



"Benefit Sharing: Experiences from Brazil"

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United Nations Symposium on Hydropower and Sustainable Development

Beijing, China

October, 2004

Itaipu Hydroelectric Power Plant

- Joint Venture Brazil – Paraguay on the basis of the Treaty signed on April 26, 1973
- Introduction of royalties to be paid by the binational entity as compensation to the two countries (US\$ 1.99/MWh, today's value)

Year	1984	1985	1986	1987	1988	1989	1990	1991	2005
Addition (MW)	1400	700	2100	2100	2100	2100	700	1400	1400
Capacity (MW)	1400	2100	4200	6300	8400	10500	11200	12600	14000

Law 7990 (1989), Law 8001 (1990) and related legal rules

- Introduction of financial compensation (6% of the generation “tariff of reference”) to be paid by generation companies (>10MW) to States and Municipalities affected by reservoirs (either local or upstream regularization reservoirs)
- Distribution of Proceeds – Applicable also to Itaipu’s royalties: 45% for States, 45% for Municipalities, 10% for the electricity regulatory agency*

* (40% for electricity services supervisory activities, 35% for water resources management and data gathering, and 25% for environmental protection)

Further changes in the use of proceeds have been brought by...

- Law 9433 (1997 - outlines the national water resources policies and guidelines, and introduces the concept of payment for water use)

And by ...

- Law 9984 (2000 – creates the national water regulatory agency and increases from 6% to 6.75% the amount to be paid by generation companies, the additional 0.75% being the payment for water use)

So that today's situation is...

- Generation companies pay 0.75% of R\$ 44.20 per MWh for water use
 - use of the proceeds is responsibility of the national water regulatory agency
- Generation companies pay 6% of R\$ 44.20 per MWh (US\$ 0.93/MWh) and Itaipu pays US\$ 1.99/MWh as compensation for inundated areas
 - distribution of the proceeds is 45% for States, 45% for Municipalities, 10% for the Federal Government*

* (30% for electricity services supervisory activities, 30% for national water resources secretary, and 40% for the national fund for Science and Technology)

The 2004 figures

- 137 hydroelectric power plants with 145 reservoirs will pay over US\$ 400 million in financial compensation or royalties to 22 states and 593 municipalities:

Royalties (roy) and Financial Compensation (fc)

16 municipalities (roy only) 325 municipalities (both roy and fc) 252 municipalities (fc only)

Final Remarks on Itaipu

- **Regional Development**
 - Royalties paid to Brazil and Paraguay up to December, 2003: US\$ 4,582,000,000.00
 - Tourism: 12 million visitors since 1977, with recent average of 500,000 visitors/yr
 - Improvement in roads, bridges, avenues : over 240 km in the affected municipalities

Green boundaries

- 110,000 ha with riverside forests, biological refuges and forest parks bordering 2,900 km of the 135,000 ha lake



- **Itaipu and new courses in regional colleges**

- Engineering
- Computer Science
- Physical therapy
- Nursing...

- **The virtuous cycle**

- More economic activities
- More critical mass of knowledge
- More social progress

Everything is vague to a degree you do not realize till you have tried to make it precise.

– Bertrand Russell

Several important details have been overlooked in order to make this presentation concise. But it is not precise. Everything is vague...