



"One of the key elements of this proposal is information. This is an equitable payment, which means we take into account the culture of the community, we take into account the levels of poverty, we take into account their values and levels of preferences. All of that is part of the package, it is not just an incentive to conserve but rather a business case based on the principle of equity"

-Julio Tresierra,
WWF Global
Coordinator

"A Memorandum of Understanding (MOU) is often the first stage in the formation of a formal contract... It is given weight in a court of law should one party fail to meet the obligations of the memorandum".

-Investopedia,
Forbes

A Joint CARE/WWF Scheme: Equitable Payments for Watershed Services (PWS) (Tanzania, Africa)

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Enhancing Downstream Water Quality by Improving Upstream Land Use Practices

Over the past 50 years, ineffective land-use practices such as excess cultivation and deforestation have resulted in increased turbidity (suspended dissolved solids) in Dar es Salaam's main water supply - the Ruvu River catchment. Conducted during the first phase of the project, extensive hydrological studies undertaken by CARE and the World Wildlife Fund (WWF) have identified various upstream conservation "hot spots" (areas of high biodiversity), that if properly managed, could significantly improve water quality.

In an effort to bridge development and conservation, CARE/WWF have formed a joint



partnership, exclusively establishing the first corporate framework supporting Payments for Watershed Services (PWS). This three-phased PWS scheme is taking place in the Uluguru Mountains of Tanzania, Africa and is set to improve the water quality of the Ruvu River catchment while improving livelihood in the community.

Under a proposed public-private scheme negotiated between upstream land-users and downstream beneficiaries, downstream water users will make payments to upstream land-users to implement "good" land-practices, providing improved water quality supply in the Ruvu River catchment.

Current Status

This project is currently in its second phase, in which *assessments of land use changes on turbidity control* are being undertaken. As of today, a Memorandum of Understanding has been established among Dar es Salaam Water and Sewage Corporation (DAWASCO a water and sewage services provider), Coca Cola Kwanza (a major client to DAWASCO), and the Kibungo Juu community (critical upstream land-users). With this pilot study, WWF/CARE

hope to demonstrate the costs benefits of increased water quality gained through the use of improved land-use practices as well as an accurate estimate of land-use changes and improved turbidity. Once completed, phase three will introduce a *legal binding contract* that will further be negotiated between the buyer and seller and will serve as a framework for communities who wish to integrate similar PWS schemes.

"We measure willingness and capacity because in most studies they only establish the notion of willingness to enter. Willingness to enter is not enough, many buyers are willing to enter but don't have the capacity to pay and many communities are willing to enter but don't have the capacity to deliver. We measure willingness and capacity, this is one of the major contributions that we wish to make to PES schemes today"

-Julio Tresierra, WWF Global Coordinator

Looking Forward

WWF/CARE envision this project to be a working framework for other communities who wish to integrate equitable payment plans for watershed services within their communities. This project is also set to encourage the private sector to internalize positive externalities by integrating the cost of enhanced land-use practices into business schemes.

Additionally, this particular scheme aims to capture the community's cultural values, fostering private and public entrepreneurship and bringing forth community empowerment and innovation.

Success of this program will be determined at the end of phase two, measured by a significant water quality improvement through improved land use changes performed by the Kibungo Juu community and willingness and capacity to enter into a formal agreement. Once a consensus has been reached, phase three is expected to bring forth a contract binding DAWASCO, Coca Cola and the Kibungo Juu community into an official legal contract, fostering one of the first successful commercial equitable payment schemes for watershed services.

Project Challenges

The most prevalent challenges in equitable payments for ecosystem services are often associated with assigning preliminary monetary values to ecosystem services. The most difficult challenge that CARE/WWF have had to face has been with regards to predicting the degree of water quality improvement through short-term improved land use changes. Since the second phase of the project is set to only last four years, the challenges lie in determining the upfront monetary value of the services as well as capturing future value from the benefits of land use changes over a longer period of time.

In addition, because conventional government practices have often been in favor of monopolizing national goods, it has proven to be difficult to encourage government to establish private/public negotiations with respect to national resources. Such views have resulted in the failure to recognize and reconcile the gap between conservation and development in the national agenda. Efforts to join social, financial and environmental capital into a single working framework remain a working progress and are yet to be seen as a standardized model.

On a more localized level, success of many PES schemes has been challenged when organizations have neglected to measure the capacity of sellers to participate and buyers to pay. Along with measuring the willingness to enter, CARE/WWF plan to measure the capacity of buyers to pay and sellers to sell watershed services. This will more accurately reflect possible participation because in some cases participants may be willing but financially or physically unable to purchase or deliver the service.

