# **Evolution of IA practice in São Paulo State**

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# **Research questions**

- Is the quality of environmental impact assessment (EIA) documents improving or evolving over time?
- Previous studies in different countries suggest improvements (Landim and Sánchez, 2012, Morgan, 2012)
- How can evidence of change be collected and validated?

### **Context** – São Paulo State - Brazil

**§** National regulations: 1986 **§** EIA files 1987-2015:

### Table 4: Selected findings - EIS review

Quantian		Case						
Question	1	2	3	4	5	6		
Number of pages	189	47	411	815	729	505		
Are there comparisons of locational and technological alternatives?	No	No	No	Yes	Yes	No		
Is there any integrated landscape analysis?	No	No	No	No	Yes	No		
Does the EIS identify and locate protected areas likely to be affected?	No	No	No	Yes	Yes	Yes		
Were surveys undertaken with affected communities?	No	No	Yes	Yes	Yes	No		
Does baseline describe vulnerable groups?	Yes	No	Yes	Yes	Yes	No		
Are there archaeological data?	No	No	No	Yes	No	Yes		
Does the EIS assess impact significance?	No	No	No	Yes	Yes	Yes		
Do environmental programmes include goals and indicators?	No	No	No	No	No	No		

- **Ø** 889 Environmental Impact Studies (EIS) +
- Ø ~2,500 shorter assessment reports
- **§** Dedicated EIA Division within State Department of Environment – technical staff ~ 60 professionals

## Methods

- Content analysis of EIA documents
  - 1. terms of reference (ToR)
  - 2. environmental impact study (EIS)
  - 3. EIS supplements
  - 4. records of public hearings
  - 5. EIA review report
- Two-stage filtering for case selection 5
  - (1) approved quarry projects (4% of EIA files)
  - (2) (i) longest time spectrum possible; (ii) different rocks; (iii) different locations and settings
- Six cases selected
- Scripts developed for each document Data was tabled and compared for detecting regularities, temporal changes or innovations.

#### Table 5: Selected findings - Review report

	Case							
Question	1	2	3	4	5	6		
Number of pages	15	12	37	71	44	35		
Does it request any commitment from	_	_	No	No	Voc	Vac		
proponent due to the public hearing?		-			162	162		

# **Discussion and conclusions**

#### Some improvements over time were found:

S Longer and more detailed documents: ToR, EIS (Landim and Sánchez, 2012) and Review Report Use of primary data for anthropic environment on EIS, e.g.: surveys with affected communities Impact significance assessment on EIS, from Case 4 and onwards Improved regulation: mandatory ToR (1994); endangered species list (1998); impact prediction on protected areas (2000) and archaeological studies on EIS (2003) Better public participation: hearings more influential, resulting in commitments to the proponent

#### Table 1: Cases selected

#	Year	Rock	Setting	Mt/yr
1	1990	Granite	Urban	2.0
2	1992	Limestone	Rural	0.36
3	1998	Granite	Urban	1,4
4	2003	Limestone	Rural	1.45
5	2012	Limestone	Rural	7.4
6	2013	Basalt	Rural	1.2

## Results

Table 2: Selected findings – ToR review
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		Case							
Question	1		2	3	4	5	6		
Are there ToR for the EIS?	No	)	No	Yes	Yes	Yes	Yes		
Number of pages	-		_	10	3	17	25		

#### But there are persistent shortcomings:

- Despite improvements, there is no evidence of more advanced stakeholder engagement
- Late public participation (Palerm, 2000)
- Deficiencies on analysis of alternatives (Steinemann, 2001)
- Deficiencies and gaps in EISs: all were supplemented
- No new analytical approaches on EIS (Landim and Sánchez, 2012), e.g.: no integrated landscape analysis

Do they feature guidelines for the baseline?

Yes No No Yes

Yes

Do they present guidelines for Yes No Yes determining impact significance?

Table 3: Selected findings – Public hearing minutes								
Question	Case							
	1	2	3	4	5	6		
Did a public hearing take place?	?	?	Yes	Yes	Yes	Yes		
Did it result in any project change,								
complements to the EIS or further	-	-	No	No	Yes	Yes		
commitment in the Review Report?								

S Low detailing level for environmental programmes => does not facilitate follow-up.

### References

LANDIM, S.N.T.; SÁNCHEZ, L.E. The contents and scope of environmental impact statements: how do they evolve over time? Impact Assessment and *Project Appraisal*. V. 30, n. 4, pp. 217-228. 2012. MORGAN, R.K. Environmental impact assessment: the state of the art. Impact Assessment and Project Appraisal, v. 30, n. 1, p. 5-14, 2012. PALERM, J. R. An Empirical-Theoretical Analysis Framework for Public Participation in Environmental Impact Assessment. Journal of Environmental Planning and Management, 43:5, 581-600. 2000 STEINEMANN, A. Improving alternatives for impact assessment. Environmental Impact Assessment Review. v. 21, p. 3-21. 2001.