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Review: Money isn't everything

In a time of shrinking public budgets, one of the underlying objectives of PES schemes is to increase funding for ecosystem protection by generating additional income from private sector beneficiaries. So far, private sector participation in PES schemes has been an exception rather than the rule.

Among the exceptions is Nestle Waters – the owners of the French company that produces Vittel mineral water. Realizing that intensive farming could threaten the quality of their mineral water, Vittel took a proactive approach, by investing US\$24.5 million over a seven year period to support the transition from intensive to extensive farming practices that required more capital, land and labor. These efforts were far from straightforward, and relied on much more than scientific and economic information alone. A [case study report](#) prepared for IIED by Danièle Perrot-Maître (2006), reveals the complexity of this PES scheme, and some factors that have been critical to its success.

Before launching the scheme, a four year research program was undertaken by a Vittel subsidiary company in partnership with the French National Agronomic Institute. The purpose of the research was threefold: 1. To establish relationships between farming practices and water quality. 2. To recommend changes for more stringent mineral water standards, and 3. To create adequate incentives for farmers to change their practices accordingly. Following the study and a ten year period of negotiation, Vittel entered into long-term contracts with 26 out of 37 farmers in the watershed that were committed to the continuation of farming. These contracts provided farmers with subsidies and land use rights for up to 30 years on larger plot sizes (average 150 ha) in return for adhering to specified management practices.

Before joining the scheme, the farmers were all heavily in debt (and in many cases no longer owned their land) as a result of purchasing equipment for intensive farming promoted by the European Union Common Agricultural Policy (CAP). Furthermore, inheritance laws had often made it necessary for farmers to re-acquire fragmented farmland from siblings (among whom it had been evenly divided) in order to continue farming. The Vittel scheme overcame these problems by taking ownership of the land from the creditors and providing farmers with long-term use rights.

The subsidies have included 200 Euros per hectare per year for a five year transition period, 150,000 Euros per farmer for new equipment, free labor to apply compost (at optimal rates), technical assistance, and an introduction to new social and professional networks to support this extensive farming approach. Payments are based on compliance rather than service provision since it is impossible to link change in water quality to practices on individual farms. However, there is extensive monitoring of nitrate levels in the water, as well as farming practices, so that these can be adjusted as lessons are learned.

A major point of contention was how to value the services provided by farmers, and whether to base payments on the opportunity costs of farmers or those of the company. On the one hand, farmers were in a strong bargaining position with the combined ability to radically affect water quality. And on the other, Vittel's strong brand connections to the 'Grande Source' (Great Spring) area (at the foot of the Vosges mountains in northeastern France), compelled the company to search out a mutually beneficial solution. Given that Vittel is also a major employer in the region,

many of the farmers came to recognize that protection of the 'Grande Source' would in fact be a mutual benefit.

Under the agreement that was ultimately accepted, farmers were offered a way out of debt, which ensured that family farming in medium to large size farms could continue over the next generation without any loss of income. Among the key factors in the success of this initiative is that efforts were made right from the start to understand farmer's livelihood strategies, perspectives, future plans and constraints, as well as engaging them in the research program.

Scientific and economic research was preceded by research on the historical, geographical and sociological context of the watershed. This allowed the company to establish a dialogue and partnership based on mutual interest and trust with those farmers that wanted to continue farming. Other important factors in the success of the arrangement were the existence of strict legislation on mineral spring water, the formation of a locally based intermediary institution (whose director became a champion of the cause), and last but not least, the acceptance of risk and uncertainty by everyone involved.

In contrast with annual payments made under the CAP, the payments made by Vittel reflect a commitment to the long-term viability of farming, which is expected to become sustainable at the end of the transition period. The scheme was made possible by a special set of conditions that may or may not be found elsewhere. However, what is replicable, even outside of Europe, is the process through which the scheme was developed, which gave special attention to context rather than seeking out ideal conditions, and which transformed a situation of conflict into a successful private/public partnership.

References and further information:

Perrot-Maitre, D. (2006) [The Vittel payment for ecosystem services: a "perfect" PES case?](#) (pdf) International Institute for Environment and Development, London UK

Perrot-Maitre, D. (2005) Presentation given at [CIFOR/ZED workshop on Payments for Environmental Services: Methods and Design in Developed and Developing Countries](#). Titisee Germany, June 15-18, 2005.

Déprés, C., G. Grolleau and N. Mzoughi (2005). [On Coasean Bargaining with Transactions Costs: The Case of Vittel](#). Dijon, UMR INRA-ENESAD CESAER Centre d'Economie et Sociologie appliquées à l'Agriculture et aux Espaces Ruraux: 17.

Feedback and commentary

If you have a good rule-of-thumb, or other comments, please send them to comments@flowsonline.net for inclusion in the next bulletin. We also welcome input and references for forthcoming bulletins.

New resources

Burke L., Sugg Z. 2006 [Hydrologic modeling of watersheds discharging adjacent to the Mesoamerican reef](#). World Resources Institute, Washington, DC

[Kathryn Fuller Science for Nature Symposium](#) and the launch of [The Natural Capital Project](#) – A collaboration of WWF, TNC and Stanford University, held October 31-November 1, Washington DC. Presentations are available online.

[Katoomba XI: Catalyzing Payments for Ecosystem Services in South Africa](#). A meeting of the East and Southern Africa Katoomba Group, November 8-10 2006. Kirstenbosch Botanical Gardens, Cape Town South Africa. Proceedings and background materials.

McCauley, D. 2006. [Selling out on nature](#). Nature Vol 443, 7 September 2006, pp 27-28. Available online at Nature Valuation and Financing Network website.

USFS Pacific Southwest Research Station, [Publications](#) from program on Cumulative Effects of Forest Management on Hillslope Processes, Fishery Resources and Downstream Environments

Wunder S. 2006. [Between purity and reality: taking stock of PES schemes in the Andes](#), Editorial, The Ecosystem Marketplace, Katoomba Group, vol.1, no.4, 31 Oct.

Wunder, S. 2006. [Are direct payments for environmental services spelling doom for sustainable forest management in the tropics?](#) Ecology and Society 11(2):23

Wunder, S. 2006. The efficiency of payments for environmental services in tropical conservation" Conservation Biology. [Link to Abstract](#)

Wunder, S. 2006. [Pagos por servicios ambientales: Principios básicos esenciales](#). CIFOR Occasional Paper No. 42 Spanish. 24p.

Wünscher, T., S. Engel & S. Wunder, 2006. "Payments for environmental services in Costa Rica: increasing efficiency through spatial differentiation", Quarterly Journal of International Agriculture, vol. 45, no.4, pp.317-35. [Link to Abstract](#)

WWF [PES InfoExchange](#) (Demember/January Year 2 No. 16).

[WWF-Private Sector Forum to Promote Ecosystem Services and Payments for Ecosystem Services](#), Vienna Austria, November 13-14, 2006. Presentations are available online.

Zilberman, D., Lipper L., and McCarthy N. 2006. [When are Payments for Environmental Services Beneficial to the Poor?](#) ESA Working Paper No. 06-04 UN Food and Agriculture Organization, Agricultural and development Economics Division.

[ASB Scenarios Project](#) - CIFOR, ASB and the World Agroforestry Centre recently conducted a series of workshops in which they used the approach of the Millennium Ecosystem Assessment, of developing future scenarios, to identify possible futures and choices available in tropical forest communities. The methodology, which can also be an important tool for the development of PES, is presented in the following publications:

Evans, K., Velarde, S.J., Prieto, R., Rao, S.N., Sertzen, S., Dávila, K., Cronkleton P. and de Jong, W. 2006. [Field guide to the Future: Four Ways for Communities to Think Ahead](#). Bennett E. and Zurek M. (eds.). Nairobi: Center for International Forestry Research (CIFOR), ASB, World Agroforestry Centre. p.87.

Prieto RP, F Patiño, J Ugarte, SJ Velarde, C Rivadeneyra. 2006. [Exploring the Future: Madre de Dios. Scenarios Workshop report](#), May 28-29, 2005, Universidad Nacional de Madre de Dios. Puerto Maldonado, Peru. ASB, World Agroforestry Centre and Millennium Ecosystem Assessment. 44p.

López M, R Prieto, SJ Velarde, 2006. [Construyendo el Futuro de Chalaco, Reporte del Taller de Escenarios](#), 20 y 21 de Mayo de 2005. Municipalidad Distrital de Chalaco, Colegio Secundario "San Fernando", Chalaco. ASB, Universidad Nacional Agraria La Molina (UNALM), World Agroforestry Centre y Millennium Ecosystem Assessment. Piura, Perú.

Ugarte J, RP Prieto, M Lopez, SJ Velarde, C Rivadeneyra. 2006. [Exploring the Future: Ucayali. Scenarios Workshop Report](#), 10 June del 2005, Conference Room at the Hotel Sol del Oriente - Pucallpa, Ucayali. ASB, World Agroforestry Centre and Millennium Ecosystem Assessment. 29p.

Bentes-Gama M, Oliveira VB, Vieira AH, Locatelli M, Rodrigues VGS, Medeiros I de M, Martins EP. 2006. [Fortalecimiento fo Manejo Florestal Comunitário en assentamento rural Amazônia](#)

[Ocidental](#), Rondônia, Brasil. In: Congresso Latino Americano da IUFRO, 2. La Serena, Anais. La Serena: Instituto Florestal de Chile.

Announcements

Global Workshop of Payment of Environmental Services

In collaboration with a number of partners, RUPES Project is organizing a global level workshop in Mataram, Lombok, Indonesia from 22 to 27 January 2007. A scientific conference and a practice workshop will be the main agenda. For more information see:

www.worldagroforestry.org/sea/rupes

About the Flows Bulletin

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