unproductive” investments in storage facilities and other technical equipment.

#### *Physical environment and farm structure*

In Lithuania, the case study was carried out in the Northern Karst region, which covers one fifth of the entire country. After privatisation of the former large state and collective farms, the farm structure became highly fragmented with great differences in farm size, specialisation, and levels of education.

In Slovakia the large-scale farm structure continued to exist after land restitution. The Slovakian case study was made in one of the most productive agricultural areas of Slovakia: Corn Island. The area is very rich in groundwater resources. Eighty percent of the territory is under agricultural production and most crops are irrigated.

#### *Policies, institutions and governance*

In Lithuania, laws for the protection of water have been in force already since 1972. Since the mid-70s, protected water management zones have been declared. In 2001, the Agricultural Ministry and the Environmental Ministry issued a joint order as part of the implementation of the Nitrate Directive regulating the density of animals per hectare of agricultural land. Administrative penalties for visible actions have been effectively enforced. The advisory service that had existed during socialism was rebuilt during the 1990s. Small farmers, however, need better access to information and training. It is envisaged to designate the entire country a nitrate vulnerable zone (following the Danish advice). Such approach implies a commitment to uniform environmental standards across sectors.

Also in Slovakia, laws for the protection of water have already been in force since 1973. In 1978, the Corn Island area was declared a protected water management area. In 2002, the New Water Act was adopted, which defines storage, manipulation and application of mineral and organic fertilisers as well as appropriate soil cultivation standards. It also limits the number of animals per land unit. As compared to Lithuania and Latvia, the continuity of enforcement mechanisms has been higher in Slovakia as the farming community and farm structures were less fragmented after privatisation. During transition, controls and enforcements of the laws were largely abandoned due to the economic depression. However, the current Slovakian water monitoring system is very comprehensive and meets EU requirements. A water-monitoring network has been existing since the 1960s. However as in Poland, there is hardly any agricultural advisory service, especially for small farmers.

#### 4.3 THE CEESA CASES IN CZECH REPUBLIC, SLOVENIA AND HUNGARY - INCHOATE AGRI-ENVIRONMENTAL GOVERNANCE

The CEESA cases in Slovenia, Czech Republic and Hungary dealt with biodiversity issues and the implementation of agri-environmental schemes in protected areas. All countries show specific and general problems with the governance of agri-environmental programmes. For instance, the lack of cooperation and coordination among agricultural and environmental ministries and the landscape protection authorities are crosscutting sources of conflict -- a problem which has its roots in the traditionally strict division of ministry responsibilities (Ministry of Agriculture and Ministry of Environment) and their austere, hierarchical design. Depending on the hierarchical structure of authority within and between these bodies, the traditions in decision making, and depending on the location of most financial resources, the cooperation and participation among the different actors varies considerably. Administrative capacities require improvement; for example, farmers and NGOs should coordinate decision-making in order to bring about a better functioning governance which is less “top-down” - for the benefit of the people as well as the environment.

##### *Physical environment*

The Czech case deals with the challenges of landscape conservation and management in the White Carpathian region of eastern Moravia, on the border to Slovakia. The region is characterised by small, dispersed villages and pastoral agriculture including extensive cattle and sheep grazing. Until the mid-twentieth century, low input farming was common, contributing to the evolution of bio-diverse landscapes - a mosaic of forests, pastures and some of the species-richest meadows in Europe. The area is characterised by a dual structure in farm size. On the one hand, about 50% of the land is managed by a handful of large commercial enterprises, whereas, on the other hand, 33% of the agricultural land is operated by smallholders who own less than 10 hectares.

The Slovenian case deals with the agri-environmental scheme in an area designated as a regional park. In Slovenia the total share of less favoured area (LFA) accounts for 84.3% of the total surface area and 78.4% of Slovenia’s agricultural land. The country is characterised by hilly and mountainous areas, which make up 70 % of the total area. It also has a rather long tradition of policies for less favoured areas. The case study area is an upland natural forest with traditional pastoral farming, which has been proposed as a regional park. The farmland has over centuries been in private ownership of small-scale family farmers.

The Hungarian case investigates the agri-environmental scheme in a protected landscape area. Traditional grazing practices in this hilly region have shaped diverse grassland habitats. After 1990 the number of grazing animals decreased, threatening the maintenance of the landscape and its biodiversity.

##### *Rural population*

The Czech case describes the effects of out-migration. If people living in the countryside find a job in the city, they will commute or move to the cities. There are a large number of smallholdings, which mainly produce for self-consumption. Small farms often express a strong attachment to the landscape and are voluntarily involved in environmental and landscape improvement activities

The rural population in Slovenia lives under conditions similar to those in Austria or northern Italy and can therefore be characterised as exceptional for CEECs. Many farmers work part-time, earning their main income from non-agricultural activities (e.g. tourism and crafts). There has been no considerable depopulation of the areas after 1990. In Hungary, the area chosen for a case study consists of many small subsistence farmers with no off-farm income alternatives. In light of the fragmented farm structures produced by the privatisation of land, people are more concerned about their survival than about the environment (in contrast to the Czech case). In Hungary we can also observe out-migration and ageing of the rural population.

#### *Policies, institutions and governance*

In the Czech case, the agri-environmental programmes are developed in preparation for EU accession. Farmers are eligible to receive LFA support but are unfamiliar with agri-environmental incentives. Various compensation payments have been introduced by the Ministry of Agriculture (MoA) and Ministry of Environment (MoE), with those from the MoA being highest. Subsidies are only available for farmers with two hectares within and more than five hectares outside of the protected area. Small farmers seek additional suckler cow premiums, pasture-based livestock premiums and payments for ecological farming. There are coordination problems regarding the complementarity of the different subsidies from the MoA and MoE. NGOs are very active in mediating between farmers and authorities and in providing additional information on biological farming practices.

In Slovenia, there has been a LFA support system since 1975. The Slovenian Agri-Environment Programme (SAEP) was established on a pilot scale as early as in 2001. Farmers receive LFA support (49 EURO/ha) and are eligible for agri-environmental payments, as well as other subsidies. The local population of Triglav, however, wants to be more involved in the designation process of the national park.

In Hungary, agri-environmental programmes are currently being developed in preparation for EU accession. Most protected areas are state owned. The state leases land to farmers under conditions of rather strict environmental management prescriptions. Financial incentives and compensation payments for LFA have not been paid yet. The National Park Directorate indirectly supports the farmers by issuing preferential rents for the farmers living in the protected landscape area. The approach towards the farmers is prescriptive and regulative. Cooperation between farmers and authorities needs improvement, and the strict environmental regulations cannot be implemented or enforced.

#### 4.4 THE BULGARIAN CEESA CASE - ROAD TO ACCESSION OR TO PERDITION?

The Bulgarian case is about rebuilding the irrigation system in the Plovdiv agricultural area, which was destroyed during the transition period. Following privatization, a large number of small landowners had to be supplied with water from the irrigation system; property rights redefined; and responsibilities, rights, and duties changed and adapted to new conditions. Privatisation and restitution have led to uncertainty about the organisations in charge of managing local-level irrigation works. As a result of decollectivisation, the state-owned irrigation company has to deal with a large number and different types of agricultural producers, instead with agricultural cooperatives in the past. Consequently, many internal irrigation canals were no longer maintained and thus deteriorated. Cropping structures have been modified – from vegetables to less water-intensive

crops. Property regimes have changed, leading to fragmented landscapes with a large number of small plots. Owing to this process the new ownership structures did no longer match the original large-scale physical structure of the irrigation systems. The destructive physical effects on the internal irrigation systems were amplified by vanishing social structures and conflicts with minorities at the community level. Confronted with the desolate situation in the rural areas many young people left the villages in search for work in the cities. Former human networks disbanded and “social mechanisms” collapsed. The practice of irrigation water appropriation is chaotic and dominated by opportunism and the “rule of the fist” instead of “rule of law”. Water users who order water cannot rely on its delivery and, when delivered, it arrives without notice. Those at the front of the irrigation canal are served first; often no water remains for those at the end. Farmers in some villages guard their own fields in case water is delivered. Once water arrives in the channels, they must ensure that the flow is not diverted to another field.

Agricultural advisory services are missing or ineffective and farmer organizations play a negligent role in solving the great number of conflicts surrounding water. In the Bulgarian irrigation sector there are no commonly agreed-upon rules, and behavior such as free riding and rent seeking dominates. Therefore, as long as economic farming conditions are unstable and basic conditions – such as access to information – do not exist, there is no fertile ground on which good governance can grow and institutions of sustainable irrigations systems can evolve. Both forces of institutional change – the evolutionary and the new institutionalist perspective – seem to have failed in the Bulgarian irrigation case (Penov, 2002).

#### 4.5 THE LATVIAN CEESA CASE – DRAINAGE SYSTEMS AND THE ENVIRONMENT

Latvia has a long history of land drainage. The first drainage systems were built in the mid-19th century. Land drainage, as a tool to manage groundwater levels in humid zones, plays an important role in agriculture. During socialism the drainage systems were managed and maintained by the state, but the effectiveness of the system did not play a major role. As a result of land privatisation the area of abandoned land has increased, soil fertility has declined and the farm structure has become increasingly fragmented. Reduced liming has led to acidification of agricultural soils.

As a result of insufficient maintenance, drainage systems have been destructed and soil moisture conditions have been disturbed. The loss of soil fertility has contributed to a general decrease in agricultural production and a shift from state and collective enterprises to small-scale and subsistence farming. The public opinion still prevails, backed by laws (law of land reclamation), that the former state drainage system should be maintained in the public interest. This is no problem for large polder systems and main canals, which are still state-owned. However, the smaller drainage constructions are now in public or private ownership and the farmers are responsible for the drainage canals which are located on their own land. Conflicts with drainage system maintenance occur when canals in public ownership are not maintained by cooperation of several landowners so that private upstream fields may get waterlogged or even damaged from flooding (wet pits). The same problem may occur when a private owner at a downstream plot of a canal avoids maintenance, thus adversely affecting his neighbourhood. Recommendations given by national experts (e.g. Code of Good Agricultural Practice for Latvia) are very normative. They focus on a legal system and a corresponding system for monitor-

ing and sanctioning. Even different kinds of cooperation and collective action are regarded as necessary (maybe an imitation of the West) in order to solve problems, although actors cannot draw on previous experiences of successful cooperation, for instance, in the frame of drainage associations. The latter are more or less unknown in Latvia.

## 5 CONCLUSIONS

The cases investigated in Central and Eastern European countries within the CEESA research project were found to be highly diverse in terms of the topics identified, the resource problem areas focused on, the perspectives analysed, and the methods applied. Despite the indisputable success of most countries in transforming their economic and political systems, it has become clear that the environment is not the sole gauge for measuring achievements towards sustainable agriculture. The latter, in general, has only be one among many other aims of the transition process that prevails up to date and will continue even after finalisation of the accession process.

The question remains open for debate whether the decline of post-socialist agricultural production (especially in livestock farming and in the agricultural input sector) has reduced environmental pressures to a greater extent than did deliberate efforts at crafting institutions for sustainable agriculture. Institutional change needs time. The time granted for changing the CEE political and economic systems and fulfilling the Copenhagen criteria has been limited and environmental criteria have not been given priority. It was argued that if accession would not happen up to a certain deadline, the “historical window of opportunity would shut”. Therefore, accession took place at its own pace, regardless of the time actually needed for building adequate institutions for governing the interactions between people and their natural environment in agriculture. However, despite the achievements of this type of institutional change (e.g., legislative harmonisation) the informal and formal institutions of sustainability in CEE societies were not automatically altered. In addition, evolutionary processes of institutional change are needed to achieve environmental goals in agriculture.

The patterns of evolutionary agri-environmental governance are determined by the degree of homogeneity of both physical (farm structure etc.) and social conditions.

- The complexity of the initial problem situation
- The administrative capacities and other resources are available for solving the problems
- The number and variance of actors needed to solve the problem situation
- The relevance of “friction” likely to be caused as a result of the necessity to cooperate
- Rivalry among stakeholders
- Fragmentation of the ownership and farming structure after privatization
- Availability of potential non-state actors for sharing environmental responsibility

The governance response to more complex and less homogeneous variables of institutional change has been different. In Hungary, e.g., governance solutions were mainly hierarchical and regulatory. The state was the sole landowner, prescribing strict regulations for land management without being able to compensate the farmers. This approach may have minimised transaction costs as it reduced costs for coordination among differ-

ent authorities and different actors. It remains questionable, however, whether such protective and hierarchical type of governance yields environmentally sound and socially acceptable results.

In contrast, the Czech case shows the difficulties in environmental governance when taking into account not only the complex physical conditions but also the requirements of coordination and cooperation among the different actors involved. Although there is private ownership of land in protected areas, power is redistributed to the large enterprises by renting land from a large number of small landowners and paying very little rent. The coordination problem involves these large enterprises, different governmental authorities, small farmers and NGOs. Despite higher costs for coordination, people are better motivated and integrated in the process of decision-making, they receive incentive payments and they are willing to invest into their rural environment even without direct benefits. There are more elements of market governance and civil society in the Hungarian case than in Hungary. Similarly, the other cases vary in terms of a functioning governance structure for agri-environmental coordination.

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