Possibilities and Limits to ‘public-financed PES’ Implementation
An Application on “Forests for Water” Management

Guillaume de Buren – IDHEAP, Chair of Public Policies and Sustainability

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What is Natural Resources Management (NRM)?

What is managed is not the natural resources but the uses made of them by actors. Institutions are “humanly devised constraints” influencing actors’ uses of resources.

In short my interest is focused on how institutions influence the behavior of actors and, *vice versa* how actors influence the institutions.

Actors choose to mobilize one or another institution. This is highly strategic!
## Institutions: what are we talking about?

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My thesis tries to grasp all those institutions and their interactions.

Application of my research on “Forests for Water”
Forests provide an active protection of groundwater through the natural filtration and purification processes provided by forest soil during infiltration.

The issue of water quality and quantity depends also on the type of forestry.

Some facts:

In Switzerland, 47% of groundwater protection areas are located in the forest (Brändli, 2010).

In Lombok Island, 50% of the springs dried up following deforestation since 1985 (BLHP, Provincial Service of Environment and Research).
Research design

Each institutional context favors one type of institution, but never exclusively.

I conducted 6 case studies in 3 different institutional contexts (one for each type).

In order to control the other variables, we have drawn an embedded research design that allows us to compare our object in different institutional contexts.
This presentation focuses on “negotiated regulation”

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Focus of this presentation

Central issue in Resource Economics

Central issue in Public Policy Analysis

Central issue in New Institutional Economics
Contracting as a public intervention

Public administrations conclude contracts with various actors.

**Purchasing** (to buy s.th. necessary for public service provision)
- *e. g. Purchasing of a purification plant or buy the forest.*

**Public Private Partnership** (to delegate a public service provision)
- *e. g. Delegation of water purification service to a private company on a long term.*

**Bilateral contract with individuals** (to modify a behavior or offer a compensation)
- *e. g. Compensation of a forester, who agrees not to exploit his forest.*

**Incentive used as an implementation tool** (pay to reach a political goal set in a regulation)
- *e. g. European “Voluntary” Agro-Environmental Subsidies.*

**Conventional easement** (without expropriation for public utility)
- *e.g. Access to a water catchment or to lay a pipe on someone’s land.*

... etc. many other possibilities are observed.

The existence of a “contract” is not a relevant criteria because we observe them in all three types of institution. Rather the criteria is the bi-/multilateral agreement.

The **legal regime** differs according to the contract (*i. e. private or administrative law*).

The possibility for public administrations to conclude contracts depends very much of the **legal tradition** (*i. e. Common law vs. Civil law; Germanic tradition vs. French tradition, etc.*).
Use of negotiated arrangement to protect the environment

Since the 1990s, Payments for Environmental Services (PES) have been promoted.

(Neo)classical definition:

A voluntary payments from the beneficiaries of environmental services to the providers of the environmental service.

\[\text{e.g. the water consumers pay foresters in order to maintain the forest.}\]

In the last 5 years, Ecological Economists have enlarged the definition to include public interventions, compulsory payments, etc.

Simultaneously many public administrations are promoting PES in order to go beyond the limits of traditional environmental policies.

The question is:

“to what extent public payments can or cannot be assimilated to PES?”

In fact, despite their importance in literature, few so-called PES meet the definition.
Examples of public payments

Negotiated arrangement

Rather than regulating, the public administration negotiates in order to influence behaviors, obtain support for implementing a public service, etc.

Requirement of a legal basis.

Possibilities and limits defined by administrative law (e.g. not obvious in Switzerland and Indonesia, but common in France).

It is a PES

* e.g. Agreement with foresters on logging limitation in a catchment area.

Incentive policy implementation

Implementation of provisions defined by a legislative body (politics) in a regulation.

It is an output of a public policy, that privileges incentive over constraint.

The provider is a candidate to whom the administration decides to allocate funds.

Legally there is no bi-/multilateral agreement, but a unilateral decision.

It is not a PES.

* e.g. Public subsidies for catchment protection in a forest area.

We observe many confusions between those two types of public payments.

Not every public payment corresponds to the PES concept.
PES on my field research
Lombok island (Indonesia)

Nusa Tenggara Barat prov.,

4 kabupaten + 1 kota
Activities in the field
“PES” implementation in West Lombok Regency

Those different types of implementation are often mixed up!
They are interdependent (i.e. indirect effects: no 2 without 1, etc.)

1 = private-private PES

2004-07 – NGOs and PWS try to set a PES with the support of donors.

Creation of bodies (providers in upland, intermediary and water consumers association).

First payments (few).


The previous independent intermediary body is replaced by a public body.

The stake is control over money!

The incentive policy is considered as not effective enough.

The Public Water Supply (PWS) Company create its own PES, financed by its own budget, based on water laws.

2010 - beginning of the activities (payments to farmer groups presenting a request and a project).

2011 – continuation...

2012 – continuation...

2013 – continuation...

2 = incentive policy ≠ PES

2012 - first implementation.

2013 - continuation...

3 = public-private PES
## Synthesis: which institutions are implemented now in Lombok?

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<td><strong>Public regulation</strong></td>
<td><strong>Incentive policy encouraging local actors to reforest (perda 4/2007).</strong></td>
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Even in a weak institutional context, **all 3 types of institutions are implemented.**

To understand the reality, **it is not possible to focus only on one type.**
Conclusion

It is not important to know if a payment scheme is a “PES” or not, but... it is essential to differentiate between the different types of institutions in order to use an appropriate analytical framework.

In this respect, the confusion between PES and incentive policies is problematic.

- Rational choice theories are dismissed to understand policy process which driven by non-rational political games and power struggle issues!
- Public Policy Analysis is not appropriate to explain negotiated arrangements!

The recent enlargement of the definition of PES by Ecological Economists generates a confusion between institutions.

The “Institutional Resource Regime” framework is designed to grasp two types of institutions and explain their articulations. The integration of the third type (negotiated arrangement) in the IRR is not conclusive (but progressing).

At that point, we see an urgent need for more interdisciplinary approaches!
Thank you for your attention

More on this topic on my Internet page:  
www.idheap.ch/e/GuillaumedeBuren  (or Google my name)

On the same issue:  
Schweizer, Dupuis & de Buren Guillaume (2013). “Innovative implementation by non-state actors in environment-related areas”. ICPP-Grenoble

Contact:  Guillaume.deBuren@unil.ch