

Project Description – Project Proposals

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Ethical issues in agricultural land markets

Project Description

1 State of the art and preliminary work

Agricultural land markets as a problem of ethics

The present-day agricultural land markets in Germany exhibit several trends which are often felt to have moral significance. The trends include the dramatic increase of land prices and rents, the growing role of non-agricultural investors, the emergence of large-scale holding structures with the attendant concentration of land ownership, and the increasing demand for the conversion of agricultural land to non-agricultural uses (Bund-Länder-Arbeitsgruppe “Bodenmarktpolitik” 2015, p. 9). The attribution of morality to the impersonal and emergent dynamics of the market process may seem counter-intuitive. Yet, it has long been recognized that the societal significance of land extends far beyond its role as a production factor and a commodity. If this significance is fully appreciated, then one must agree with Beatley’s assessment that (1991, p. 3) “the social allocation of land to different uses and activities is fundamentally and inextricably a problem of ethics”. On this basis, Beatley (1994, p. 11) makes the case for the establishment of land use ethics as a new academic subdiscipline that would be concerned with “the study of the ethical and moral bases of actions and policies intended to influence the use and management of land and resources”. As an emerging field of inquiry, land use ethics is supposed to alert academics, practitioners, politicians, and the broader public to the moral complexity of land use and the necessity to look beyond “narrowly economic and utilitarian” (Beatley 1991, p. 3) frameworks.

At the same time, moral philosophers broadly agree that neoclassical economics - today’s mainstream school of economic thought - is firmly rooted in the moral doctrine of utilitarianism (Snoeyenbos and Humber 1999; Swanson 1999). The economic analysis of the efficiency and regulation of agricultural land markets, as pursued in the present project proposal, is accordingly framed by this doctrine and thus adopts a utilitarian vision of land. In the contemporary environmental and social philosophy, this vision is not only problematic, but also has a number of compelling alternatives. The classic Rawlsian critique of utilitarianism exposes its tendency to justify social injustice (Rawls 1999), a point shared by critical institutional economists (e.g., Polanyi 2001). Furthermore, the utilitarian doctrine is anthropomorphic in the sense that it limits “the set of entities to which ethical regard is appropriately directed” (Callicott 2013, p. 9) to human beings and thus ignores natural environment, including land. These and other problems of utilitarianism present not only scholarly, but also practical interest as the utilitarian doctrine is acknowledged to adequately reflect the real-world forces driving business behavior (Valentinov 2015a). Thus, in cases of trade-offs between economic efficiency and alternative moral criteria, such as social and ecological sustainability, the utilitarian doctrine will tend to questionably prioritize efficiency at the cost of downplaying multifarious diverse sustainability concerns. Land grabbing is one example where alternative moral criteria are particularly likely to collide in dramatic ways (e.g. Deininger and Byerlee 2011).

While the utilitarian vision of land buttresses the economic standpoint to assess the performance of agricultural land markets, a number of currently prevailing land market policy goals in Germany are not easily reconciled with this standpoint, including, for example, the promotion of the broad dispersion of land ownership, preferential access of farmers to the purchase of agricultural land (relative to non-agricultural investors), the control of the rise of prices and rents, and the priority of agricultural uses over non-agricultural uses of agricultural land (Bund-Länder-Arbeitsgruppe Bodenmarktpolitik 2015). On the other hand, some other land market policy goals, such as avoiding market power and improving transparency in agricultural land markets (ibid), are fully consistent with the utilitarian goal of optimizing the allocation of agricultural land through the market. To further add to this complexity, an economic stand-point is by no means inconsistent with seemingly non-utilitarian moral goals, e.g., the protection of biodiversity, as various instruments, e.g., environmental specifications, can be used to make the price mechanism more responsive to such goals. However, there are no guarantees that these instruments are sufficient. It is for this reason that the balance of the economic and non-economic stand-points, and hence of the utilitarian and non-utilitarian moral goals, presents an urgent and ongoing task, both for practice and theory.

Various components of the non-economic standpoint to assess agricultural land markets have been famously summarized by Aldo Leopold's (1949) land ethics, a seminal contribution to environmental philosophy that is still widely discussed (cf. Turner et al. 2014; Callicott 2013; Freyfogle 1996). The main point of his land ethics emphasizes the moral problems of a narrow economic understanding of land: "It is inconceivable to me that an ethical relation to land can exist without love, respect, and a high regard for its value. By value, I of course mean something far broader than mere economic value: I mean value in the philosophical sense" (ibid, p. 223). This understanding of land value is evidently linked to the Kantian notions of dignity and intrinsic worth (cf. Callicott 2013). Leopold consequently urged his followers to "quit thinking about decent land use as solely an economic problem [and to e]xamine each question in terms of what is ethically and esthetically right, as well as what is economically expedient. A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise" (Leopold 1949, p. 224ff.). Despite Leopold's overriding concern with ecological preservation, he upheld the principle of "the extension of ethics", i.e., the application of ethical criteria to a broadening range of fields "with corresponding shrinkages in those judged by expediency only" (ibid, p. 203). This principle makes his reasoning applicable to the issues of social justice and human virtue that are related to social sustainability. Applied to land markets, it offers a possibility to gain a critical distance to the economic aspects of land and to assess the functioning of land markets concerning their effects on broader social and ecological criteria.

Although compelling, Leopold's land ethics is not easily implemented in the context of pre-sent-day land markets in Germany. While providing inspiration for much of the modern environmental philosophy, Leopold's ethics cannot provide much specific guidance for the resolution of conflicts among specific participants and stakeholders of agricultural land markets. If their interests are conflicting, individuals will likely hold widely diverging views about the proper direction of "the extension of ethics" (ibid). Navigating these divergences calls for refined conceptual tools that fall beyond the scope of Leopold's own elaboration of the philosophical value of land. The development of these tools is the central goal of this subproject.

To achieve this goal, the subproject will bring to light the methodological problems preventing the utilitarian doctrine from taking full account of the societal role and the ethical contents of agricultural land markets. The analysis of these problems will be informed by Niklas Luhmann's (1997) theory of "autopoietic" social systems that maintain a precarious relationship to their social and natural environment. The relation to these environments would reflect Leopold's "philosophical value" of land, not only in the natural, but also in the societal context encompassing distributional considerations. The present subproject's prime example of an autopoietic system is the agricultural land market itself that exhibits considerable autonomy from the social and natural environments and thus little sensitivity to their requirements. Other relevant examples are the political and legal systems ("function systems" in Luhmann's terminology) which seek to control the land market, but are subject to autopoietic excesses of their own. From the standpoint of the theory of "autopoietic" social systems, failure of attempts at systemic steering of a

functionally differentiated society results from the incapability of political and legal systems to properly reflect the complexity of the social and ecological environment. This argument has major implications for the political and legal regulation of land markets, as well as for stakeholder communication.

In the following, the research objectives and key research questions are formulated. Subsequently, the conceptual strategy of the subproject is explained in greater depth, followed by the specification of the planned working program and implementation schedule.

Previous work

Valentinov's previous work relevant to the subproject has been in the fields of systems theory, institutional economics, ethics, and philosophy of science. In the field of systems theory, he approached the problem of sustainable development by integrating ideas from Ludwig von Bertalanffy's theory of open systems and Niklas Luhmann's theory of operationally closed systems (Valentinov and Chatalova 2016a). On this basis, he revisited K. William Kapp's notion of social costs (Valentinov 2014b) and the problems of structural change in agriculture (Balmann and Valentinov 2016; Balmann et al. 2016). In the field of institutional economics, he drew upon systems thinking to emphasize the complexity-reducing nature of the for-profit sector, including markets and corporations (Thompson and Valentinov forthcoming; Valentinov 2015c; Chaddad and Valentinov forthcoming). He showed that the Veblenian critique of capitalism can be justified from the Luhmannian point of view (Valentinov 2015b). In the field of ethics, he argued that the Luhmannian idea of precarious system-environment relations has moral significance. Not only is the category of emergence fraught with moral meaning (Valentinov et al. 2016), but even the Rawlsian conception of injustice can be thought of as a form of such precariousness (Valentinov 2015a). In the field of philosophy of science, Valentinov has worked together with Prof. Steven Wallis on the systems-theoretic implications of the "integrative propositional analysis", a technique for evaluating and developing conceptual systems and mental models (Wallis and Valentinov 2016). The provisional result of this cooperation is that mental models that are less systemic and scientifically grounded are nevertheless likely to catch on (Hielscher et al. 2016).

1.1 Project-related publications

1.1.1 Articles published by outlets with scientific quality assurance, book publications, and works accepted for publication but not yet published.

- Chaddad, F., Valentinov, V. (2017): Agency Costs and Organizational Architecture of Large Corporate Farms: Evidence from Brazil. *International Food and Agribusiness Management Review*, online first, doi: <http://dx.doi.org/10.22434/IFAMR2016.0009>
- Hielscher, S., Pies, I., Valentinov, V., Chatalova, L. (2016): Rationalizing the GMO Debate: The Ordonomic Approach to Addressing Agricultural Myths. *International Journal of Environmental Research and Public Health*, article # 476, doi: [10.3390/ijerph13050476](https://doi.org/10.3390/ijerph13050476)
- Thompson, S., Valentinov, V. (2017): The Neglect of Society in the Theory of the Firm: A Systems Theory Perspective. *Cambridge Journal of Economics*, online first, doi: <https://doi.org/10.1093/cje/bew072>
- Valentinov, V. (2014b): K. William Kapp's Theory of Social Costs: A Luhmannian Interpretation. *Ecological Economics* 97: 28-33.
- Valentinov, V. (2015a): The Rawlsian Critique of Utilitarianism: A Luhmannian Interpretation. *Journal of Business Ethics*, online first, doi: 10.1007/s10551-015-2786-y
- Valentinov, V. (2015b): From Equilibrium to Autopoiesis: A Luhmannian Reading of Veblenian Evolutionary Economics. *Economic Systems* 39: 141-155.
- Valentinov, V., Chatalova, L. (2016a): Institutional Economics and Social Dilemmas: A Systems Theory Perspective. *Systems Research and Behavioral Science* 33(1): 138-149.
- Valentinov, V., Hielscher, S., Pies, I. (2016): Emergence: A Systems Theory's Challenge to Ethics. *Systemic Practice and Action Research*, 29(6), pp. 597–610.

1.1.2 Other publications

Balmann, A., Chatalova, L., Gagalyuk, T., Valentinov, V. (2016): Gesellschaftliche Verantwortung in der landwirtschaftlichen Tretrmühle: Moderne Landwirtschaft, technologische Tretrmühle und gesellschaftliche Entfremdung - Folgen, Herausforderungen und Lösungsansätze, in: Moderne Landwirtschaft zwischen Anspruch und Wirklichkeit - Eine kritische Analyse, S. 147-170.

Balmann, A., Valentinov, V. (2016): Towards a Theory of Structural Change in Agriculture: Just Economics? Conference paper presented at the 149th EAAE Seminar 'Structural change in agrifood chains: new relations between farm sector, food industry and retail sector' Rennes, France, October 27-28, 2016. Available at: <http://econpapers.repec.org/paper/agseaa149/246420.htm>.

1.1.3 Patents

1.1.3.1 Pending

n.a.

1.1.3.2 Issued

n.a.

2 Objectives and work programme

2.1 Anticipated total duration of the project

Three years, from August 1, 2017 until July 31, 2020.

2.2 Objectives

Research objectives

The main purpose of the proposed subproject is to articulate the moral significance of agricultural land markets by contrasting between economic and non-economic standpoints to evaluate their functioning and implications. This purpose is decomposed into three research objectives that focus on the selected practical issues of agricultural land markets. In particular, it is intended:

- (1) to explore the moral implications of selected trends on agricultural land markets;
- (2) to provide the moral justification of land market regulations and to identify their limits; and
- (3) to suggest alternative conceptual tools to address related moral dilemmas.

The *first research objective* aims to take stock of ethical standpoints related to agricultural land market dynamics that may motivate policy interventions. These dynamics will be concerned with land consolidation, allocative efficiency, social costs of land market operations, conflicts of interests, and the relationship between the land ownership structure and land value. Each of these issues exemplifies the long-standing interest of economists in understanding the societal implications of market dynamics. While the economists are equipped with sophisticated tools for measuring these implications, the tools remain wedded to the utilitarian paradigm which cannot be taken to exhaust the full spectrum of relevant moral considerations. The idea of fullness as used here particularly draws on pragmatist business ethics that accentuate “the flourishing of production and consumption in a way that nourishes the desire of humans in general for the infusion of experience with meaningfulness and self-development, and for the flourishing of the multiple environments in which they are embedded in the fullness and richness of their existence” (Rosenthal and Buchholz 2000, p. 77).

While appreciating the importance of the “flourishing of the multiple environments” (ibid), which is rendered difficult by the autonomy of economic system, the systems-theoretic perspective

likewise acknowledges the systemic nature of modern society and makes the case for respecting the autonomy of the concerned social systems. This autonomy certainly presents a civilizational gain that lends credence to utilitarianism. This insight, however, by no means prevents the systems-theoretic perspective from emphasizing the embeddedness of social systems, such as agricultural land markets, in their social and natural environments. It is this embeddedness that connects systems theory with deontological and biocentric ethical concepts, while paying attention to motives of policies and effects on land owners, operators, and other stakeholders. These and other ethical concepts can thus potentially provide relevant normative bases for policy.

The systems-theoretic vision of agricultural land markets accordingly traces ethical concerns and moral dilemmas back to the precarious interaction between the social system of land markets and its environment. The focus on the system-environment interaction does not interfere with the traditional economic vision of market failure as a justification for land market policy, but brings into consideration a range of further policy interventions that could correct or compensate for disruptions of this system's metabolic exchange with the environment. Indeed, as Rawls discerned, markets may be found to fail in the securing of social justice even if they do not fail from the intra-systemic point of view oriented by the ideal of allocative efficiency. If social justice is indeed not secured, then policies may seek to harmonize the requisite metabolism by promoting moral communication embodying social reflexivity centered on risks and benefits of land market dynamics. This again has important implications for the moral alignment of the current legislation with political and social concerns.

The *second research objective* is directed towards the moral assessment of land markets and stakeholder interests with an emphasis on exploring distributive justice implications of some salient trends, such as rising land prices, land consolidation, conflicting stakeholder interests, and the upset continuity of land use. In this context, the systems-theoretic vision of agricultural land markets as social systems reveals at least two generic systemic characteristics that raise morally relevant concerns. One of these characteristics is self-regulation, which is often invoked as a description of how the market mechanism works. As Wallis and Valentinov (2016) note, the modern society exhibits a large number of complex self-regulation mechanisms embodied in markets and corporations. Yet, many of these mechanisms generate unintended and undesirable consequences that thwart many of the intended commendable goals. Evidently induced by the complexity-reducing nature of the relevant social systems, these consequences dampen the utilitarian support for self-regulation. The second generic systemic characteristic is emergence, which is associated with "phenomena that arise from and depend on some more basic phenomena yet are simultaneously autonomous from that base" (Bedau and Humphreys, 2008, p. 1). The lacking sustainability and legitimacy of social systems are problems of emergence, similar to problems of the undesirable side-effects of self-regulation. Emergence is likewise implicated in the decoupling of systemic operations from the intentions of individuals, such as land owners, land users, and other stakeholders.

Economists have a powerful concept that captures the idea of undesirable side-effects – externalities. As Thompson (1995) noted, this concept too is wedded to the utilitarian paradigm. It is small wonder that critical institutional and ecological economists are skeptical concerning the extent to which the whole spectrum of moral concerns can be presented as externalities and accordingly internalized (cf. Kapp 1975; Valentinov 2014). These skeptical concerns are well captured by the Luhmannian systems-theoretic category of systemic sensitivity to the environment. The sensitivity of economic, political, and legal systems (i.e., "function systems") evidently sets the limits for the possibilities of internalization and regulation. These limits are also implicit in Carroll's (1991) four-level pyramid of corporate social responsibility. In differentiating between the economic, legal, ethical, and philanthropic responsibility, the pyramid makes clear that the economic and legal system fail to accommodate a number of moral concerns. This failure, in turn, fits well with the Luhmannian thesis that the overwhelming complexity of the environment forestalls the possibility of systems being fully sensitive to it. Again, the limits of systemic sensitivity to the environment determine the limits of the economic concepts of internalization and regulation.

Lastly, with the *third research objective*, the subproject seeks to develop alternative systems-theoretic tools for solving moral dilemmas effected by the impersonal and emergent dynamics of the market process. As established above, many of these dilemmas will overstretch the internalization capacities of the economic, legal, and political systems. These dilemmas can be conceptually reconstructed through a model of the complexity-sustainability trade-off, which could distinguish between complexity reduction strategies and critical dependence principles of agricultural land markets in a social and natural environment (Valentinov 2014). Some of the manifestations of complexity reduction strategies are found today in emotionalized discourses on large farms versus family farms, on the relative value of land use purposes related to speculations and feedstock production, or on the corporate social responsibility from the perspective of land owners. The innovative element of the subproject will be the generation of new knowledge co-created by different stakeholder groups in their search for the resolution of their conflicting interests. The co-creation of knowledge will, in turn, inform the search for semantic and institutional innovations required for the prevention and resolution of moral dilemmas, as well as for the improvement of the institutional economics understanding of agricultural land markets.

The diversity of interests and ethical standpoints of land market stakeholders further adds to the moral complexity of present-day agricultural land markets. This pluralism of moral values and the requirement of tolerance are the central characteristics of the discourse culture, especially in modern democratic societies. Moral conflicts in these societies, especially those conflicts that are not amenable to systemic internalization, are unlikely to be solved by fixed normative rules or attributions of individual responsibility. What is instead required is a dialogical compromise-oriented communication, which takes intersubjectivity seriously. Promoting this communication requires an understanding of cultural values, mental models, and discourse frames of different stakeholder groups.

In approaching the three objectives, the subproject deliberately shifts the conceptual lens from Leopold's ethics of land to the ethics of agricultural land markets, as explained in more detail below.

Conceptual strategy: From the land ethics to the ethics of agricultural land markets

The difficulties that Leopold's land ethics have in dealing with the multiplicity of land market stakeholders pursuing conflicting interests are by no means unique. It seems plausible that their origin is not in the conceptual weakness of Leopold's thought, but rather in the fundamental fact of value pluralism as a key characteristic of modern society. In the modern landscape of moral philosophy, this fact has been prominently noted by John Rawls' theory of justice as fairness. In the pluralistic society, "individuals are assumed to have different and potentially conflicting conceptions of what goals are worth pursuing and which conception of a good life to affirm. Social institutions can mediate these conflicts, but it is not obvious how they should be designed in order to do this fairly" (Mandle 2009, p. 36). Conflicts of interest are a necessary implication of value pluralism. "Persons are not indifferent as to how the greater benefits produced by their collaboration are distributed, for in order to pursue their ends they each prefer a larger to a lesser share" (Rawls 1999, p. 4).

A specific manifestation of value pluralism in the land use context has been systematically elaborated by Beatley (1994) who proposes to map the moral land use ethics standpoints along two dimensions: from utilitarian to deontological and from anthropocentric to biocentric. This mapping allowed Beatley (ibid) to develop a well-structured metaethical framework including traditional utilitarianism, cost-benefit analysis, biocentric utilitarianism, and deontological ideas related to land use rights, duties to future generations, distributive justice, animal rights, deep ecology, and Christian stewardship. What is clear, however, is that this mapping cannot be supposed to provide guidance in cases of conflicting interests and moral dilemmas.

This problem, again, is not unique. It has been well-diagnosed in Buchholz and Rosenthal's (1999, p. 312) analysis of contemporary ethical relativism: "we are left with a kind of ethical smorgasbord where one has various theories from which to choose that will hopefully shed some light on the ethical problems under consideration and lead to a justifiable solution. However, we are never told to any extent exactly how we are to decide which theory to apply in a

given situation, what guidelines we are to use in applying these different theories, what criteria determine which theory is best for a given problem and what to do if the application of different theories results in totally different courses of action”.

The unfortunate consequences of ethical relativism have led Luhmann to adopt a highly reserved and skeptical attitude toward the role of morality and moral communication in the modern society. On the one hand, Luhmann (2008, p. 46ff.) acknowledged that moral norms help address the basic problem of “double contingency” and are in this respect functionally equivalent to other communication media. On the other hand, to Luhmann (1993, p. 361ff.), moral communication presents a special type of communication expressing respect or contempt. It is constructed in such a way as to concern the person as a whole (Reese-Schäfer 1999, p. 120 ff.). In this sense, moral communication is person-centered and for this reason potentially dysfunctional: “those who moralize, accept risks, and in case of resistance will be likely to look for stronger methods or lose their self-esteem otherwise. Therefore, as long as morality is not self-evident and thus almost unnecessary, it has the tendency to produce conflict, or to originate from conflict and to exacerbate it then” (Luhmann 1993, p. 370, own translation). In view of the conflictual nature of moral communication in the modern society, Luhmann has paradoxically located the task of ethics in warning against morality (Luhmann, 1993, p. 41; cf. Kneer and Nassehi, 2000, p. 181; Luhmann, 1993, p. 368ff.).

Luhmann’s pessimism, however, likely goes unnecessarily far. While it is quite plausible that the person-centered categories of respect and contempt fall short of the complexity of modern society, Reese-Schäfer (1999, p. 129) suspects that Luhmann’s reduction of moral communication to these categories may itself be inadequate, for it turns a blind eye to the structural origins of what is perceived to be a moral problem. In fact, Luhmann himself suspected that the traditional “old European” morality merely serves to conceal and mask dysfunctional social structures that are more likely corrected by institutional reforms rather than by moral appeals. In fact, it is the structural origins of moral problems that cause moral communication to gain prominence, especially in periods of “crisis, structural change, and lack of orientation” (Luhmann 1993, p. 445ff.). If these structural origins are acknowledged, then a large number of moral problems no longer become attributable to individual intentions. This point has been noted by representatives of institutional ethics who argue that individuals cannot assume responsibility for consequences that were neither intended nor anticipated (Beckmann 2009; Beckmann et al. 2014; Pies et al. 2014; Hielscher et al. 2014). At the same time, it is clear that whereas the decoupling of consequences from intentions indeed cuts the ground from under the person-centered moral communication, it does not invalidate morality in general. Rather, what seems to be necessary is a conceptualization of how the moral content might accrue to supra-individual entities, such as social systems in general and agricultural land markets in particular.

In spite of Luhmann’s own moral skepticism, his theory of “autopoietic” social systems does seem to provide the necessary building blocks for such a conceptualization. Luhmann’s key systems-theoretic idea is that social systems of whatever type fulfill the function of complexity reduction, which is required to prevent individuals from being overwhelmed and paralyzed by the complexity of their social and natural environments. An implication of complexity reduction is that the internal complexity of social systems is necessarily inferior to the complexity of their environment. In contrast to Ashby’s (1956) law of requisite variety, Luhmann denied the ability of social systems to match the environmental complexity, which is exerting a corresponding “pressure” on those systems (Luhmann, 1995a, p. 182). According to Luhmann, social systems can withstand this pressure by virtue of their property of operational closure, which can be understood as the disconnection between their environmental contacts and their unique identity (Valentinov, Hielscher, & Pies, 2015).

A moment’s reflection will reveal that the operationally closed systems whose complexity falls short of the complexity of their environment, are bound to have sustainability problems. Valentinov (2014) has recently formulated this insight as the “complexity-sustainability trade-off”, which consists of the “complexity reduction principle” inspired by the Luhmannian idea of operational closure and the “critical dependence principle” originating from the Bertalanffyian (1968) theory of open metabolic systems. According to the complexity reduction principle, “systems increase their complexity by becoming increasingly insensitive to the complexity of the environment”

(ibid, p. 18), whereas the critical dependence principle posits that “the increasing complexity of systems is associated with their growing dependence on environmental complexity” (ibid). Put together, these principles indeed suggest that social systems, as it were, trade their internal complexity off against their sustainability, as the former can only be reached at the expense of the latter.

In Leopold’s land ethics, the complexity reduction principle translates into the reductionist economic valuation of land, whereas the critical dependence principle makes clear why “it is misleading and ultimately dangerous to speak of any individual organism as a distinct being – or to speak of the human species as a distinct element of the natural order, or to speak of a tract of land as a discrete part of the Earth” (Freyfogle 1996, p. 651). Valentinov has shown these two systems-theoretic principles to generate normative implications comparable to those of classical institutionalism (Valentinov 2013; 2015b) as well as of the Rawlsian critique of utilitarianism (Valentinov 2015a). These ideas potentially inform the (land-)ethical analysis of land markets if these markets are defined as the reference social systems. The key implication here is that morality reflects the critical dependence of the social system on its outer environment beyond what the rationality of this system can capture. It is evident that Leopold would interpret the outer environment as “the biotic community” exhibiting the attributes of “integrity, stability, and beauty” (Leopold 1949, p. 224).

Leopold’s land ethic revolves around the fact that the economic value of land fails to reflect its true value, which depends on the state of the biotic community. The question of why two types of value dramatically diverge goes beyond Leopold’s own interests, but seems closely related to the Luhmannian complexity reduction principle. In view of the systemic complexity reduction role, “system rationality increasingly loses its claim to be world rationality... To the extent that system rationality appears more realizable it becomes less world-rational and even less socially rational” (Luhmann 1989, p. 138). This diagnosis seems to capture the essence of the Luhmannian analysis of functional differentiation, i.e., the decomposition of the modern society into function systems, such as economy, politics, and law. He emphasized that, by virtue of specializing on their respective functions, these systems enjoy a substantial degree of autonomy from their social and ecological environment. This autonomy, in turn, implies the limited sensitivity of the functional systems to their multifarious environmental dependencies. Given that all the functional systems are equally important and no kind of central or peak agency is available, a functionally differentiated society is confronted with severe steering problems, especially in coping with global challenges that require coordinated responses (van Assche and Verschraegen 2008).

This diagnosis of functional differentiation is evidently a far cry from the classical sociological idea of the normative integration of society. According to Luhmann, the function systems are linked together not by shared moral norms and values, but rather by “structural couplings” which mean the reliance of functional systems on certain structural characteristics of their environment (Schneider 2009, p. 288). Valentinov’s (2014) model of the complexity-sustainability trade-off, however, drives home the point that structural couplings cannot prevent systemic sustainability from deteriorating, just as they cannot connect the economic value of land with its true value in Leopold’s land ethics.

The context of agricultural land markets must certainly be distinguished from that of the function systems analyzed by Luhmann. First, while these markets belong to the economic system, they do not constitute the whole of it. Second, an account must be taken of stakeholder conflicts, both actual and potential. The validity of the complexity-sustainability trade-off, however, is not limited to function systems. Valentinov and Chatalova (2016) have shown that this trade-off allows the conceptualization of any kind of social system as the combination of two systems-theoretic identities. On the one hand, the system is open in the Bertalanffyian sense and metabolically dependent on its environment. On the other hand, it is operationally closed and accordingly seeks to build up their internal complexity by disregarding the complexity of the environment. The social dilemma situations arise out of the conflict between these two identities – a conflict that occurs when the systemic disregard for the environment becomes so far-reaching as to undermine the metabolism necessary for the maintenance of the system. Evidently, in the present context, metabolic disruptions translate into legitimacy (i.e., ethical) problems. Further-

more, specific stakeholders may be embedded in other types of social systems, such as politics, local communities, or business organizations, whose rationalities are not necessarily congruent with each other.

A further reason to reconsider Leopold’s land ethics arises from its ambivalent relation to agricultural production and agricultural land markets. If “the biotic community” is to maintain its “integrity, stability, and beauty”, both agricultural production and functioning land markets may need to be severely curtailed. As Thompson (1995) aptly noted, it is this ambivalence that has so far prevented environmental philosophy from fully appreciating the societal significance of agriculture. Even E.F. Schumacher’s (1973) ecological critique does not deny this significance. To him, agriculture has to keep humans in touch within living nature, of which they are a vulnerable part; it has to ennoble man’s wider habitat, as well as to bring forth the food (ibid, p. 113). Applied more generally, the problem is not unique to Leopold’s work. Habermas discerned a similar problem in the Frankfurt school that tended to assume a fusion of “validity” and “power”, or enlightenment and domination, in such a way as to lose the genuine potential for social critique. Thompson is optimistic that the societal significance of agriculture and land markets can be well captured by the category of sustainability, which, however, does not remain entirely free of ambiguities related, among other things, to the likely confounding of the “resource sufficiency” and “functional integrity” approaches. The model of the complexity-sustainability trade-off avoids these ambiguities by allowing sustainability to legitimate a certain degree of intra-systemic complexity. Accordingly, if grounded in this model, the ethics of agricultural land markets does not have the same ambivalent relation to land markets and production as Leopold’s land ethics has. The real challenge is thereby shifted from the theoretical plane to the empirical plane of specifying the metabolic relations between the agricultural land markets system and its environmental stakeholders.

2.3 Work programme incl. proposed research methods

Working packages

The subproject includes four working packages [WP] that refer to the formulated research objectives. Each working package will be finalized by a milestone report [R]; the research outcomes of packages 1-4 will each be summarized in one publication [P] in international peer-reviewed journals and in further publications in other specialist journals (Table 1). Additionally, the key findings will be communicated through mass media outlets [M], policy briefs [B], and direct contact with stakeholders [S] involved in workshops and expert interviews.

Table 1: The subproject implementation schedule

Working packages	Years		
	1 st	2 nd	3 rd
[WP1] Ethical mapping	R, P		
[WP2] Discourse analysis		R, P	
[WP3] Engaging stakeholders		R, P, M, B, S	
[WP4] Constructing the social fabric matrix			R, P, M, B, S

Working package 1: Ethical mapping

Ethical mapping, as understood here, encompasses a review of scholarly literature and political documents on agricultural land markets with an emphasis to establish their relation to the basic landscape of moral philosophy. Beatley’s (1994) preliminary outline of this landscape includes utilitarian and market perspectives on land use, the idea of culpability and harm prevention, land use rights, distributive justice, ethical duties to the environment, land use obligations to future generations, paternalism of land use policy, and interjurisdictional land use ethics. This set of principles of ethical land use presents a useful preliminary standard for assessing the extent to which land use patterns emerging from the functioning of agricultural land markets pose ethical problems. Ethical mapping will also include a metaethical reflection on the criteria that allow the

qualification of specific agricultural land market issues as morally relevant. The point of departure here will be the systems-theoretic vision of agricultural land markets as social systems. Those systems affect their environment in ways whose repercussions are not fully captured through systemic rationality. The steps of ethical mapping described below draw inspiration from Beatley's (1994) seminal attempt at systematizing land use ethics.

The *first step* of ethical mapping is the assessment of agricultural land markets from the utilitarian point of view. To what extent and in what sense is it arguable that these markets indeed ensure the maximization of utility for their participants? These issues draw attention to real-world market failures, such as market power, externalities, public goods, and transaction costs, e.g. in the form of poor transparency, each of which potentially interferes with the maximization of allocative efficiency. The utilitarian doctrine presents the primary ethical defense of agricultural land markets. The proposed ethical mapping must clarify the extent to which this defense is actually justified in the German case.

In the *second step*, ethical mapping is supposed to identify the further moral dimensions of agricultural land use that are not covered by the utilitarian assessment but can motivate reasonable moral claims. Prominent among these dimensions is distributive justice. A number of salient trends, such as the rise of land rents and prices, land consolidation, and the emergence of large-scale holding structures, generate winners and losers, the latter of which are dissatisfied with the distributional implications of market allocation. The key issues here concern the identification of the least advantaged groups in the Rawlsian sense and the applicability of Rawlsian reasoning to their problems. Another relevant dimension is harm that can be imposed by agricultural land markets, beyond what is captured by the concept of externalities. For example, the growing role of non-agricultural investors, the conversion of agricultural land to non-agricultural uses, and discontinuity of the production cycle, such as by outsourcing parts of production to major agribusinesses, are relevant examples. Yet another dimension is related to the ability of agricultural land markets to violate minimum social and environmental rights. For example, if individuals are assumed to have a basic right to food (De Schutter 2010), how would that influence the regulation of agricultural land markets? Furthermore, if land as a natural object is assumed to possess intrinsic worth, it may likewise provide a basis for assessing these markets, especially in terms of the human footprint and the ideal of stewardship. Finally, agricultural land markets cannot be given a moral assessment without considering their effects on future generations, which will likely be interested in inheriting a healthy natural environment.

After the utilitarian and non-utilitarian dimensions of agricultural land markets have been identified, they will be organized into a unified framework. This will present the *third step* of ethical mapping. One version of such a framework is developed by Beatley (1994) and includes a two-fold departure from utilitarianism: one towards deontology and another towards biocentrism. More fitting with the purposes of the present subproject is an alternative framework informed by the Luhmannian vision of agricultural land markets as a social system maintaining a potentially precarious relationship to its social and natural environments. Within this systems-theoretic framework, the utilitarian justification reflects the internal complexity of this system, while the non-utilitarian concerns would refer to the aspects of the precariousness of system-environment relations (Valentinov 2015b). A crucial role of the alternative framework is in the generation of meta-principles for the resolution of moral dilemmas that would emerge if specific moral assessments generate conflicting policy recommendation.

Working package 2: Discourse analysis

The morally controversial nature of the dynamics of agricultural land markets manifests itself in the emotional and polarized state of discourses led by their participants and affected stakeholders. Frequently, these discourses encompass issues that have long been marked by a lack of societal consensus, such as the relative advantages of small and large sized agricultural production units, the expediency of public regulation of market processes, the extent of public constraints on private property rights in land, and the moral significance of agricultural production. From the perspective of Haidt's (2012) theory of moral foundations, these issues may activate the "moral taste buds" of care, fairness, liberty, and loyalty. The resulting emotional reaction is likely to eventuate in the emergence of rigid mental models that stand in the way of informed

and enlightened public discourse. Discourse analysis in this research proposal is intended to identify these mental models.

In the *first step*, semi-structured expert interviews will be conducted with specific types of participants and stakeholders of agricultural land markets, such as farmers, rural residents, non-agricultural investors, public officials, NGOs, and mass media representatives. The potential interviewees will be requested by telephone or email. When possible, interviews will be conducted via online surveys, otherwise, face-to-face interviews will be conducted. It is intended that 20 expert interviews will be completed. The interview guideline will contain open questions related to moral dimensions of agricultural land markets, touching upon the identified “moral taste buds” of care, fairness, liberty, and loyalty in regard to the significance of land, farming, private property, the free market, and an intact natural environment. The interview data will be analyzed by the computer-based method *GABEK*[®] (a German acronym for holistic analysis of complexity). The advantage of *GABEK*[®] as a method of qualitative research is its ability to reconstruct the meaning of concepts by revealing connections between dominant semantics which co-occur in speech contexts (Zelger and Oberprantacher 2002, cf. also Mueller et al. 2011, Hielscher and Will 2014). The method will allow the creation of “linguistic nets” that reveal meaningful connections between basic moral concepts identified within the text sample. Reading these nets as representations of the interviewees’ mental landscape will lay bare the patterns of moral argumentation, especially the underlying implicit assumptions. Furthermore, the method will classify the identified moral arguments through a semantic analysis (cf. Pies et al. 2009, pp. 385ff.) with an emphasis on assessing whether and how moral arguments are adapted to real-world economic conditions of modern agriculture. By this means, ethical arguments will also be distinguished from enlightened self-interests and other motives.

In the *second step* of discourse analysis, frame analysis will be applied to Germany’s major print media outlets, such as *Spiegel*, *FAZ*, *Zeit*, *Süddeutsche*, and *Focus*, covering their activity of the last ten years. Discourse frames, which serve as a further complexity reduction strategy, consist of pre-selected contextual contents. Being typically biased toward negatively connotated contents (e.g., presenting agriculture as the driver of social costs or certain branches as victims of unfair policies), they substantially determine public perception of agriculture, necessarily contributing to the progressing alienation between agriculture and society. As noted by Luhmann (1995b), discourses framed by prejudicial semantics (e.g., victim-perpetrator-bias) can be debunked only through „direct contact between sender and receiver“. In the present context, this would mean establishing direct communication between agriculture as a social system and journalists and the public as its social environment. The frame analysis will therefore trace the extent and quality of such communication channels. The analysis will again apply the *GABEK*[®] method to identify the major content selectors and resulting moral discourse patterns related to specific policy areas.

In the *third step*, the findings of the discourse analysis discussed above will be given a philosophical scrutiny drawing on “the ordonomic approach” grounded in the work of Ingo Pies and associates (Pies et al. 2009, 2012; Hielscher et al. 2016; Valentinov et al. 2015, 2016). Geared towards examining the interdependence between institutions and ideas or social structure and semantics, this approach is able to detect the effect of rigid mental models on the choice of argumentative strategies in such a way as to diagnose the emergence of social dilemmas, i.e., the situation of collective self-damage. Such dilemmas may, for instance, arise due to mixed signals sent by current agricultural policy that targets the promotion of efficient and sustainable agricultural structures, but at the same time incentivizes some inefficient structures such as family farms. From the systems-theoretic point of view, the ordonomic analysis of mental models uncovers the complexity reduction effects of social systems to which the concerned discourse participants belong. Once the complexity reduction effects are laid bare, they can be juxtaposed with the critical environmental dependencies of these social systems. In more operational terms, this juxtaposition involves the analytical deconstruction and empirical reconstruction of discourse patterns related to conflict, with an emphasis on finding innovative semantic categories or rule arrangements that help solve the conflict. The overall normative orientation of such feedback regulation mechanisms is the Rawlsian idea of mutual advantage, which translates into the systems-theoretic idea of sustainability of agricultural land markets as social systems. Tentatively, some of these rule arrangements might include a variety of the Corporate Social Responsibil-

ity (CSR) code for the agricultural sector. Their validity, however, cannot be established apart from the discourse analysis, which is herewith planned.

Working package 3: Engaging stakeholders

The assumption behind this working step is that the genuine resolution of ethical debates among the stakeholders of agricultural land markets is not possible without the engagement of these stakeholders themselves. This assumption is guided by the Habermasian approach to discourse ethics (Rehg 1994). While Kantian and Rawlsian moral reasoning can be done monologically and normatively by an expert philosopher, the discourse ethics postulates the intersubjective and thus dialogical, consensus-oriented character of moral validity. Given that agricultural land markets are indeed a concern to numerous stakeholders, efforts will be made to bring some of them together into two moderated discussion groups. These groups will consist of 15-20 participants in total, representing different stakeholders, such as land owners (active farmers and non-agricultural investors, including churches), land operators (family farmers and owners of large-scale enterprises), NGOs' representatives, rural dwellers, and public officials (local politicians and representatives of agricultural offices). Ideally, the stakeholders participating in expert interviews (cf. working package 2) can be attracted as discussants. The organization of the discussion meetings is expected to considerably benefit from the already established contacts to different agricultural stakeholder groups and from the experience of our cooperation partners (cf. Section 5.4) in conducting interviews and surveys. Furthermore, it is intended that this sub-project together with subprojects 6 and 7 will coordinate the thematic breadth and logistic handling of the workshops to utilize synergies in knowledge exchange as well as in the time- and cost-efficiency of workshop organization.

In the discussion groups, the researcher will position him(her)self not as an expert, but as a learning agent and facilitator. The plan is to conduct two group workshops moderated by invited experts familiar with these discussion formats. The possible topics to be discussed encompass the ambivalent role of non-agricultural investors in agricultural land markets, the emergence of land price bubbles, policies of preserving small-scale family farming and landscape protection, land market regulations by means of land price and rent ceilings, and the corporate social responsibility of land owners. These topics are supposed to be specified in the course of expert interviews and the discourse analysis.

Stakeholders will thus be seen not merely as a source of moral debates, but also as a potential source of both moral consensus and collective learning. Both of these aspects are significant. First, if there is indeed a sense in which the ethical debates can be resolved, then attaining consensus is a crucial part of it. Second, in view of the likely persisting mental models of specific stakeholders, stakeholder interaction may potentially lead to the emergence and co-creation of new knowledge, whose intersubjective origin would make it inaccessible to a researcher acting alone. Within this working step, two complementary types of moderated discussions will be organized. One of these is the "*critical systems heuristics*" developed by the contemporary Swiss philosopher Werner Ulrich (1994). The other is an interactive gamified version of the "*integrative propositional analysis*" developed by the contemporary cognitive scientist Steven Wallis (Wallis 2016; Wallis and Wright 2015; Wallis and Valentinov 2016a,b,c). The former aims at a critical handling of the "boundaries" of mental models; the latter type is concerned with evaluating and improving their substantive content. In the present proposal, the use of both of these discussion types is innovative in that it will be linked to the Luhmannian complexity reduction principle and thus fitted into the model of the complexity-sustainability trade-off of the social system of the agricultural land market (Valentinov 2014).

The discussion guided by the critical systems heuristics (Ulrich 2005, 2000) will rest on the assumption that the dialogical discourse process will help the participants become aware of their "boundary judgments", i.e., the taken-for-granted definitions of reference systems underlying their decision-making. In the present context, these judgments will be interpreted as reflections of the complexity reduction effects of the social systems to which specific stakeholders belong. Against this backdrop, the "boundary questioning" which is a part of the critical systems heuristics will give stakeholders a chance to appreciate the critical dependence effects as well. Ulrich refers in this connection to the "dialogical search for mutual understanding" and "controversial

debate on boundary judgments” (Ulrich 1998, 8). The latter debate is particularly germane in view of its emancipatory function, which will be attractive to those stakeholders who wish to express dissatisfaction with what they would perceive as unfair activity on the part of their opponents. The emancipatory use of the critical systems heuristics holds out some hope for reaching an understanding, even though this cannot be guaranteed. Yet, independently of whether a mutual understanding is achieved, controversial issues that would arise during the discussion would already present new knowledge on the moral dimensions of agricultural land markets.

The discussion guided by the interactive gamified version of the integrative propositional analysis (Wallis and Wright 2015) will rest on the assumption that the stakeholders cannot only learn from each other, but can also co-create new knowledge that would present an output of the present project. The integrative propositional analysis is a tool for evaluating conceptual systems, such as theories, policy plans, business plans, and mental models. The assumption is that the effectiveness of these conceptual systems in the real world is determined by their “systemicity” which refers to a measure of their causal interconnectedness (Wallis 2016). The systemicity is not fixed; it is potentially subject to improvement, especially through the interaction of concerned stakeholders. The co-created new knowledge thus improves the knowledge map and can be supposed to overcome the specific limitations of the individual mental models, particularly by being more “systemic”, i.e., by taking better account of the interrelatedness of reality. This map can be the basis for evaluating the moral problems of individual mental models as well as the basis for a consensus.

Working package 4: Constructing the social fabric matrix

The social fabric matrix (SFM) is an open-ended descriptive-explorative tool developed by the contemporary institutional economist Gregory Hayden (2006; cf. also Natarajan et al. 2009). It presents a “nonequilibrium, noncommon-denominator process matrix” (Hayden 2006, p. 86) allowing for the organization of knowledge about a specific institution, especially to discover elements not yet recognized (ibid, p. 87). SFM has been applied to a broad variety of contemporary real-world problems, including poverty, microfinance, quality of life, pollution control, agricultural development, the mortgage crisis, and educational systems (cf. Natarajan et al. 2009). Common to this wide range of SFM applications is the holistic account of the interaction of the economic system with technology, nature, and the broader institutions of society. By visualizing this interaction in terms of flows and deliveries, the matrix detects the counter-intuitive emergent properties of social systems and identifies the drivers and directions of socio-economic change. Although heterogeneous in their thematic foci, the available applications of SFM inform policy making by making it consistent with the complex social, ecological, and technological interdependencies implicit in the systems-theoretic ideas of openness and feedback.

The components of the matrix include: cultural values, i.e., “evaluative standards for judgment with regard to what is ideal”; social beliefs, which differ from cultural values by being specific to institutions and activities; attitudes, i.e., social beliefs focused on specific objects or situations (mental models will be included here); technologies; ecological systems; and institutions. In the matrix, these components are mathematically integrated through the concepts of flows and deliveries, the latter of which can be intentional and non-intentional, as well as qualitative and quantitative (e.g., criteria, court rulings, goods and services, etc.) (ibid, p. 76). “The rows and columns are the same entries and are in the same order. The cell $i=j$ defines what the i th entry is delivering to the j th entry, thus, what the j th is receiving. The terms “delivering and receiving” convey the basic idea that the process is ongoing” (ibid, p. 87). Mathematically, the matrix can be analyzed with matrix algebra, social network analysis, and graph analysis.

The construction of the matrix will be informed by the previous working steps of the present subproject. Specifically, ethical mapping will provide information on the cultural values relevant for the agricultural land markets; the mental models and frames identified by discourse analysis will be included under the social beliefs and attitudes categories; and the co-created knowledge maps generated through stakeholder engagement will provide ideas on how to identify flows and deliveries connecting the rows and columns in the matrix. In deriving information on further components, such as technologies, ecological systems, and institutions, the matrix will make use of the insights generated by subprojects 4, 5, and 7. The matrix is explicitly conceived as a

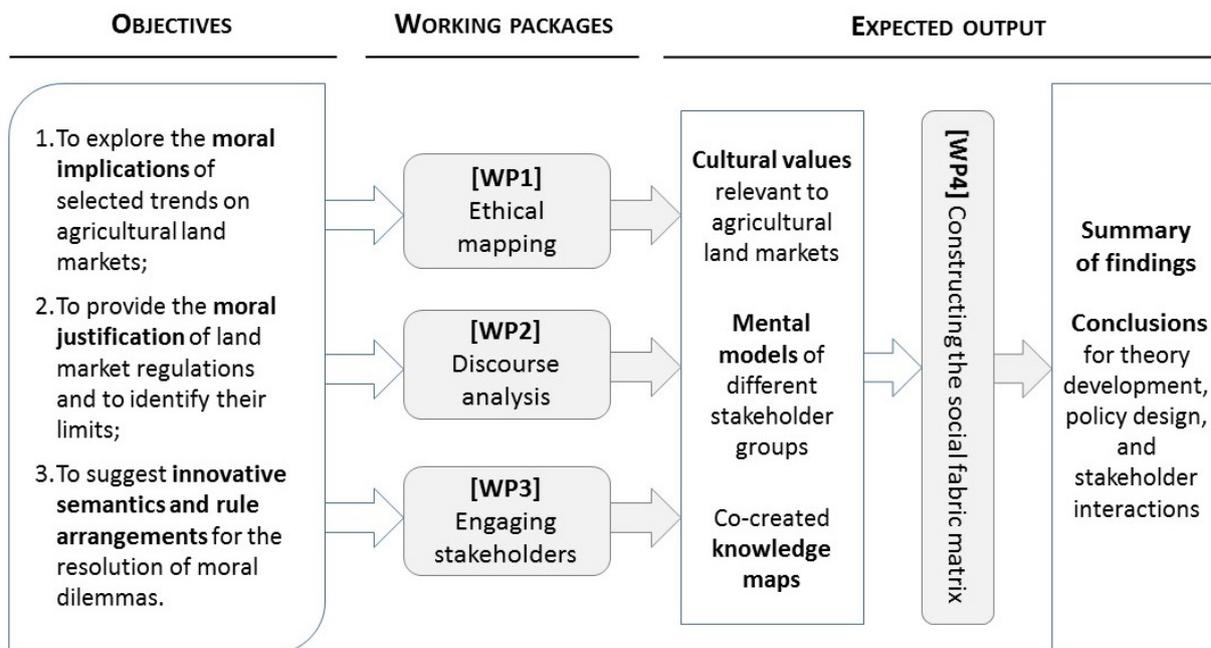
systems-theoretic tool and must be well-suited for analyzing the sustainability of the social system of agricultural land markets in its social and natural environments. If specific blocks of the matrix are defined as open systems connected by flows and deliveries to the environment represented by the remaining blocks, then the matrix can provide a model of the complexity-sustainability trade-off constituted by the specific manifestations of the complexity reduction and critical dependence principles. Given that the matrix can integrate diverse types of data with no need of a common denominator, it can be used to illustrate the need for alternative values, beliefs, attitudes, technologies, and institutions operative in agricultural land markets. Identifying this need is essential to design alternative land market regulations, which are the focus of subproject 6. Furthermore, the matrix will allow the testing of moral emergence properties of those regulations and their tendency to fall out of line with the values and beliefs claimed by their participants.

The matrix will likewise be suited to analyze the systems-theoretic implications of the self-regulation properties of agricultural land markets. If Wallis and Valentinov (2016) are correct in arguing that self-regulation may potentially generate unintended and undesirable consequences, then the matrix will be able to render these consequences explicit, which would undermine the utilitarian support for these markets. The matrix will thus provide a platform for comparing the market self-regulation feedback with the broader societal and ecological feedback mechanisms (which may or may not be in place), supporting subproject 7 in the assessment of the environmental dimension of land market dynamics. These broader feedback mechanisms will have implications for the moral constitution of agricultural land markets, both actual and desirable from the perspective of sustainability in the social and natural environments.

The subproject organization

Taken together, the four working packages described above yield a strategy to approach the formulated research objectives (Figure 1).

Figure 1: Overview of the subproject organization



The insights generated in working packages one to three will not only present self-contained research findings, but also serve as the input for constructing the social fabric matrix in working package four. The overall output of the subprojects is expected to provide a metaethical reflection on moral problems of agricultural land markets viewed as social systems maintaining a pre-

carious relationship to their social and natural environments. Specifically, it is planned to derive a set of conceptual tools consisting of innovative semantics and rule arrangements for the resolution of moral dilemmas related to the self-regulation and emergent properties of agricultural land markets.

This subproject is intended to be implemented by two postdoctoral researchers, including the principal investigator. The principal investigator (who will not be paid out of the project funds) will work primarily on the development of the systems-theoretical underpinning of the subproject's methodology [WP1] and assist in the interpretation of the ethical issues of land markets concluded from the social fabric matrix analysis [WP4]. The second postdoctoral researcher will be responsible for preparing, conducting, and evaluating semi-structured stakeholder interviews and discourse analysis [WP2, WP3]. In these tasks, she will be supported by a student assistant (a Master's student with basic knowledge in survey analysis and ethics). Both researchers will communicate results derived in each subproject step [WP] through academic and non-academic publications. In conducting and evaluating the discourse and frame analyses, the subproject will also benefit from the agreed cooperation with external researchers from the Martin-Luther University Halle-Wittenberg and the University of Utrecht, who have a long-term experience in discourse analysis and profound expertise in business ethics.

2.4 Data handling

With regard to the collection and handling of data and in the cooperation with those surveyed in general, the principal investigator, post-doctoral researcher, student assistant, and other involved personnel will impose the highest ethical standards upon themselves.

2.5 Other information

2.5.1 Contribution to the overall project and cooperation with other subprojects

The exploration of ethical dimensions of agricultural land will contribute to the understanding of their relation to the efficiency and regulation of agricultural land markets, thus supporting the analyses of subprojects 1 and 4. Toward this end, the subproject will map the moral beliefs of the concerned stakeholders and identify possible discrepancies between these beliefs and the current land market regulations. Ethical mapping aims to identify further moral dimensions of agricultural land use that are not covered by the utilitarian assessment, but can motivate reasonable moral claims. In this regard, the subproject will benefit from the expertise of subproject 6 on different land market participants and their bidding strategies. Insights on potential connections between farm size, terms of rental contracts, and moral dilemmas will be derived from the exchange with subprojects 2 and 5.

On the basis of the analysis of land markets as social systems, an 'ideal moral constitution' of agricultural land markets will be justified, with an account of its legal implementability. Furthermore, a discourse analysis of public, scientific, and mass media communications will investigate the mental models or cognitive biases that shape the evolution of specific land market regulations in ways that may deviate from the 'ideal moral constitution'. Viewing land markets as social systems standing in a potentially precarious relationship with their social and natural environments will also contribute to the disentanglement of multifarious effects of land market dynamics on environmental parameters, which are the focus of subproject 7.

2.6 Descriptions of proposed investigations involving experiments on humans, human materials or animals

n.a.

2.7 Information on scientific and financial involvement of international cooperation partners

n.a.

3 Bibliography

- Ashby, W.R. (1956): *An Introduction to Cybernetics*. London: Chapman and Hall.
- Beatley, T. (1991): A Set of Ethical Principles to Guide Land Use Policy. *Land Use Policy* 8(1): 3-8.
- Beatley, T. (1994): *Ethical Land Use: Principles of Policy and Planning*. Baltimore et al.: Johns Hopkins University Press.
- Beckmann, M. (2009): *Ordnungsverantwortung: Rational Choice als Ordonomisches Forschungsprogramm*. Wissenschaftlicher Verlag Berlin, Berlin.
- Beckmann, M., Hielscher, S., Pies, I. (2014): Commitment Strategies for Sustainability: How Business Firms Can Transform Trade-offs into Win-Win Outcomes. *Business Strategy and the Environment* 23: 18-37.
- Bedau, M.A., Humphreys, P. (2008): Introduction. In: Bedau MA, Humphreys P (eds.) *Emergence: Contemporary Readings in Philosophy and Science*. MIT Press, Cambridge, MA, pp. 1-6.
- Bertalanffy, L. von (1968): *General System Theory: Foundations, Development, Applications*. New York: George Braziller.
- Boulding, K.E. (1984): *The Organizational Revolution: A Study in the Ethics of Economic Organization*. Greenwood Press, Westport, CT.
- Buchholz, R.A., Rosenthal, S.B. (1999): Social Responsibility and Business Ethics. In: Frederick RE (ed.) *A Companion to Business Ethics*. Blackwell, Malden, MA, pp. 303-32.
- Rosenthal, S. B., & Buchholz, R. A. (2000). *Rethinking business ethics: A pragmatic approach*. New York: Oxford University Press.
- Bund-Länder-Arbeitsgruppe „Bodenmarktpolitik“ (2015): *Landwirtschaftliche Bodenmarktpolitik: Allgemeine Situation und Handlungsoptionen. Abschlussbericht*.
- Callicott, J.B. (2013): *Thinking like a Planet: The Land Ethic and the Earth Ethic*. Oxford: Oxford University Press.
- Carroll, A.B. (1991): The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons* 34: 39-48.
- De Schutter, O. (2010): The Emerging Human Right to Land. *International Community Law Review* 12: 303-334.
- Deininger, K., Byerlee, D. (2011): *Rising Global Interest in Farmland. Can it Yield to Sustainable and Equitable Benefits?* Washington: The World Bank.
- Freyfogle, E.T. (1996): Ethics, Community, and Private Land. *Ecology Law Quarterly* 23: 631-661.
- Habermas, J. (1985): *The Theory of Communicative Action. Volume 2: Lifeworld and system: A Critique of Functionalist Reason*. Boston: Beacon Press.
- Haidt, J. (2012): *The Righteous Mind: Why Good People are Divided by Politics and Religion*; New York: Pantheon.
- Hayden, F.G. (2006): *Policymaking for a Good Society: The Social Fabric Matrix Approach to Policy Analysis and Program Evaluation*. New York: Springer.
- Hielscher, S., Pies, I., Valentinov, V., Chatalova, L. (2016): Rationalizing the GMO Debate: The Ordonomic Approach to Addressing Agricultural Myths. *International Journal of Environmental Research and Public Health*, article # 476, doi: [10.3390/ijerph13050476](https://doi.org/10.3390/ijerph13050476)
- Hielscher, S., Will, M.G. (2014): Mental Models of Sustainability: Unearthing and Analyzing the Mental Images of Corporate Sustainability with Qualitative Empirical Research. *Systems Research and Behavioral Science* 31: 708–19.
- Hodgson, G.M. (1987): Economics and Systems Theory. *Journal of Economic Studies* 14: 65-86.
- Kapp, K.W. (1975): *The Social Costs of Private Enterprise*. New York: Schocken Books.
- Kapp, K.W. (1977): *The Social Costs of Business Enterprise*. Nottingham: Spokesman University Paperback.
- Kneer, G., Nassehi, A. (2000): *Niklas Luhmanns Theorie sozialer Systeme*. Paderborn: Fink.
- Leopold, A. (1949): *A Sand County Almanac*. Oxford: Oxford University Press.
- Luhmann, N. (1989): *Ecological Communication*. Chicago: The University of Chicago Press.

- Luhmann, N. (1990): *Paradigm Lost. Über die Ethische Reflexion der Moral*. Suhrkamp, Frankfurt am Main.
- Luhmann, N. (1993): *Gesellschaftsstruktur und Semantik, Vol. 3*. Frankfurt am Main: Suhrkamp.
- Luhmann, N. (1995): *Die Realität der Massenmedien*. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Luhmann, N. (1995a): *Social Systems*. Stanford University Press, Stanford.
- Luhmann, N. (1997): *Die Gesellschaft der Gesellschaft*. Frankfurt am Main: Suhrkamp.
- Luhmann, N. (2008): *Die Moral der Gesellschaft*. Frankfurt am Main: Suhrkamp.
- Mandle, J. (2009): *Rawls's A theory of justice: An introduction*. Cambridge, MA: Cambridge University Press.
- Müller, J., Abfalter, D., Hautz, J., Hutter, K., Matzler, K., Raich, M. (2011): Differences in Corporate Environmentalism - a Comparative Analysis of Leading US and German Companies. *European Journal of International Management* 5(2): 122–48.
- Natarajan, T., Elsner, W., Fullwiler, S. (eds). (2009): *Institutional Analysis and Practice*. New York et al.: Springer.
- Pies I. (2012): *Regelkonsens statt Wertekonsens: Ordonomische Schriften zum politischen Liberalismus*. Berlin: Wissenschaftlicher Verlag Berlin.
- Pies, I., Beckmann, M., Hielscher, S. (2014): The Political Role of the Business Firm: An Ordonomic Re-conceptualization of an Aristotelian Idea. *Business & Society* 53(2): 226–259.
- Pies, I., Hielscher, S., Beckmann, M. (2009): Moral Commitments and the Societal Role of Business: An Ordonomic Approach to Corporate Citizenship. *Business Ethics Quarterly* 19: 375-401.
- Pies, I., Hielscher, S., Beckmann, M. (2009): Moral Commitments and the Societal Role of Business: An Ordonomic Approach to Corporate Citizenship. *Business Ethics Quarterly* 19(3): 375-401.
- Polanyi, K. (2001): *The Great Transformation: The Political and Economic Origins of our Time*. Boston: Beacon Press.
- Rawls, J. (2001): *Justice as Fairness: A Restatement*. Cambridge, MA et al.: Belknap Press.
- Rawls, J. (1999): *A Theory of Justice*. Cambridge, MA: Belknap Press.
- Reese-Schäfer, W. (1999): *Niklas Luhmann zur Einführung*. Hamburg: Junius.
- Rehg, W. (1994): *Insight and Solidarity: The Discourse Ethics of Jürgen Habermas*. Univ of California Press.
- Schneider, L.W. (2009): *Grundlagen der Soziologischen Theorie*. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Schumacher, E.F. (1973): *Small is Beautiful: Economics as if People Mattered*. New York: Harper and Row.
- Snoeyenbos, M., Humber, J. (1999): Utilitarianism and Business Ethics. In R.E. Frederick (ed.), *A Companion to Business Ethics* (pp. 17-29). Blackwell, Malden, MA.
- Swanson, D.L. (1999): Business Ethics and Economics. In R.E. Frederick (ed.): *A Companion to Business Ethics*. Ch. 17. Blackwell, Malden, MA. DOI: 10.1002/9780470998397.ch17.
- Thompson, P. (1995): *The Spirit of the Soil: Agriculture and Environmental Ethics*. London et al: Routledge.
- Turner, B.L., Wuellner, M., Nichols, T., Gates, R. (2014): Dueling Land Ethics: Uncovering Agricultural Stakeholder Mental Models to Better Understand Recent Land Use Conversion. *Journal of Agricultural and Environmental Ethics* 27(5): 831-856.
- Ulrich, W. (1998): *Systems Thinking as if People Mattered*. Critical Systems Thinking for Citizens and Managers. Working Paper No. 23, Lincoln School of Management, London, UK.
- Ulrich, W. (2000): Reflective practice in the civil society: the contribution of critically systemic thinking. *Reflective Practice* 1(2): 247-268.
- Ulrich, W. (2005): *A Brief Introduction to Critical Systems Heuristics (CSH)*. ECOSENSUS project site.
- Valentinov, V. (2014a): The Complexity-Sustainability Trade-off in Niklas Luhmann's Social Systems Theory. *Systems Research and Behavioral Science* 31: 14-22.
- Valentinov, V. (2014b): K. William Kapp's Theory of Social Costs: A Luhmannian Interpretation. *Ecological Economics* 97: 28-33.
- Valentinov, V. (2015a): The Rawlsian Critique of Utilitarianism: A Luhmannian Interpretation. *Journal of Business Ethics*, online first, doi: 10.1007/s10551-015-2786-y

- Valentinov, V. (2015b): From Equilibrium to Autopoiesis: A Luhmannian Reading of Veblenian Evolutionary Economics. *Economic Systems* 39: 141-155.
- Valentinov, V., Chatalova, L. (2016a): Institutional Economics and Social Dilemmas: A Systems Theory Perspective. *Systems Research and Behavioral Science* 33(1): 138-149.
- Valentinov, V., Chatalova, L. (2016b): Institutional Economics, Social Dilemmas, and the Complexity-Sustainability Trade-off. *Systems Research and Behavioral Science* 33(3): 488-491.
- Valentinov, V., Hielscher, S., Pies, I. (2015): Nonprofit Organizations, Institutional Economics, and Systems Thinking. *Economic Systems* 39 (3): 491-501.
- Valentinov, V., Hielscher, S., Pies, I. (2016): Emergence: A Systems Theory's Challenge to Ethics. *Systemic Practice and Action Research*, 29(6), pp. 597–610.
- Van Assche, K., Verschraegen, G. (2008): The Limits of Planning: Niklas Luhmann's Systems Theory and the Analysis of Planning and Planning Ambitions. *Planning Theory* 7(3): 263-283.
- Wallis, S. E. (2016): The Science of Conceptual Systems: A Progress Report. *Foundations of Science* 21(4): 579–602.
- Wallis, S., Wright, B. (2015): Strategic Knowledge Mapping: The Co-creation of Useful Knowledge. *Developments in Business Simulation and Experiential Learning* 42: 1-18.
- Wallis, S.E., Valentinov, V. (2016c): A Limit to Our Thinking and Some Unanticipated Moral Consequences: A Science of Conceptual Systems Perspective with Some Potential Solutions. *Systemic Practice and Action Research*, online first, doi:10.1007/s11213-016-9394-3.
- Wallis, S.E.; Valentinov, V. (2016b): The Imperviance of Conceptual Systems: Cognitive and Moral Aspects. *Kybernetes: The International Journal of Systems, Cybernetics and Management Science*, 45(9), pp.1437–1451.
- Wallis, S.E.; Valentinov, V. (2016a): What is Sustainable Theory? A Luhmannian Perspective on the Science of Conceptual Systems. *Foundations of Science*, online first, doi:10.1007/s10699-016-9496-5.
- Woermann, M. (2013): On the (Im)Possibility of Business Ethics: Critical complexity, deconstruction, and implications for understanding the ethics of business. New York: Springer.
- Zelger, J., Oberprantacher, A. (2002): Processing of Verbal Data and Knowledge Representation by Gabek-WinRelan, URL: <http://www.qualitativerecherche.net/index.php/fqs/article/view/866>.

4 Requested modules/funds

Total requested funds: **155 923 €**

4.1 Basic Module

4.1.1 Funding for Staff

The principal investigator (Valentinov, Vladislav) will not be paid out of the project funds. Given the complexity and conceptual novelty of the tasks, we apply for a 60% post-doc position (Chatalova, Lioudmila) for three years. This position will be co-financed from IAMO budgetary funds in order to establish a full-time post-doc position for three years. We further apply for a student assistant position (a Master's student with basic knowledge in survey analysis and ethics) to insure the required support of senior researchers in preparing and conducting expert interviews and stakeholder workshops.

Total: 140 923 €

1 postdoctoral researcher TVL-E13 (60%) for 36 months	123 120 €
1 student assistant (40 hours per month) for 36 months	17 803 €

4.1.2 Direct Project Costs

4.1.2.1 Equipment up to €10,000, Software and Consumables

Consumables will be provided by the Leibniz-Institute of Agricultural Development in Transition economies (IAMO), Halle (Saale).

4.1.2.2 Travel Expenses

		Total: 10 000 €
2017	ForLand Seminar (1 project meeting, 2 persons)	400 €
2018	ForLand Seminar (2 project meetings, 2 persons)	800 €
	About 20 stakeholder interviews (conducted by 2 persons)	1 000 €
	Contributions to national and international conferences, 1 person	1 000 €
2019	ForLand Seminar (2 project meetings, 2 persons)	800 €
	Two to four stakeholder workshops with 15-20 participants each (travel cost of participants and 2 researchers)	2 200 €
	Contributions to national and international conferences, 2 person	2 000 €
2020	ForLand Seminar (project meetings, 2 persons)	400 €
	Contributions to national and international conferences, 1 person	1 400 €

4.1.2.3 Visiting Researchers (excluding Mercator Fellows)

n.a.

4.1.2.4 Expenses for Laboratory Animals

n.a.

4.1.2.5 Other Costs

Total: 2 750 €

Material cost (supply and printing of workshop and interview material, info-material etc.)

900 €

Catering (food and beverages for 15-20 participants of up to four workshops)

850 €

Software license for survey software

1 000 €

4.1.2.6 Project-related publication expenses

Total: 2 250 €

Three publications in open access journals à 750€

2 250 €

4.1.3 – 4.7

n.a.

5 Project requirements

5.1 Employment status information

(1) Valentinov, Vladislav (principal investigator, will not be paid out of the project funds)

Employment status: Senior researcher (Dr., permanent position, IAMO budgetary funds) at Leibniz Institute of Agricultural Development in Transition Economies (IAMO).

(2) Chatalova, Lioudmila

Employment status: Postdoctoral researcher (temporary position until July 31, 2017, IAMO budgetary funds) at Leibniz Institute of Agricultural Development in Transition Economies (IAMO).

(3) Student assistant (n.n.) - will be employed for the duration of the project

5.2 First-time proposal data

n.a.

5.3 Composition of the project group

(1) PD Dr. Vladislav Valentinov (principal investigator)

Affiliation: Senior researcher (permanent position, IAMO budgetary funds) at Leibniz Institute of Agricultural Development in Transition Economies (IAMO).

5.4 Cooperation with other researchers

5.4.1 Researchers with whom you have agreed to cooperate on this project

(1) Prof. Dr. S.E. Wallis, Capella University, Minneapolis, USA.

(2) Dr. Stephan Hielscher, University of Bath, School of Management, CBOS, UK.

5.4.2 Researchers with whom you have collaborated scientifically within the past three years

(1) Prof. Dr. Alfons Balmann, Director of Leibniz Institute of Agricultural Development in Transition Economies (IAMO), Halle (Saale).

(2) Prof. Dr. Ingo Pies, University Professor, Chair in Economic Ethics, Martin Luther University Halle-Wittenberg, Halle (Saale).

(3) Dr. Stephan Hielscher, University of Bath, School of Management, CBOS.

5.5 Scientific equipment

n.a.

5.6 Project-relevant cooperation with commercial enterprises

n.a.

5.7 Project-relevant participation in commercial enterprises

n.a.

6 Additional information

n.a.