

Payments for Ecosystem Services

Defra response to peer review comments

1. The Defra Evidence and Analysis Series Paper, “Payments for Ecosystem Services” was peer reviewed by Alex Inman. Alex is a social researcher currently working with a number of practitioners and academics to develop a working model for PES in the UK and developing economies such as China and Brazil, within the context of watershed management. He has recently completed a choice modelling exercise under the RELU research umbrella identifying farmer WTP for delivering multiple ecosystem services from multi generational land management agreements.
2. The paper has been revised taking into account these comments and suggestions into account.
3. This short note provides a summary of the key issues raised and how they have been addressed.

4. Overall the peer review was supportive that the paper provided all the key theoretical pros and cons surrounding PES. The peer reviewer highlighted the complexity of the interrelationships at play between market failure dynamics, cost effectiveness, transaction costs and issues surrounding governance for PES but concluded overall that the paper presented the reader with a clear pathway through all the main themes highlighted in the literature.

5. Section 3 provides an analytical framework for PES setting out key criteria for PES instrument design and discussing the key principles in more detail. The peer review highlighted the importance of accounting for transaction costs as a key criterion in its own right. This is an important point and revisions to various sections of the paper have attempted to emphasise this point further. The peer review acknowledged the importance of understanding the underlying market failures but suggested some changes to the structure of the report which have been subsequently reviewed.

6. Section 4 looks at the key design issues for PES. In 4.4: Distinctions in types of buyers: the peer review highlighted whether it is worth specifically mentioning that where you have a small number of providers and a small number of buyers and where a single ecosystem service is being sold, you will be less likely to need state involvement. A situation with multiple providers, multiple buyers and multiple services is likely to necessitate state involvement. These points are drawn out in Table 4.1 and in the accompanying text.

7. Other key comments from the peer review include:

- a. One of the potential advantages of PES mechanisms is that they have the ability to generate social learning (i.e. providers, buyers and intermediaries learning about an environmental problem together and developing a joint solution). Social learning can improve understanding of the dependence of human existence on ecosystem services, which in turn has the potential to engender long-term behaviour change in line with Defra 4 E's model e.g. see <http://archive.defra.gov.uk/evidence/social/behaviour/documents/behaviours-jan08-annexes.pdf>. This important point has been acknowledged in section 4.8 under governance issues.

- b. With reference to the targeting of PES payments, this can only be facilitated by developing some form of map identifying the sources of ecosystem services which need protecting. These locations can then be targeted with appropriate payments

- c. The peer reviewer was specifically asked for views on PES terminology and what is counted under PES in the literature. The response based on the peer reviewer's own review of the academic and policy literature has revealed that the array of terminology employed to describe PES mechanisms is broad, and at times confusing, with different authors using different terminology to describe the same mechanism. To avoid confusion, there is a need for clarity with regard to the nomenclature used. The peer reviewer highlighted a useful categorisation of PES below and concluded that the paper has highlighted these distinctions clearly.

Cash payments to landowners, administered by government and sourced from general revenues financed by tax payers – these

payments involve cash payments from government to landowners in exchange for altering land use or adopting practices designed to meet environmental objectives. The public at large is the buyer of the environmental services generated by these programmes, not the specific individuals who benefit from the programmes.

Cash payments to landowners, administered by government but financed by the recipients of environmental services generated by those landowners – these payments involve cash payments to landowners from specific beneficiaries of the ecosystem services provided by those landowners. Government administers these schemes and may supplement payments from beneficiaries with funds from general tax payer revenues.

Cash payments to landowners, financed by the recipients of environmental services generated by those landowners with no administrative involvement from government – these payments involve cash payments to landowners from specific beneficiaries of the ecosystem services provided by those landowners and are often self-organised between the beneficiaries and the providers of the services in question. In some instances, an independent body (usually an NGO) acts as an intermediary to facilitate transactions.