







Funding mechanisms for ensuring water-security and sustainable agricultural practices in water-conflict basins in Brazil

Jorge Werneck

PhD Hydrology - Director of Adasa



Water Funding Mechanisms

- Government taxes (general and/or specific);
- Tariffs (cost-recovery principle water supply and wastewater services only)
- User-pays principle;
- Polluter-pays principle;
- Provider-receiver principle (Payment for Environmental Services PES)
- Beneficiaries-pays principle;
 - Private financing Public private partnerships
 - International development banks (loans)
- Green/Climate & Blue bonds







User-pays / Polluter-pays Principles

Brazilian Water Resources Policy (Law 9433/97)

- Principles:
 - recognized water as a public, limited, finite, and vulnerable good, with economic value.
- Implementation tools:
 - charging fees for water use (following the user pays principle and the polluter pays principle);
 - Water Resources Plans (programs and projects suppose to guide the definitions of charging fees).







User-pays / Polluter-pays Principles

Brazilian Water Resources Policy (Law 9433/97)

Implementation:

- the River Basin Committees establish the fee-charging mechanisms for the use of water resources and suggest the amounts to be charged;
- Revenues from charges are invested in priority in river basins where they have been generated;
- This money is mobilized to finance studies, programs, projects and works included in the Water Resources Plans;
- Administration expenses are limited to 7.5% of the total amount brought in by water charges.







Payment for Environmental Services - PES

Principles:

AVISO DE AUDIÊNCIA PÚBLICA

Ambientais (PSA)

Plataforma TEAMS - Virtual

INSCRIÇÕES e CONTRIBUIÇÕES

Adasa

e-mail: ap_001_2021@adasa.df.gov.br http://www.adasa.df.gov.br

ADASA comunica a realização de Audiência Pública

sobre normas para reconhecimento, na tarifa dos

serviços públicos de abastecimento de água e

esgotamento sanitário do DF, de valores destinad

pela concessionária para o Pagamento por Serviços

- ✔ Provider-receiver principle;
- Beneficiaries-pays principle

Regular é nossa natureza



Assessing the use of erosion modeling to support payment

Jorge Enoch Furquim Werneck Lima • Walszon Terllizzie Araújo Lopes • Fabiana de Gois Aquino • Eduardo Cyrino Oliveira-Filho • Edson Eyji Sano •

for environmental services programs

PROGRESS IN EROSION AND SEDIMENTATION IN LATIN AMERICA

Areas most susceptible to loss of ecosystem services Proper land-use management

AGÊNCIA REGULADORA DE ÁGUAS. ENERGIA E

Publicado no DODF n 74, de 22 de abril de 2021. RESOLUÇÃO Nº 04, DE 19 DE ABRIL DE 2021



Estabelece normas para o reconhecimento, na tarifa dos esvriços de abastectmento de água e esgotamento santiário, de valores destinados pela concessionária para o Pagamento por Serviços Ambientais (PSA), e disciplina as regras para alides dos projetos prioritários e a forma de apresentação de seus resultarios.

O DIRETOR-PRESIDENTE DA ACÊNCIA RECULADORA DE ÁGUAS, ENERGIA E SANEAMENTO BÁSICO DO DISTRITO FEDERAL. ADASA, no uso de suas atribujões legals, previstas no art. 7°, inciso III, e no art. 23, incisos III e VII, da Lei Distrial nº 4285, de 26 de dezembro de 2008, e de acordo com a deliberação da Diretoria Colegiada, observados os elementos constantes do Processo SEI nº 00197-00004702021-47. Resolve:

Art. 1º Estabelecer normas para o reconhecimento, na tarifa dos serviços de abastecimento de água e esgotamento santáriro, de valores destinados pela concessionária para o Pagamento por Serviços Ambientais (PSA), e disciplina as regras para análiste dos projetos prioritários e a forma de apresentação de seus resultados, conforme disposto no Módulo XIV do Mansal de Revisão Tarifária Periódica (MRT), apovado pela Resolução Adasa nº O, de 8 de fevereiro de 2021.

- \$ Sustainability of the Project
- Promote farmers engagement



Felippe Damião Mello di Silva

Direct Services

Erosion control
Sediment retention
Soil formation

J Soils Sediments DOI 10 1007/s11368-013-0821-0

Indirect Services

Nutrient cycling

Hydrological cycle

Water supply
Soil productive capacity

Food supply

Energy supply

Provider / Maintainer

BENEFITS

Lower water treatment cost

Increased food production Increased food security

Landslides prevention

Flood prevention

Increased reservoirs lifetime Lower maintenance costs of drainage systems (channels and pipes)

Improved river navigability

Lower maintenance costs of pumping

Increased bathing quality of water bodies Increased fishing

Aquatic ecosystems maintenance

Scenic beauty maintenance

Diseases prevention



Beneficiary







Piping of the Santos Dumont Canal (20 km)

















Thank you for your attention







