

To Vinod Thomas (IEGDG)

## **Enhancing Development Effectiveness through Excellence and Independence in Evaluation**

The Independent Evaluation Group (IEG) is an independent unit within the World Bank; it reports directly to the Bank's Board of Executive Directors. IEG assesses what works, and what does not; how a borrower plans to run and maintain a project; and the lasting contribution of the Bank to a country's overall development. The goals of evaluation are to learn from experience, to provide an objective basis for assessing the results of the Bank's work, and to provide accountability in the achievement of its objectives. It also improves Bank work by identifying and disseminating the lessons learned from experience and by framing recommendations drawn from evaluation findings.

Vinod and others,

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I was invited by the US ED's office to attend a meeting on the proposed IFC investment in Bertin's beef slaughterhouses in the Amazon and elsewhere in Brazil. The meeting included US government representatives (Treasury, State, USAID, EPA) and IFC staff. The US is concerned about the, environmental impacts of this project, since cattle ranching is the dominant force in Amazonian deforestation. I was invited because of my expertise on deforestation in general and Brazil in particular, having just completed the Bank's Policy Research Report on Tropical Forests.

Based on the meeting, and a review of the Executive Summary of the Environmental and Social Impact Assessment (ESIA), I have the following observations.

### **The project poses a grave risk to the environment and to the Bank's reputation.**

According to the ESIA, the expansion of Bertin's slaughterhouse in Maraba (Para state in Amazonia) will increase the area's annual beef output by 250,000 head. According to their parameters, this offtake requires a cattle stock of 1 million head. If this increased demand is accomplished via a business-as-usual expansion of pasture without effective controls, it would imply deforestation of about 10,000 km<sup>2</sup>, an area roughly equivalent to Jamaica, or half the size of New Jersey. While we may hope that controls work, past experience, including the failures of large zoning projects in Rondonia and Mato Grosso, suggests that there is a significant risk that they will not.

### **The environmental impact statement fails adequately to diagnose or acknowledge the project's deforestation risk, and is unclear and unconvincing about risk mitigation strategies.**

The ESIA's discussion of cattle dynamics in Para is faulty and incomplete. It says:

In these scenarios, it is believed that Frigorifico Bertin in Maraba expansion is feasible without bringing new deforestation sights, provided that the control measures proposed in this study are implemented.

Main arguments in support to this supposition are the existence of a surplus in the offer of cattle in the region and the possibility of improvements of zootechnical indexes, mainly those related to pasture handling techniques, what allows an increase in productivity and, consequently, a larger livestock the same area. Further, it is believed that there is room for implementing of control measures without incurring in very high additional cost for the Slaughterhouse, as well as for producers.

The `surplus' argument is incorrect and misleading. By `surplus' the report means that a significant portion of local beef production is sold to unlicensed slaughterhouses, or sold on; the hoof to distant out-of-state buyers. These are not idle cows waiting for Bertin's new facility. To the contrary, the installation of a large, additional local source of demand will boost the farmgate price of beef substantially above what these surplus ranchers now receive from distant buyers after paying transport costs. The effect will be to shift upwards the demand curve for beef, extending the area that can profitably transport beef to market. This would put pressure on the expansion of the Amazon frontier at the edge of the slaughterhouse's catchment area.

The control or mitigation measures are related to Berlin's cattle purchasing strategy but are not well described. The project can only avoid deforestation pressure if it induces substantial increases in stocking density (cows per hectare) in its supply region. The document fails to describe how this will be done (though there was some mention at the meeting of a TA project under consideration). It does not describe the baseline or scope for increasing stocking density.

Compounding the problem is that almost all of the landholders in the immediate vicinity of the plant are grossly out of compliance with the regulation that they maintain 80% of their land under forest, in addition to maintaining riverrine forests. Satellite photos document near total deforestation in the area, and this is acknowledged in the ESIA. Hence the project proposes to buy cattle only from ranchers who have negotiated a `terms of conduct' agreement with state authorities --basically a plan for reforestation or compensation. (It is not clear whether Bertin has committed to ensure that their supplier not only *obtain* this agreement, but actually *comply* with it.) The integrity of this agreement depends on the state's undemonstrated ability to negotiate and enforce these agreements. Reforestation would be technically difficult and expensive in pastures used more than a few years, and would make it even more difficult to accommodate the herd through intensification of the diminished pasture. Compensation – paying for preservation of off-site, threatened forests – is theoretically attractive but the regulatory mechanism for doing this has not yet been set up.

Note that the easiest way to find suppliers in compliance with land use regulation would be to recruit them in newly deforested areas, where remaining forest cover is sufficient to satisfy regulations. This strategy would result in increased, but legal, deforestation.

**The environmental impact statement failed completely to consider impacts of the Bahia plant expansion on the Atlantic Forest, one of the world's most important biodiversity hotspots.**

According to the IFC webpage "Summary of Proposed Investment" the investment will also increase capacity at a slaughterhouse in Itapetinga, Bahia. This is at the edge of the Atlantic Forest of South Bahia, considered one of the richest and most threatened biodiversity sites in the world. The area around Itapetinga contains some forest remnants and was characterized as a priority area (within a priority region) by a conservation workshop held in mid-2006. Given the prominence of this region (which is inside or near the Rain Forest Trust's Ecological Corridors project), the ESIA should at least have screened to see whether there was any possibility of an impact. But the IFC webpage "Environmental and Social Review Summary" does not mention the Bahia site; the ESIA mentions its existence but I can find no mention of the plant expansion and its impact.

**A positive outcome of the Bertin project requires, at a minimum, vigorous, coordinated implementation with the Para Integrated Rural Development project and strong local ownership of forest regulation enforcement**

Bertin's strategy for mitigating environmental impacts involves tracing the chain of custody of its cattle supply, and certifying the social and environmental performance of its suppliers. Further, it has to make sure that its suppliers sufficiently intensify production to avoid pressure for net increase in pastures.

Achieving these goals requires credible state certification of land title and of the 'terms of conduct adjustment' by which land owners would come into compliance with land use regulations. It requires effective state enforcement of those regulations. It requires setting up and enforcing regulations for permitting compensation for past deforestation, and state enforcement of conservation zoning.

These capabilities are scheduled to be addressed by the just-approved Para Integrated Rural Development project. Because zoning has been unpopular in the past, the Bertin project could be seen as a 'carrot' for implementation these regulatory reforms. But past experience has shown that regulatory reforms often get more slowly implemented (or not at all) relative to productive investments. It would have been desirable to phase in the regulatory system first. Keeping the regulatory innovations on track is absolutely essential to mitigating the substantial risks of the Bertin project. Federal involvement (IBAMA) is also necessary because of legal ambiguity concerning responsibility for enforcement of land and forest regulations.

**Ongoing, transparent, monitoring is essential for project management and accountability**

If the project goes forward, near-real-time, transparent monitoring will be essential to detect and correct failures of the mitigation system, and to provide public credibility that the investment had beneficial effects. Monitoring would include Bertin's adherence to commitments on supplier compliance with land titling and labor regulations. In addition, it is essential to get baseline data on cattle stocking densities and land cover, and to track these over time, in order to assure that the Bertin-induced herd expansion is accommodated via intensification rather than extensification.

## **Conclusion**

The project has significant downside and upside potential. In the best scenario, it could help to catalyze demand for effective environmental regulation, reconciling conservation with intensified and sustainable agriculture. In the worst scenario, it could induce significant Amazonian deforestation and threaten important fragments of the Atlantic Forest biodiversity hotspot. Past experience suggests that achieving the favorable scenario is by no means assured, and will require further clarification of Bertin's deforestation mitigation strategy, strong management attention, political will and ownership on the part of Para state counterparts, and a strong, transparent monitoring system.

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