

## Behavioural economics in agroecological payments – what drives farmers’ decisions?

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**Abstract.** Agroecological payment schemes are key policy instruments for promoting sustainable farming and biodiversity protection, yet participation among farmers remains inconsistent. This study applies a behavioural economics perspective to examine how psychological, social, and contextual factors influence engagement with such schemes. Drawing on an integrated framework that combines Prospect Theory, the Theory of Planned Behaviour, and Nudge Theory, the research synthesises empirical evidence from the scientific literature. The analysis identifies loss aversion, present bias, and status quo preferences as major cognitive barriers, while social norms, positive attitudes, and framing effects can encourage adoption. **Keywords:** behavioural economics, agroecology, payment schemes, farmers’ behaviour, Prospect theory, Theory of planned behaviour, Nudge Theory

### Introduction

Agroecological payment schemes operate as a vital tool which promotes environmentally friendly farming methods while protecting biodiversity across Europe and other parts of the world. While traditionally structured around economic incentives, these payment schemes increasingly highlight the significant role of behavioural economics in influencing farmers’ participation decisions. Farmers base their choices on factors beyond economic logic because their decisions are shaped by cognitive biases together with social norms, trust and personal drive.

Classic economic models assume that farmers act rationally, maximising profits and minimizing costs. In reality, however, many decisions in agriculture are influenced by social norms of behaviour, and farmers often act intuitively, guided by previous experience, emotions, or fear of change. This calls for the application of behavioural economics, which represents an intersection between economics and psychology and studies the actual behaviour of economic agents. In the context of the agri-environmental schemes of the Common Agricultural Policy (CAP), this knowledge is key to understanding the motivation (or lack thereof) of farmers to participate.

Behavioural economics reveals the intricacies of decision-making through its study of psychological and social factors that affect human choices. The Prospect Theory developed by Kahneman and Tversky [1] shows that people perceive losses as more significant than gains which makes farmers highly reactive to potential risks from adopting new practices. The concept of loss aversion stands out as a major obstacle to adopting agroecological practices according to multiple studies [2], [3], [4]. Duquette et al. [5] further highlight present bias, noting that farmers choose short-term expenses over delayed advantages, often overlooking environmental and economic benefits. Some factors that determine how

farmers respond to incentive programs are related to specific economic, historical and cultural national characteristics. The implementation of certain agri-environment measures in Bulgaria for instance frequently depend on farmers having long-term contractual agreements or land ownership [6]. In a recent study, the authors Kabadzhova et al. [7] concluded that farmers from the region of Blagoevgrad and Kyustendil are more likely to implement agroecological practices based on the financial support rather than internal drivers such as environmental and health concerns. Stauder [8] discusses how farmers' decisions are strongly influenced by cultural beliefs and emotional reactions stemming from anger, stress, perceived technical difficulties, and increased workload. Research by Palm-Forster et al. [9] and Dessart et al. [3] shows that farmers participate in agroecological programs because they are susceptible to cognitive biases that include both anchoring and framing effects. Kuhfuss et al. [10] demonstrate that farmers choose their actions through the influence of social norms and their peers. In addition to these findings, according to Tran-Nam et al. [11] visible participation of peers reduces psychological and informational barriers, which makes the adoption of practices more likely when community members who already apply these methods set an example.

This research bases its analysis on integrated theoretical framework combining Prospect Theory [1], the Theory of Planned Behaviour [12], and Nudge Theory [13] to explain the behavioural mechanisms which shape farmers' decisions toward agroecological payment schemes. While each framework addresses decision-making from a different angle, together they provide a comprehensive understanding of how cognitive, social, and contextual factors interact in shaping farmers' choices. The aim of this research is to examine how perceptions of risk and loss, attitudes and peer influences, and policy design elements affect farmers' willingness to adopt environmentally sustainable practices.

### **Methodology**

This study adopts a literature analyses methodology to examine the behavioural drivers influencing farmers' participation in agroecological payment schemes. Rather than relying on primary survey data, the research builds upon a synthesis of empirical and conceptual literature, drawing together insights from behavioural, agricultural, and environmental economics in order to develop an integrated conceptual explanation of decision-making in this context. The literature search was carried out between March and September 2025 across the following academic databases: Scopus, Web of Science, ScienceDirect, SpringerLink, Taylor & Francis Online, Wiley and Google Scholar. Search terms were combined using Boolean operators and included: "agroecological payments" OR "agri-environmental schemes", "farmers' decision-making" OR "participation", "behavioural economics" OR "loss aversion" OR "risk perception", "social norms" OR "attitudes", "nudge" OR "framing" OR "choice architecture", "prospect theory" AND "theory of planned behaviour" AND "nudge theory". The selection process involved: (1) initial screening of titles and abstracts and (2) full-text evaluation based on conceptual relevance. 58 studies were reviewed in total of which 27 were included in the final synthesis. Studies were included if they examined behavioural mechanisms in farmers' decision-making toward agri-environmental or agroecological incentives, provided empirical or experimental evidence, and were published in peer-reviewed journals. The review also targeted studies that emphasise European contexts to align with the policy framework of the Common Agricultural Policy (CAP). Excluded were studies focusing solely on technological adoption without behavioural analysis. Studies were analysed around three core conceptual categories derived from the integrated theoretical framework: (1) Cognitive drivers (risk perception, loss aversion, temporal discounting); (2) Social and normative drivers (attitudes, identity, peer influence); (3) Contextual and institutional drivers (contract design, framing, administrative burden). Patterns, convergences, and divergences were identified across studies, and these were used to develop a conceptual model that explains how behavioural mechanisms shape participation in agroecological payment schemes.

While this review does not claim to be exhaustive, the transparent documentation of the scope of the search, the selection criteria, and the thematic synthesis enhance the reliability of the results and allow for their replication or extension in future studies.

## **Theoretical and Conceptual Framework**

The integration of Prospect Theory, Theory of Planned Behaviour and Nudge Theory is applied in the current study to demonstrate how behavioural elements affect farmers' participation in agroecological payment schemes by capturing the interplay between cognitive biases, social-psychological influences, and contextual policy design.

### *1.1. Prospect Theory*

The Prospect Theory [1] explains that people judge value by reference points rather than absolute values, and that losses affect them more strongly than gains, according to the principle of loss aversion - losses carry greater psychological weight than equivalent gains. In the agricultural context, farmers often view short-term investments or yield reductions as potential losses relative to their current practices. Any change that introduces uncertainty—such as adopting an agroecological practice or enrolling in an agri-environmental payment scheme—is initially perceived as a potential loss, even if expected monetary returns or environmental benefits may eventually be higher. The Perception of risk and lack of control explain the reluctance for adaptation of conservation measures or result-based schemes [14]. Bocquého et al. [2] compared Expected Utility and Prospect Theory models in a field experiment with French farmers and found that the latter fits behaviour substantially better. Farmers displayed strong loss aversion coefficients ( $\approx 2$ ) and probability weighting, suggesting they overweight low-probability adverse outcomes. This means that even minimal risk of yield loss or contract penalty can discourage participation in agri-environmental schemes. In the context of result-based agri-environmental payments, Dessart et al. [3] noted that loss aversion leads farmers to prefer action-based schemes (where payments are guaranteed upon performing specific practices) rather than outcome-based ones (where payment depends on environmental results). Since outcomes are uncertain and can be affected by weather or ecological variability, farmers perceive a higher probability of loss of payment, which discourages them from participating. A closely related cognitive bias—status quo bias—further compounds these effects. Ruto & Garrod [15] show that farmers display a strong preference for the status quo in choice experiments on agri-environmental contracts, even when new options offer superior expected income. This conservative decision-making pattern however does not reflect irrationality, but rather loss avoidance—the desire to minimize regret and uncertainty. Furthermore, transaction costs and psychological commitment reinforce this cognitive inertia [16], [17]. Administrative complexity, delayed payments, and opaque contract conditions increase perceived risk and reduce institutional trust, thereby magnifying loss aversion [17], [18]. Conversely, when schemes are designed to reduce bureaucratic burden, increase procedural clarity, or provide collective or peer-based participation mechanisms (via group contracts), the psychological distance to the new behaviour diminishes, making adaptation more acceptable [10], [11].

Prospect Theory provides a powerful lens to explain why limited participation in agri-environmental schemes is not solely a function of inadequate financial incentives, but rather reflects underlying cognitive and normative constraints. Empirical work across Europe demonstrates that loss aversion, reference dependence, and status-quo bias consistently shape adoption patterns [3], [19]. Recognizing these behavioural dynamics is therefore essential for developing interventions that are behaviourally congruent, such as emphasizing avoided losses rather than gains, ensuring contract transparency and timely compensation, and embedding coordination within trusted social networks [17].

### *1.2. Theory of Planned Behaviour*

The Theory of Planned Behaviour (TPB) extends the cognitive model by adding social and motivational elements which shape decision-making behaviours. According to Ajzen [12] behaviour results from attitudes (toward the behaviour), subjective norms (perceived social pressure to perform or not perform the behaviour) and perceived behavioural control (the individual's confidence in their ability to execute the behaviour). Farmers' environmental attitudes determine their willingness to adopt sustainable practices but social norms formed by peer actions, family expectations and professional relationships shape the perception of what people consider socially acceptable behaviour. Research indicates that

farmers who observe others adopting ecological practices become more inclined to accept potential risks and develop greater confidence in their abilities [10]. In agricultural adoption studies, TPB has been widely used to explain farmers' uptake of new practices. For example, Bechini et al. [20] examine farmers' barriers and drivers towards the adoption of a number of management practices on dairy farms in northern Italy and found that difference between adopters and non-adopters is the opinion of members of their community. Similarly, Daxini et al. [21] concluded that farmers who feel a higher degree of social pressure or approval are more likely to follow a management plan for the use of fertilizers. The role of subjective norms becomes particularly salient in contexts where farmers collaborate or engage in shared land management. Tran-Nam and Tiet [11] show that organic farming adoption is strongly influenced by peer endorsement and knowledge-sharing networks, where seeing others adopt reduces perceived risk and legitimizes change. Thus, rather than being individual decisions driven solely by economic optimisation, participation in agroecological schemes emerges as a socially embedded process shaped by expectations, reputation, and shared cultural meanings. Further, Eichhorn et al. [22] identifies that perceived pride and recognition derived from participating in result-based agri-environment schemes strengthens commitment, suggesting that self-identity rewards can reinforce environmental action. Perceived behavioural control — farmers' assessment of whether they have the time, resources, capacity, and institutional support to implement new practices — is often the determining factor between intention and action. Administrative burden, lack of advisory support, and uncertainty about practical implementation weaken perceived control, thereby inhibiting adoption even when attitudes are favourable [3]. Conversely, accessible advisory services, clear guidance, and simplified scheme requirements strengthen perceived capability and translate intention into practice [17].

Taken together, these findings underscore that adoption of agroecological practices depends fundamentally on whether farmers: (1) believe the practice is valuable (attitude), (2) perceive it to be socially supported (subjective norms), and (3) feel capable of carrying it out under real-world constraints (perceived behavioural control). Therefore, the Theory of Planned Behaviour highlights the social and psychological structure within which behavioural change occurs, emphasizing that effective agri-environmental policies must engage not only economic motivations but also identity, trust, peer dynamics, and the practical conditions of everyday farming.

### *1.3. Nudge Theory*

Nudge Theory [13] emphasizes that behaviour is shaped not only by conscious reasoning, but also by the way choices are structured within the decision-making environment. Rather than altering financial incentives, nudges work by modifying the “choice architecture” in which decisions occur, guiding individuals toward socially beneficial behaviour while preserving freedom of choice. This theory extends the framework to the political and institutional level by highlighting that the way decisions are formulated or presented - default settings, order of options, wording and framing, highlighted reminders, can significantly change behavioural outcomes without altering the structure of incentives. In agroecological settings, this means that even if schemes are financially equivalent, farmers respond differently depending on how the payment or decision is framed. This requires governments to be more flexible and use a wider range of instruments—not only subsidies and regulations, but also behavioural policies that nudge farmers toward better decisions without restricting their freedom of choice [23]. For example: defaults / automatic enrolment can reduce the friction associated with opting in (e.g. in conservation auctions or environmental contracts); framing payments as “avoiding losses” can be more motivating rather than framing as “gaining rewards”, due to loss aversion; salience and reminders (e.g. text-based nudges, checklists) can serve as a method to counteract inattention or procrastination. Empirical evidence in agriculture supports these ideas: Kuhfuss et al. [10] explore nudges, social norms, and permanence in agri-environmental schemes, showing that conveying how many farmers continue after contracts can influence intentions to maintain practices. Moreover, nudge designs can help overcome the “end-of-contract” problem: farmers often drop ecological practices after payments end. Providing information about community norms or future benefits can increase permanence post-

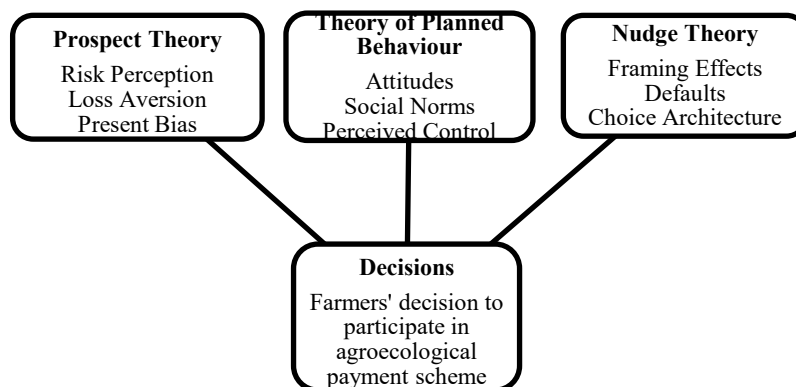
contract. In Sicily, Vella et al. [24] demonstrate how nudges can encourage adoption of PiWi grape varieties, showing that framing and interface design impact uptake.

Additionally, nudges can play an important role in enhancing agricultural policy. Research on nudges in agricultural policy primarily examines their effectiveness—whether and to what extent they influence farmers’ behaviour—and their cost efficiency as policy instruments. By simplifying compliance and reducing bureaucratic complexity, nudges may lower both public and private transaction costs, thereby improving the overall efficiency of agri-environmental policy implementation [25].

Nudge Theory demonstrates that the structure and presentation of policy options profoundly shape farmers’ decisions. Behaviourally informed agri-environmental schemes therefore can benefit from: (1) simplified administrative procedures, (2) framing incentives in ways that resonate with farmers’ values and identities, and (3) highlighting the potential to reduce transaction costs. These strategies complement, rather than replace, financial compensation, providing a more behaviourally realistic approach to designing effective and enduring agroecological interventions.

*1.4. Conceptual model*

The perspectives of Prospect Theory, Theory of Planned Behaviour and Nudge Theory allow for a comprehensive understanding of farmers’ behavioural dynamics. The conceptual model (Figure 1) synthesizes these three interrelated mechanisms. Cognitive drivers (loss aversion, present bias), social drivers (attitudes, norms, perceived control), and contextual drivers (framing, defaults, institutional design) jointly influence the farmers’ decision to participate in agroecological payment schemes.



**Figure 1.** Conceptual model: Behavioural drivers of farmers’ decisions for participation.

The conceptual model illustrates how the three theoretical pillars—Prospect Theory, the Theory of Planned Behaviour, and Nudge Theory interact in a layered and mutually reinforcing manner, producing a decision environment in which adoption is more or less likely depending on how these mechanisms align.

At the cognitive level, Prospect Theory explains how farmers evaluate the potential consequences of adopting agroecological practices. Farmers tend to reference their current production system as a baseline; any deviation from this established state is interpreted in terms of potential loss. Because loss aversion and present bias generally outweigh future environmental or economic gains, farmers may view participation as risky or burdensome—even when payment levels or environmental advantages appear objectively beneficial. This cognitive framing forms the initial perceptual filter through which policy options are viewed.

The Theory of Planned Behaviour adds a social and motivational dimension to this evaluation. Once risks and potential outcomes have been mentally framed, decisions depend on farmers’ attitudes toward agroecological practices, the social norms communicated within their peer networks, and their perceived capacity to implement new requirements. Positive environmental attitudes do not necessarily result in

action unless subjective norms and perceived behavioural control are strong. Thus, even when loss aversion is reduced, low perceived feasibility or lack of social endorsement can stall adoption. In this way, the TPB component is sequentially connected to cognitive evaluations but also feeds back by shaping how risks and benefits are interpreted (e.g., trusted peers adopting reduces perceived risk).

Nudge Theory operates at the contextual level, shaping how choices are presented and processed. Interventions such as simplified administrative procedures, transparent contract terms, or collective enrolment options adjust the “choice architecture” surrounding decision-making. These changes influence both cognitive and social dimensions: simplifying procedures reduces the psychological cost associated with loss aversion, while norm-based nudges reinforce the social desirability and legitimacy of participation. In this sense, nudges function as cross-cutting mechanisms that modify both risk perception and social meaning simultaneously.

These three components form a reinforcing system in which risk perceptions (Prospect Theory), social expectations and perceived capability (Theory of Planned Behaviour), and decision context (Nudge Theory) interact to either strengthen or weaken commitment to adoption (Table 1).

**Table 1.** Interaction structure of the behavioural reinforcement system in agroecological scheme adoption.

<b>Component</b>	<b>Influence</b>	<b>Reinforcement</b>
Cognitive evaluation of risk (Prospect Theory)	Determines whether adoption appears safe or risky	Influences attitudes and how norms are interpreted. Determines how framing in policy nudges is received.
Formation of intention (Theory of Planned Behaviour)	Determines whether the farmer wants and believes they can adopt	Influences how risks and incentives are interpreted. Strong norms and perceived feasibility reduce loss aversion and make nudges more effective.
Decision environment (Nudge Theory)	Makes adoption easier, clearer, or socially supported	Simplifies participation → increases perceived control and lowers perceived loss → makes social approval more influential.

Over time, this system can produce feedback loops. When some farmers adopt and experience positive outcomes, peer norms shift, which reduces perceived risk and increases perceived behavioural control for others—making future adoption more likely. On the other hand, if farmers encounter administrative burdens or inconsistent payments, risk perceptions intensify and norms shift toward resistance, reinforcing the status quo.

Finally, the strength and direction of these mechanisms are moderated by structural and contextual factors such as farm size, economic vulnerability, advisory access, institutional trust, and local landscape conditions. These elements determine whether farmers interpret policy signals as opportunities or risks, shaping both the speed and extent of adoption.

### **Discussion**

These findings underscore that participation in agroecological payment schemes cannot be understood solely through economic rationality. Instead, adoption emerges from the interaction of cognitive, social, and contextual influences that shape how farmers perceive, evaluate, and act upon policy opportunities. This relationship is captured in the conceptual model, which synthesizes insights from Prospect Theory, the Theory of Planned Behaviour, and Nudge Theory to show how behavioural mechanisms jointly contribute to farmers’ decisions.

The three theoretical lenses used in this study highlight different but complementary dimensions of farmers’ decision-making. Prospect Theory emphasizes how farmers’ evaluations of agroecological practices are shaped by perceived risks and the tendency to avoid potential losses relative to familiar production and management practices. The Theory of Planned Behaviour brings attention to the role of

attitudes, peer expectations, and perceived capability in determining whether these evaluations translate into actual intentions. Nudge Theory focuses on how the structure of the policy environment—such as the clarity, simplicity, and social framing of scheme requirements—can facilitate or hinder the move from intention to adoption. Together, these frameworks show that participation outcomes arise from the interaction of cognitive assessments, social influences, and institutional design conditions.

To synthesize the behavioural evidence across the three theoretical strands (Prospect Theory, Theory of Planned Behaviour, Nudge Theory) a consolidated overview is presented in Table 2. The table groups the reviewed studies into theoretical clusters, highlighting the dominant behavioural mechanisms identified in each, along with their corresponding policy implications.

**Table 2.** Synthesis of key behavioural patterns and policy implications identified in the literature.

<b>Representative Studies</b>	<b>Theory Cluster</b>	<b>Key Behavioural Findings</b>	<b>Policy Implications</b>
Bocquého et al. (2014); Duquette et al. (2012); Rommel et al. (2022); Dessart et al. (2019); Canessa et al. (2024); Klebl et al. (2024); Schaub et al. (2023); Ruto & Garrod (2009)	Prospect Theory	Farmers are reluctant to incur losses, overweight short-term risks, and show a strong dependence on references. Uncertainty, administrative complexity, and delayed payoffs reinforce the perception of losses. Risk preferences vary depending on the context, and psychological barriers reduce the willingness to adopt new practices.	Reducing uncertainty and risk of losses; stabilizing payments; simplifying contracts; increasing transparency; using framing to highlight avoided losses rather than potential gains; adapting AES design to regional risk profiles.
Daxini et al. (2019); Stauder (2023); Massfeller et al. (2022); Eichhorn et al. (2024); Tran-Nam & Tiet (2022); Bechini et al. (2020); Klebl et al. (2024); Dessart et al. (2019)	Theory of Planned Behaviour	Attitudes, social norms, and perceived behavioural control strongly shape adoption intentions. Peer influence, moral approval, feasibility perceptions, workload concerns, and advisory support are decisive drivers. Identity elements such as being a 'good farmer' and social recognition also matter.	Strengthening advisory systems; using peer learning; using identity-based messaging; enhancing training; reducing administrative burdens; improving clarity of communication; supporting farmers' sense of capability.
Kuhfuss et al. (2016); Palm-Forster & Messer (2021); Vella et al. (2025); Byfuglien et al. (2025); Wittstock et al. (2022); Mettepenningen et al. (2009); Schaub et al. (2023); El Benni et al. (2025); Dessart et al. (2019)	Nudge Theory	Behaviour is shaped by framing, defaults, social cues, administrative simplicity, and cognitive load. Collective bonuses, simplified forms, adaptation framing, and salience effects improve participation. Administrative burdens discourage engagement, while well-designed nudges reduce friction.	Using framing interventions; streamlining procedures; reducing transaction costs; utilizing collective incentives; designing choice environments to make sustainable options easier and more intuitive; incorporating nudges into CAP.

By combining findings across multiple empirical and conceptual contributions, Table 2 maps out how cognitive, social, and contextual drivers shape farmers' engagement with agroecological payment schemes. Rather than treating these studies as isolated insights, the table emphasises the emerging patterns across the literature and clarifies how distinct behavioural mechanisms converge toward similar or complementary policy design implications.

Evidence from the reviewed literature demonstrates that farmers' decisions toward agroecological payments emerge from the interaction between cognitive framing of risks and rewards, social reinforcement through norms and identity, and contextual facilitation through institutional design. This underscores the need for multilevel approaches that integrate these behavioural mechanisms within policy frameworks [19], [26]. Such findings strengthen the theoretical argument that addressing only the economic dimension of agri-environmental participation is insufficient.

Insights from Prospect Theory suggest that farmers' risk perception, loss aversion, and present bias substantially influence their willingness to participate in agroecological schemes. Farmers tend to evaluate outcomes relative to a reference point—their current management practice. Consequently, the adoption of new agroecological measures is frequently perceived as a potential “loss” until tangible benefits are realized. Bocquého et al. [2] and Duquette et al. [5] demonstrate that many farmers give disproportionate weight to immediate costs while discounting future gains. More recent European evidence reinforces this behavioural pattern: Canessa et al. [26] highlight that institutional trust and contract design shape how cognitive biases influence adoption behaviour, whereas Klebl et al. [19] identify risk perception and uncertainty as persistent psychological constraints on biodiversity-oriented farming decisions across Europe.

The social dimension, grounded in the Theory of Planned Behaviour, emphasizes that attitudes, subjective norms, and perceived behavioural control are decisive in shaping environmental intentions. Empirical evidence from Daxini et al. [21] and Stauder [8] shows that favourable attitudes and peer endorsement significantly enhance participation, while social recognition and perceived pride further strengthen commitment to result-based schemes [22]. These findings indicate that agroecological adoption is situated within shared social and cultural frameworks rather than driven solely by individual economic rationality.

At the contextual level, Nudge Theory highlights how institutional framing, procedural design, and administrative complexity shape farmers' engagement with agroecological schemes. Kuhfuss et al. [10] demonstrate that social nudges, such as collective bonuses, can significantly increase enrolment, while Palm-Forster and Messer [9] show that framing and default mechanisms enhance participation in conservation programs. Recent European studies find that adaptation-oriented policy framing strengthens farmers' support for climate measures [27], and that procedural simplicity and transparent communication reduce cognitive load and transaction costs, thereby improving uptake [17]. Together, these findings confirm that choice architecture—the way policy options are structured and presented—can be as influential as financial incentives in determining behavioural outcomes.

The synthesis in Table 2 shows that behavioural constraints such as loss aversion, perceived effort, social validation, and administrative burden operate simultaneously rather than in isolation. As a result, effective policy design must address these intertwined mechanisms rather than rely on financial incentives alone. The table thus highlights a shared conclusion across the literature: reducing friction, strengthening farmer confidence and social support, and reframing choices in a way that aligns with farmers' cognitive tendencies are critical levers for enhancing the uptake and effectiveness of agroecological schemes. Overall, the adoption of agroecological measures is most likely when farmers see the practice as low-risk, socially valued, and administratively feasible, underscoring the need for behaviourally informed policy strategies.

## **Conclusions**

The integration of behavioural insights provides a richer and more realistic understanding of farmers' decisions regarding agroecological payments. Farmers' participation is not solely determined by the magnitude of subsidies but by how these incentives are perceived, socially reinforced, and contextually framed. Consequently, policies that account for behavioural realities—by reducing perceived losses, strengthening social norms, and designing intuitive programme structures—are likely to achieve higher participation and more durable environmental outcomes.

To translate these behavioural insights into practice, agroecological payment schemes should incorporate design elements that reduce perceived risk, strengthen social support, and simplify

participation. First, schemes can minimize short-term uncertainty by offering guaranteed baseline payments, timely disbursement schedules, and clear contractual terms, thereby reducing loss aversion and perceived financial exposure [16], [17]. Second, governments and advisory services should prioritize practical support and hands-on extension, including demonstration farms and locally embedded advisors, which have been shown to enhance perceived behavioural control and intention–action conversion [21]. Finally, elements of choice architecture, such as simplified documentation, pre-filled forms, or default participation options where appropriate, can lower administrative and cognitive barriers, making environmentally beneficial choices easier to adopt [9]. Collectively, these measures move beyond increasing payment levels alone and align policy design with how farmers actually perceive, evaluate, and enact change.

This study contributes to the growing intersection of behavioural economics and agricultural policy by offering an integrative framework that explains farmers’ decisions in agroecological payment schemes through the combined lenses of Prospect Theory, the Theory of Planned Behaviour, and Nudge Theory. Whereas most previous studies have examined these frameworks in isolation, this research synthesizes them into a single conceptual model, illustrating how cognitive biases, social influences, and contextual design factors jointly determine adoption behaviour.

While the conceptual model offers a comprehensive behavioural interpretation, several limitations must be acknowledged. The study relies primarily on secondary sources, which may introduce selection and publication biases. Empirical validation remains necessary to test the strength and interaction of these behavioural mechanisms across contexts.

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