**ePEStemology database**

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**Variable list with description and values, ePEStemology database**

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| **Variable** | **Description** | **Values** |
| **Author** | Name of the author(s) of the article | Author name |
| **Title** | Title of the article | Title article |
| **DOI** | Official Digital Object Identifier (DOI) of the article | DOI links |
| **Year** | Year of publication of the article | 2005, 2006,…, 2019 |
| **Journal** | Name of journal in which the article is published | Journal name |
| **Volume** | Volume of journal in which the article is published | Journal volume |
| **Institution name** | Name of main institution to which the first author of the article is affiliated | Institution name |
| **Institution type** | Type of main institution to which the first author of the article is affiliated | University (1); Government or government-financed institute (2); Independent organization / NGO (3); Private consultancy / think tank (4); Other (5) |
| **Institution country** | Country in which the first author’s main institution is based. For simplicity and assuming greater responsibility of the research effort in the contributions of the first author, we use first author as a proxy for institutional basis. | Country name |
| **Direct-indirect** | *Direct*studies focus on PES, either theoretically or empirically; *Indirect*studies do not directly theoretically or empirically engage with PES to any extent; they merely propose PES as a potential policy solution to address ecological challenges. | Indirect (0); Direct (1); |
| **Thematic focus** | Main thematic focus or objectives addressed in the article  (*multiple entries possible; maximum 2 entries*) | Market-based valuation of PES (1); Effectiveness of PES (2); PES design (3); Spatial or social targeting in PES (4); Payment entitlements (5); (Collective) participation in PES (6); Transaction costs (7); PES and poverty alleviation (8); PES and power relations (9); PES and forest/habitat/natural resource management (10); PES and degrowth (11); Motivations around PES (12); Private sector, Corporate Social Responsibility and PES (22); PES and the role of intermediaries (14); Multiple/relational/indigenous values in PES contexts (15); Gender and PES (16); PES social/equity trade-offs (17); Uncertainties in PES (18); Land use change analysis in PES (19); PES and agri-environmental policies (20); Climate change and PES (21) |
| **Methods** | Primary method(s) used in the study  (*multiple entries possible; maximum 3 entries*) | Case study (1); Document review (secondary sources) (2); Theoretical/analytical modeling (3); Natural science (modeling) & bio-resource engineering (4); Choice experiments, contingent valuation & auction approaches (5); Interviews, focus groups and discursive approaches (6); Survey/regressions (7); Econometric modeling (8); Framed field experiments based on behavioral models (9); Descriptive statistics (t-test, non-parametric) (10); GIS spatialization / remote sensing (11); Scenario analysis (12); Deliberative methods/analysis (13); Value Chain Analysis (14); Multi-criteria analysis (15); Other (16) |
| **Methodological approach** | Overarching main methodological approach applied in the study ranging from *quantitative analyses* (including randomized control trials, geospatial analyses, framed-field experiments, and contingent valuation or choice experiments), *qualitative analyses* (e.g. discourse analysis of interviews), to *conceptual and institutional analyses* (e.g. prescriptive, legal, or policy-oriented), and *mixed methods* (e.g. social multi-criteria evaluation) | Quantitative (1); Qualitative (2); Mixed methods (3); Conceptual/institutional/prescriptive (4) |
| **Theoretical-empirical** | *Theoretical studies* only discuss PES theory, theoretical concepts, or broad overarching policy discussions without reference to grounded examples; *Empirical studies* discuss PES on the basis of empirical information or examples; *Combined studies* use both strategies | Theoretical study (1); Empirical study (2); Combined study (3) |
| **Contextual engagement** | The type of engagement with social, cultural and political contexts and dynamics in the PES study. *Studies* *informed by the setting* engage with the social/cultural/political context and/or the qualitative, lived or emotional experiences of a particular setting or context (e.g. local meanings of ‘nature’, and/or power asymmetries of diverging positionalities of actors); *Externally-driven studies* are based upon broad policy analyses and/or largely employ external expert-developed models or strategies to interpret data or implement programmes and policies with an idealized design (e.g. a choice experiment to uncover values for stylized development scenarios); *Combined studies* use both strategies by introducing an external model, while at the same time ensuring that such a model is informed and dependent on the social, political, or cultural context of where the model is applied (e.g. a social multi-criteria model) | Informed by setting (1); Externally-driven (2); Combined (3) |
| **Ecosystem** | Main ecosystem type the study focuses on  (*multiple entries possible; maximum 2 entries*) | Forest (1); Wetland (2); Tundra/arctic (3); Ocean/marine (4); Agricultural and/or watershed (5); Desert (6); Grassland/paramo/savanna (7); River/lake (8); Mediterranean (9); Mountains (10); Urban (11); None (12) |
| **Ecosystem Service** | Main ecosystem service the study identifies or considers in the context of PES  (*multiple entries possible; maximum 3 entries*) | Biodiversity/wildlife (1); Carbon sequestration (2); Hydrological (3); Pollination (4); Cultural (5); Soil formation (6); Provisioning (7); Energy production (8); Storm protection (9); Fire protection (10); Fisheries (11); Pest management (12); Nutrient cycling (13); Not specified or general (14) |
| **Discipline** | Key disciplinary approach of the study  (*multiple entries possible; maximum 5 entries*) | Anthropology/sociology/political sciences (1); Ecology/biology/life sciences/natural sciences (2); Economics (neoclassical) (3); Psychology/behavioral (economics) sciences (4); Legal/policy-oriented (5); International development (6); Institutional/governance/commons (7); Gender and indigenous studies (8); Ecological/land use spatialization & planning (9); (public) health (10) |
| **Recommendation** | Main conclusion, recommendation or concern of the study related to PES scholarship and/or specific programmes. This could include points of attention for future research, recommendations regarding PES application and/or the applicability of PES more broadly.  (*multiple entries possible; maximum 3 entries*) | Efficiency concerns (1); Timing of PES and influence on long-term outcomes (2); Need of social contextualization (3); Optimization through targeting (4); Livelihood consideration and trade-offs (5); Need of more precise ecological science-backing (6); Need of more support and enforcement (7); More attentiveness to policy mixes and institutional arrangements across scales (8); More attentiveness to power relations (9); Concerns about effectiveness of outcomes (10); Concerns about land tenure and/or access to social capital (11); PES ineffectiveness (12); Risk aversion influencing PES (13); PES as state control/securitization (14); Gender concerns (15) |
| **Author evaluation** | Authors’ overall evaluation of PES as a (potentially) successful strategy to achieve its stated objectives. *Mixed evaluations* refer to PES as offering potential but with some reservations/concerns to be addressed | Positive evaluation (1); Negative evaluation (2); Mixed evaluation (3) |
| **Positionality** | Explicit or implicit position and/or assumptions the authors of the study hold in relation to PES research, using three broad categories: *Political Ecology* perspectives are largely concerned with environmental/social justice implications and explicitly PES on the basis of asymmetrical power relations between actors (e.g. PES as a form of new commodity fetishism, or new forms of social exclusion induced by PES schemes); *Environmental Economics* perspectives are mainly rooted in natural resource economics approaches and focus on prescriptive economic and managerial considerations to improve efficiency, effectiveness, or additionality of PES (e.g. designs that internalize nature’s costs into the economy, or spatial targeting for optimizing cost effectiveness); *Ecological Economics* perspectives argue that PES should be analyzed and conceptualized as embedded within a broader socio-institutional context by integrating equity, justice and ecological-sustainability concerns into policy design (e.g. improving ways in which PES could lead to collective action and contextualized legitimacy, or as part of a broader policy mix).  For further details and examples of these positionalities, please refer to Kaiser et al. (2021), Tacconi (2012), and Van Hecken et al. (2015). | Political Ecology (1); Environmental Economics (2); Ecological Economics (3); Other (4) |
| **Emphasis** | Overarching main emphasis of the PES scheme in question within each paper. Drawing on Pascual et al (2010), the following categories are defined: *efficiency* (a focus on minimizing costs and maximizing return); *equity* (a focus on justice and fairness of PES schemes); *additionality/conditionality* (a focus on either ecological or social-livelihood outcomes); *Institutional/policy conditions* (a focus on institutional factors, rules, norms and policy architecture of putting PES in practice); *All of the above* (a combined focus on all the categories mentioned above)  *(multiple entries possible; maximum 3 entries)* | Efficiency (1); Equity (2); Additionality/conditionality (3); Institutional/policy (4); All (5) |
| **Additionality** | If the variable “*Emphasis*” is coded as “additionality/conditionality” (3), then this variable further distinguishes additionality as a focus primarily on *social outcomes*, *ecological outcomes*, or *both* (combining social and ecological outcomes) | Social (1); Ecological (2) ; Both (3) |
| **Case examples** | Number of empirical case studies or examples provided in the study: *single*, *multiple*, or *none* (for strictly theoretical studies) | Single case (1); Multiple cases (2); None (theoretical) (3) |
| **Country focus** | Country on which the study is focused  (*multiple entries possible; maximum 3 entries*) | Country name |