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BEYOND THE SCHEME OF PAYMENT FOR ECOSYSTEM SERVICES: BUILDING MONEY FOR  
SUSTAINABILITY

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# Beyond the Scheme of Payment for Ecosystem Services: Building Money for Sustainability.

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## **Abstract:**

This text describes a prototype called “Campana” that aims to strengthen conservation of the biological corridor 'Pájaro Campana', Costa Rica. The “Campana” is a kind of money different than the one created by the central bank and other banks (created from the debt of governments, companies and people). The “Campana” is created from the existence of conserved forests and no one needs to be indebted. It is used as a local medium of exchange, has an expiration date and its yearly renewal is equivalent to the amount of preserved forests. Throughout the duration of the “Campana”, users are encouraged to use it in reforestation, agricultural soil conservation, adoption of ecological farming practices, conservation of mangroves and other existing ecosystems in the area. The “Campana” is created and managed by non-governmental institutions, which determine the admission criteria to the system, rules of use and other tasks like monitoring of target areas.

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Why the environmental policy instruments should depend only on one type of money? Initiatives like PES (Payment for Ecosystem Services) and REDD + depend exclusively on a single type of money, “*fiat money*” created from government, companies and households debt (Wray, 1998; Milne, 2009; Griffin, 2010).

As shown by historical analysis (Reinhart and Rogoff, 2008) and by the obvious results of the most recent financial crisis, the financial system that creates that kind of money has structural failures (Duncan, 2005; Lietaer et al., 2010) which are incompatible with socio-ecological long-term objectives (Lietaer et al., 2012).

If we would like to build solutions to recover and preserve what remains and especially, reduce poverty in places where people depend of ecosystem services and biodiversity for survival, we need new types of money less vulnerable to negative side effects of monetary policies implemented by central banks.

Based on these considerations, we present the prototype of the “Campana”, a type of money that seeks to solve a set of socio-ecological problems of a particular Costa Rican region. The name “Campana” refers to the iconic species of the area (*Procnias tricarunculata*).

## **1. Study Area**

The Bellbird (Pájaro Campana) Biological Corridor, CBPC, is located between Puntarenas and Guanacaste, ranging from the Monteverde Cloud Forest Reserve to the mangroves of Puntarenas in the Nicoya Gulf.

Communities in the CBPC are mostly rural; they are engaged in production for domestic consumption and, to a lesser extent, for export.

Identified threats are: inadequate soil management practices and lack of environmental awareness both in the upper and middle part of the CBPC, which are causing soil and water resource deterioration, loss of habitat because of illegal logging, inadequate waste management, among others. This affects coastal marine communities due to the impact of processes such as sedimentation.

## **2. What purposes will attend the "Campanas"?**

The following:

1. Promote ecosystems connectivity through recovery and conservation of natural areas
2. Retrieve riparian forest areas to protect watersheds
3. Improve productive practices of local agricultural farms
4. Promote cooperation among communities
5. Promote good practices and environmental technologies in community areas and households.
6. Encourage local fair trade and solidarity.

## **3. How the "Campanas" will be created and how to get them?**

The creation of the "Campanas" is backed by preserved forest acres (dry forest, mangroves, etc.).

For example, if there are 1000 hectares, the amount of "Campanas" equals this amount and shall refer to the amount paid by PES for similar forests. Let us suppose that is \$1,000 per hectare per year. In that case, the amount of "Campanas" to be created in year 1 of the project will be 1 million "Campanas".

In order to solve the problems as quickly as possible, the "Campanas" are digital and have an expiration period equal to 320 days, counted from the moment they are issued.

During the time preceding its expiration period, participants who obtained the "Campanas" should use them for the proposed purposes.

For example, let us assume that a landowner has zero hectares preserved and want to reforest x acres with native species. The landowner only lacks money to make viable the activity. In presenting its reforestation plan to the "Campanas" administration, they will evaluate and tentatively will approve the financing needed.

Once the period is over, the administration will monitor the owner's progress. Let us assume that he succeeds in reforesting the planned hectares. Now he has x hectares reforested and with that, his administration debit is canceled. These x hectares serve as a backup to request more "Campanas", to reforest more and/or to apply ecological agricultural practices on their farm.

Let us suppose that the owner does not use these resources appropriately. The administration may decide to exclude him from the system.

In the case of properties wishing to reforest with commercial species, part of the gain from the sale will be donated to the administration and to the other people involved in the system, similar to the Sustento (Paiva Sobrinho and Romero, 2015).

The "Campana" administration is composed of non-governmental organizations that have qualified people.

#### **4. Conclusion**

We present a synthesis of the "Campana" prototype, which is under discussion with CBPC's communities. With their feedback, we would establish important details to support system implementation, so that the objectives will be achieved in the shortest possible time.

It is urgent to solve CBPC's socio-ecological problems and we believe that a type of money backed by preserved forests and with expiration period, has the potential to contribute in the solution of such problems.

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