

Advantage and disadvantages of using pes economics essay



Since Payment For Environmental Services creation in 1997 has grown in popularity becoming one of the most effective ways to improve conservation strategies (García-Amado, 2011; Cranford, 2011) . Wunder has defined PES as “ a voluntary arrangement where a well-defined environmental service (ES) is... ” bought” by a (minimum of one) service buyer who compensates a (minimum of one) service provider-and does so if, and only if, the service provider continuously secures the provision of that service (conditionality)” (Wunder, 2005; Thuy, 2008). This is achieved by persuading land managers to adopt land use or management which support the ecosystem by having an economic incentive (Perrot-Maître, 2006). It can therefore be said that PES operates under a market based programme which provide financial incentives for landowners to preserve the ecosystems that provide the services (Wünscher, 2008; Groom, 2008; Perrot-Maître, 2006).

PES is advantageous as it can protect a wide variety of ecosystems (DEFRA, 2010). For example Agri-environment schemes, Watershed protection, Carbon sequestration, wildlife conservation and Bio-prospecting (DEFRA, 2010). This demonstrates how universal PES schemes can be. PES Schemes are often implemented when there are no environmental provisions in place (Richards, 2007). Although PES schemes are mainly as government financed they has been an increase in private companies and individuals (private PES) (DEFRA, 2010). Many studies have indicated that PES can be both advantageous and be a disadvantage to resolving environmental issues.

PES is unique compared to other methods used to generate funds for environmental services due to the way the scheme is operated. Unlike other programmes used for environmental services PES does not run under a

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command-and-control approach (Pagiola, 2005). Instead PES is a market based instrument which offers incentives to encourage environmental protection (Gauvin, 2010; Pagiola, 2005). Due to these reasons PES can be said to be beneficial for not only to the environment but it is also advantageous to the economy in the areas which participate. This is done via direct cash payments to the land owner or through a project activity that is used to target the poor (Hegde, 2011). The poor can benefit from PES in two ways; directly and indirectly. Direct Benefits include financial payments and rewards, while indirect benefits is being allowed a greater political voice in what is done and more involvement in the negotiation process, but it also helps reduce social conflict and aids the development of new skills (Thuy, 2008).

Due to the social advantages which are offered by PES schemes it can be said there is a built in feedback mechanism. This is due to the fact that payments sent to the service provider from the service users. The service provider has the prerogative to make sure the money given is being put to good use and is able to change the program if it isn't (Pagiola, 2005). This therefore makes sure the environmental services in place are operating effectively. A feedback mechanism is also present for the service provider. The service provider has an incentive for the PES scheme to be successful as it is often the case that their livelihoods depend on PES incentives. Obviously the larger input of money the more beneficial it will be for the poorer selling communities and for the environment. (S. Wunder, 2007). In Costa Rica PES accounted for over 10% of the total household income for over a quarter of its participants (Hegde, 2011; Wunder, 2008). Because there is a financial

gain if the PES scheme is operated correctly, it is in the participant's best interest to make sure the environment is preserved and not harmed.

However in spite of the economic gains PES has been found to cause environmental damage . PES has been criticised as it often does not favour “ pro-poor outcomes”. The fact the PES is run under a voluntary scheme it creates a “ prima facie” presumption which makes people think that there is nothing to be lost from participating in PES but this is often not the case (Pagiola, 2005). Most of the world's ecosystems are situated within area which are sparsely populated it is often the case that the area is less economically developed (Pattanayak, 2010). Due to this it is assumed that the ecosystem may not be preserved as there is more concern on improving the economy of that area (Pattanayak, 2010). This may lead to land degradation in farmland areas. However it has been stated by Wunder and Zilberman that PES may not be accessible to some rural area as it is dependent on the amount of rent that is paid to the suppliers and the size of the farm (Zilberman, 2008; Wünscher, 2008). Payments may also encourage indirect environmental damage. For example increasing additional conservation which may could arise from increased enforcement of existing laws or increased ecotourism opportunities (Pattanayak, 2010).

Pagiola states that “ One of the most obvious and significant potential hindrances to the poor's participation in PES is transaction costs”.

Transaction costs occur while arranging and signing the contract and include searching and information costs, contracting costs and monitoring costs

(Thuy, 2008; Pagiola, 2005). PES programs are designed to contract

participants per contract and not per unit area, which creates an issue as it is <https://assignbuster.com/advantage-and-disadvantages-of-using-pes-economics-essay/>

a larger financial burden on a smaller farm than a larger one. For example in Costa Rica's PSA program, applicants have to have had a management plan conducted by a certified forest engineer. Poorer farms do not have the capital to arrange a plan to be made and therefore are deterred from participating (Pagiola, 2005). If the poor cannot afford the transaction cost land which under threat from environmental damage may continue to degrade. Many scholars have argued that if there was a institutional options to aid community-level organisations, which would include their legal recognition, it would enhance the participation of the poor (Thuy, 2008; Wunder, 2008). It has been suggested also that Group certification and collective action could be used as a solution for transaction cost problems (Thuy, 2008).

One possible disadvantage of PES being a market institution is that the choice of what is done is often decided by the individual land user. Due to this it can often result in the farmer feeling there is a de facto entitlement (Van-Hecken, 2010) . The farmer will be paid for any change that occurs as long as it is seen to be for the greater good. In Nicaraguan it is illegal to cut down trees, but potentially could be justified by the payments as it would "improve" land use. There have even been cases of people "holding the environment to ransom". In these cases it's obvious that the financial gain is more important than the benefits to the environment. PES is designed to aid the environment not be beneficial financially. Most PES reports speak about the advantages the scheme to the poor mainly and the benefits for the environment second. This therefore is counterproductive.

It has also been known for moral Hazards or Hidden action to occur after the PES agreements have been arranged. In this situation the conservation agent may be acting inefficient as monitoring may be expensive or politically costly (Pattanayak, 2010). In this situation the Landowner is within their rights to breach any contractual responsibilities (Pattanayak, 2010). This issue is problematic as the usage of PES could encourage reforestation to baseline land use, farmers may increase deforestation in order to earn higher payments and therefore result in an overestimate of PES impacts (Pattanayak, 2010).

The PES scheme has been praised for its use of targeting. Targeting can be defined by directing payments towards area what need biodiversity services and can use the resource the most efficiently (Wünscher, 2012). This can be a threat and positive. On the one hand it is a benefit as it allows the resource to go the site that needs it the most, therefore being more cost effective (Engel, 2008). It is also a positive as it makes the payments of PES more flexible. The issues with fixed payments is that it increases the production rents to land owners which have a low need for environmental service and those who do have a high need for environmental services won't use the programme. Flexible payment are therefore advantageous as it equals out the balance of environmental services provisions and would allow a larger area could be allowed under PES (Engel, 2008). Many scholars have argued that PES is a more cost effective plan than ICDPs as it uses targeting (S. Wunder, 2007; Barton, 2009).

However Case Studies have indicated that the scheme can often create a conflict of interests between environmental and social needs (Richards, <https://assignbuster.com/advantage-and-disadvantages-of-using-pes-economics-essay/>

2007). PES has been accused of sporting those who want the financial help rather than those who need it to protect the environment (Sierra, 2006). This was found to be the case in Sierra's study into the PES schemes which was in operation in Costa Rica on the Osa Peninsula. It was found that the regional targeting system which FONAFIFO currently has in operations allows PES managers to select farms which could aid regional conservation objectives. This was found to be an ineffective system as the "first come first served" approach failed to solve the underlying threats which were caused by land use change (Sierra, 2006). It was also found that those who were the first to get on to the PES scheme were the farmers who were friendly with the forest engineers and who already knew the existence of other environmental payments they could receive (Sierra, 2006). However the threat of targeting is that it may encourage Additionality (Engel, 2008).

Additionality can be defined as the difference in service provision between the with-PES scenario and the without-PES baseline (S. Wunder, 2007). It is often the case that PES programs do not include a long term framework for monitoring and evaluating success. Due to this it is hard to know how well the scheme is operating and often leads to questions about if the PES scheme has a sufficiently large "Additionality". Additionality can occur if the landowner accepts payment to "protect" an area which otherwise would have been left alone anyway, and therefore the payment was not necessary (Pattanayak, 2010; Sills, 2008). This can occur when there is hidden information. It is often the case that a lot of information is offered to the landowner about the benefits of supplying an environmental service but little information is provided for the buyer. (Pattanayak, 2010). This is an

issue as this often leads to over payment from the buyer and can lead to the landowner abusing the benefits (Pattanayak, 2010). Engel has indicated that Additionality generates less environmental per dollar spent than if the problem was avoided (Engel, 2008). Additionality has also been found to reduce the level of funds available for other area, and causes socially efficient and land use change (Engel, 2008; S. Wunder, 2007).

Another issue with PES is that it is difficult to apply in areas which consist of common land. PES is easier to enforce when the land is securely held. This is due to the fact the scheme only has to negotiate with the land owner. PES can operate in areas with communal but there must be an organisation which is made up of resident which they can negotiate with (Thuy, 2008). In this case long term leases can be established from the government (Thuy, 2008). This however is not always possible. For instance in the Vietnam all land belongs to the government and therefore only have the rights to use the land, but not to change it. This as a result reduces the opportunity for environmental services (Thuy, 2008). There have also been cases with shared land where the residents did not share out the money give evenly. This was the case in García-Amado where 87% of the people assessed believed they were receiving an insufficient payment to what they had expected to receive (García-Amado, 2011).

Because there is a financial gain for having an area which qualifies for PES it is often the case that these areas are bought out by larger farms or organisation, resulting in the poor farmers losing land. It has been reported that in areas of Colombia's Cauca Valley that there have been cases of politically powerful groups buying out poor land owners who lack secure

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tenure. This has been the result of the land becoming more valuable as it is eligible for PES (Pagiola, 2005). Therefore there is a large argument stating that PES benefits the rich rather than the poor and widens the gap in between those who have access to land and those who don't (García-Amado, 2011; Pagiola, 2005). It was found in García-Amado study in Chiapas, Mexico that PES was not evenly distributed through the area evenly as one area own a mature forest and therefore had a greater risk of deforestation and the other did not (García-Amado, 2011).

It is sometimes the case that the PES scheme needs the use of substantial technical capacity. This can be challenging as the poor may feel they are unable to participate in the PES scheme as they do not have a educational background (Pagiola, 2005). Potentially this may result in environmental damage as the site does not receive the help it requires. However some programs such as RISEMP, provide technical assistance, but the majority do not (Pagiola, 2005). However it is often the case that the prospect of gaining new skills is also appealing to PES participants. It was found in Van-Hecken study that the main appeal to taking part in PES for the farmers was the use of TA which could be used strengthens their knowledge of silvopastoral practices (Van-Hecken, 2010). Education is often said to be key to resolving environmental issues. It also was found to aid community empowerment and improve social capital development (Richards, 2007) .

Perrot-Maître stated that PES is “ a very complex undertaking, one that requires the consideration of scientific but also social, economic, political, institutional, and power relationships” (Perrot-Maître, 2006). From the

literature I have reviewed it has been found that in theory the scheme is <https://assignbuster.com/advantage-and-disadvantages-of-using-pes-economics-essay/>

effective in protecting the environment, but in reality it is often misused due to the financial incentives. It also creates a wider social divide between the rich and the poor which results in additionality. The literature also points to PES being fundamentally “ pro-rich” than “ pro-poor” as it is more effective under a secure land tenure. However most of the world’s poor people live in rural areas and their livelihoods are dependent on agriculture. It is often the case that it is these area which need these ecosystem services the most (Gauvin, 2010).

However it can be said in that the principles of PES are important for resolving environmental issues.

It must also be recognised that that level of advantages and disadvantages depend on the area it is in, the environmental conditions which are there and the politics of the area. The schemes do educated those who are involved and does persuade them to change. It could also have a knock on effect which could get the participants to look at environmentalism in a wider sense. Therefore it can be concluded as long as the PES scheme is run fairly and not taken advantage of the scheme is beneficial in solving environmental issue.