

INDEPENDENT EVALUATION OF LAND ISSUES in
TCCC's baseline study: *Child Labor, Forced Labor
and Land Use in Brazil's Sugar Industry* and in
PepsiCo's summary report: *The Social,
Environmental and Human Rights Aspects of
PepsiCo's Sugarcane Supply Chain in Brazil Based
on Third Party Audits*

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INTRODUCTION

This report provides an independent evaluation of land issues discussed in the third party baseline study and audits contracted respectively by The Coca-Cola Company (TCCC) and PepsiCo in 2014, and was commissioned by Oxfam for its 'Behind the Brands' campaign. It is based exclusively on information available in the public domain, as of 31 May 2016. Drawing on an earlier and similar assessment of gender issues (Chan, 2014), the independent consultant elaborated a common assessment framework against which both TCCC's study and the PepsiCo audits have been evaluated. TCCC and PepsiCo are global players in the food and beverage industry and major users of sugar from sugarcane, although neither has agricultural investments for the production of sugar. Nevertheless, both companies have committed to international conventions on land rights and have assumed responsibility for ensuring that their suppliers respect these rights. Brazil, for its part, is the world's largest producer and trader in sugar from sugarcane, which makes an assessment of the land-related activities of these companies in Brazil particularly relevant. For TCCC, this study follows on studies conducted in Guatemala, Colombia, El Salvador and Honduras in 2014–15, with further studies being conducted in Mexico and India in 2015 and 2016. By 2020, TCCC plans to conduct a total of 28 baseline studies/assessments. PepsiCo has planned additional assessments in Mexico, Thailand and the Philippines, to be completed by the end of 2016.

TCCC has committed itself to zero tolerance for land grabbing and to the principle of Free, Prior and Informed Consent (FPIC) in land acquisitions. It has incorporated respect for the land rights of indigenous communities and traditional peoples into its Sustainable Agriculture Guiding Principles and its Supplier Guiding Principles. On these issues it has adopted the International Finance Corporation (IFC)'s Performance Standards. It has committed to the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) and advocates for their endorsement and implementation. It has also adhered to the Principles for Responsible Agricultural Investment (RAI).

PepsiCo, similarly, has committed itself to zero tolerance for land grabs and has adopted the FPIC principle. Like TCCC, it has adhered to the VGGT and is incorporating these principles into its Sustainable Farming Initiative and into its Suppliers' Code of Conduct, which follows the IFC Performance Standards. In countries where adequate land protection measures in line with these principles are not in place, PepsiCo is committed to advocating for the adoption of IFC and UNFAO guidelines.

With the zoning policies put in place for sugar production in Brazil and the enactment of the Forest Code, environmental issues have become an important component of land-related issues and conflicts. Sugarcane should not be planted in the Amazon region, the Pantanal wetlands or in regions of rich original biodiversity. Areas of permanent preservation (hilltops and the banks of rivers) must be left uncultivated and the appropriate forest reserve maintained within each agricultural property. Environmental risk assessments may be required for investments. Guidance via international conventions is not so precise in the case of environmental land issues, although both companies are committed to adhering to relevant national legislation. It is less clear in this case how principles should be translated into implementable measures. As will be discussed below, both companies have sourced sugar from lands subject to environmental conflicts in Brazil.

Both the study of land issues undertaken for TCCC and the audit for PepsiCo were combined with other human rights and environmental issues. We have suggested above that environmental questions are directly relevant to an analysis of land issues. Labor issues also have implications for land in Brazil, to the extent that forced labor and child labor infringements are punishable with the expropriation of farms where these practices are identified and their incorporation into land reform programs. Given the combination of different issues covered by

the study and the audit, land was not their exclusive focus of attention. Our report, however, focuses only on the land elements of these companies' efforts.

This report is composed of three sections in addition to this introduction and the conclusion. The first section presents the assessment framework against which both the TCCC study and the PepsiCo audit are evaluated, and explains the different components of the assessment framework, together with the scoring system adopted. The second section reviews the TCCC study in the light of this framework and includes recommendations arising from this assessment. The third section repeats this exercise for the PepsiCo audit. The conclusions to both these sections include a discussion on the need or otherwise for a revision of the study/audit, together with specific recommendations to the companies arising from the study/audit. General conclusions complete the report.

The ability to conduct an evaluation of this nature depends on the level of transparency with which the study and the audits are conducted. The two most basic requirements are the provision of information on the research team carrying out the research and the publication of the full report, which should be freely available for consultation.

1 COMPANY EVALUATION FRAMEWORK

Drawing heavily on the framework elaborated by Chan (2014) to evaluate the assessments carried out on leading companies in the cocoa sector in Côte d'Ivoire, the present framework for analyzing TCCC and PepsiCo is organized around three basic themes, each judged to be equally important: the competences of the research team and the adequacy of the methodology and its application; the degree to which all the relevant land issues affecting the sugarcane sector and the companies are discussed and evaluated; and the pertinence of the conclusions and recommendations which arise from them. For each of the themes, criteria are identified together with indicators, which measure the degree to which the criteria have been met. A scoring system also used by Chan (2014) and based on Oxfam's Behind the Brands methodology has been adopted for the evaluation.

For the first theme, dealing with the quality of the research undertaken, four criteria were selected, relating to the research team, the scope of data collection and methods used, the range of stakeholders contacted and the representativeness of the research sample. For each criterion, a number of indicators were chosen which would enable these criteria to be more precisely evaluated. It was considered that each of the four criteria should have equal weight, although different scores were attributed to the various indicators. Table 1 specifies the criteria, the indicators and the maximum scores against which the research team and the design and implementation of the research are evaluated.

Table 1: Evaluation framework

1.1–1.4: Quality of research team, design and implementation

ID	CRITERION/INDICATOR – DESCRIPTION	Maximum score
1.1	Experience, skills and qualities of research team	25.0
I-1.1.1	Independence from company concerned	5.0
I-1.1.2	Expertise in land issues and current international initiatives	7.5
I-1.1.3	Knowledge of sugar sector and associated land issues	2.5
I-1.1.4	Prior engagement with relevant stakeholders	2.5
I-1.1.5	Field experience	7.5
1.2	Primary and secondary data collection and methods used	25.0
I-1.2.1	Inclusion of comprehensive literature review	5.0
I-1.2.2	Collection of appropriate quantitative data	7.5
I-1.2.3	Review of NGO and journalistic material	7.5
I-1.2.4	Interviews – content and conduct	5.0
1.3	Range of stakeholders consulted	25.0
I-1.3.1	Government bodies involved in land regulation and disputes	2.5
I-1.3.2	Social movements and farmers' organizations	7.5
I-1.3.3	Sugar sector organizations (plus certification bodies)	5.0
I-1.3.4	Company representatives	2.5
I-1.3.5	Local and regional bodies	7.5
1.4	Representativeness of assessment	25.0
I-1.4.1	Choice of mills – volume, type of contract	7.5
I-1.4.2	Choice by type of sugarcane supply	7.5
I-1.4.3	Regional inclusiveness – areas of new investment, conflicts	10.0

The second theme, which deals with the substantive land-related issues of the study/audit, is divided into five criteria, dealing respectively with underlying land issues in Brazil, the sugarcane sector in Brazil, the company's presence in the sugarcane sector, the land and supply arrangements of the contracted mills and the relations between the contracted mills and the companies. Here again we measure the criteria against individualized indicators, each of which are given specific weights. In contrast to the first theme, in this section we also give different weights to the five criteria, prioritizing the degree to which the supply chain arrangements in relation to land are adequately captured. Table 2 below presents the criteria, indicators and the relative scores for this second theme.

Table 2: Evaluation framework

2.1–2.5: Land assessment – coverage of relevant land issues

ID	CRITERION/INDICATOR – DESCRIPTION	Maximum score
2.1	Underlying issues involving agricultural land in Brazil	10
1-2.1.1	Brazilian land tenure – history and current situation	1
1-2.1.2	Brazilian land legislation and registration	2
1-2.1.3	The nature of land conflicts in Brazil	3
1-2.1.4	The land grabbing phenomenon and impacts in Brazil	2
1-2.1.5	The interface of land and environment	2
2.2	Basic features of Brazil's sugarcane sector	10
1-2.2.1	Historical and geographical dynamics	1
1-2.2.2	Industry agriculture relations in sugarcane	1
1-2.2.3	Certification in the sugarcane sector	2
1-2.2.4	Current drivers of expansion in the sugarcane sector	3
1-2.2.5	Regulation and measures affecting sugarcane land use	3
2.3	Company's presence in the Brazilian sugarcane sector	20
1-2.3.1	Mapping of company's sugar supply strategies	2
1-2.3.2	Company's public commitments on land issues	3
1-2.3.3	Studies and news coverage of company's activities in sector	5
1-2.3.4	Evidence of supplier involvement in land conflicts	5
1-2.3.5	Evidence of land conflicts in supplier regions	5
2.4	Contracted mills' land and sugarcane supply arrangements	30
1-2.4.1	Mills' land tenure conditions, historical record	6
1-2.4.2	Land tenure situation of sugarcane suppliers	6
1-2.4.3	Plans for expansion and land implications	6
1-2.4.4	Examination of local land registry data	6
1-2.4.5	Community testimony on land issues	6
2.5	Relations between contracted mills and company	30
1-2.5.1	Due diligence on land-related human rights issues	6
1-2.5.2	Formal inclusion or not of land tenure issues in contract	6
1-2.5.3	Inclusion of company's international commitments – VGGT	6
1-2.5.4	Assumption of responsibility for sub-contractees' land status	6
1-2.5.5	Level of monitoring of contractee land issues by company	6

The third section of the framework evaluates the conclusions and recommendations of the study/audit. Here we are concerned, respectively, with the criterion for the adequacy and appropriateness of the conclusions in relation to the substantive analyses of land-related issues developed in the study and the audit, and with the degree to which they allow for the elaboration of recommendations that can be translated into measures to be adopted by the companies. Once again, we elaborate indicators to measure the two criteria, and apply greater weight to the degree to which the study/audit allows for the definition of measures to be adopted by the companies. The criteria, indicators and respective scores are presented in Table 3.

Table 3: Evaluation framework

3.1–3.2: Conclusions, recommendations

ID	CRITERION/INDICATOR – DESCRIPTION	Maximum score
3.1	Adequacy and appropriateness	40
1.3.1.1	Consistency with evaluation	8
1.3.1.2	Company’s positions and implementation	8
1.3.1.3	Supply chain implementation	8
1.3.1.4	Stakeholder involvement	8
1.3.1.5	Relevant local community accompaniment	8
	Inputs for company action plan	60
1.3.2.1	Measures for company adoption	15
1.3.2.2	Measures for supply chain implementation	15
1.3.2.3	Measures for stakeholder involvement	15
1.3.2.4	Measures for local community accompaniment	15

In our conclusions to each evaluation, we include a discussion of the need or otherwise for revisions of the study/audit undertaken and measures to be taken on the basis of their results. To facilitate this discussion, we present indicators which allow for a more precise specification of the gaps and limitations and which can serve to revise the current and inform future studies/assessments/audits.

2 EVALUATION OF THE COCA-COLA BASELINE STUDY

In applying the common assessment framework to TCCC baseline study, we review each of the three basic components – the quality of the research, the treatment of the substantive land-related issues, and the conclusions and recommendations arising from the study – in the light of the criteria, the indicators and the scores attributed to each.

2.1 QUALITY OF THE RESEARCH TEAM AND METHODOLOGY

The Coca-Cola study was carried out by Arche Advisors, and the three authors responsible are named and their email addresses are provided. This firm has long experience in corporate social responsibility consultancy and auditing, including on labor and land issues, and at least one of the authors is a Portuguese speaker and familiar with Brazil. Between them, the authors have considerable professional experience in supply chain analysis, with a particular focus on labor conditions. It should be remembered that the study contracted by Coca-Cola had as its terms of reference a combined analysis of *Child Labor, Forced Labor and Land Use in Brazil's Sugar Industry*, the title of the Arche report. The brief biographies of the authors on the Arche website, or accessed via LinkedIn in the case of consultants contracted specifically for this study, do not suggest any prior expertise on the sugar sector or contact with the specific stakeholders involved in TCCC's sugar supply chain in Brazil. Nevertheless, they have extensive experience with transnational companies, NGOs, farming and farmer organizations and the issues of corporate social responsibility as applied to supply chain analysis and auditing. In relation to the criterion of the experience, skills and qualities of the research team, the Arche team is clearly well equipped, although not specialists on the sugar sector. Local field experts (with expertise including 'sugarcane ethanol supply chain traceability') are referred to in the study's item on the research team, and there is also mention of a Brazilian researcher contracted to conduct the desk research. We are not provided with information, however, to judge the competence of this component of the research team.

Table 4: 1.1

ID	CRITERION/INDICATOR – DESCRIPTION	Maximum score	TCCC Score
1.1	Experience, skills and qualities of research team	25.0	21.75
I-1.1.1	Independence from company concerned	5.0	5.00
I-1.1.2	Expertise in land issues and current international initiatives	7.5	5.00
I-1.1.3	Knowledge of sugar sector and associated land issues	2.5	1.75
I-1.1.4	Prior engagement with relevant stakeholders	2.5	2.50
I-1.1.5	Field experience	7.5	7.50

The second criterion deals with the broad issue of primary and secondary data collection, its scope and the methods adopted. Here there is a marked contrast between the remarkable scope of the fieldwork and the summary and unsystematic presentation of secondary data. The sugar sector is one of the most researched in Brazil and there is a wealth of organized data available, particularly on its evolving geography. Especially weak in the report is the discussion of sugarcane expansion, both its drivers and the implications for land. It is not global but domestic demand for agrofuels and global demand for sugar that will be the main drivers of expansion in the coming period. Studies (Milanez et al., 2015) have shown that the degree of horizontal expansion very much depends on the evolution of different technological options

affecting productivity, but that this will tend to occur on lands in the Cerrados region, where long-term land conflicts with traditional and indigenous communities are common, as in the state of Mato Grosso do Sul.

The report provides an overview of the legal framework governing land tenure in Brazil, data on the profile of land distribution and an account of public initiatives to promote land rights. It is not clear, however, how these inform the fieldwork or what inputs they offer for identifying measures that should be adopted by TCCC in its supply chain. It is true that the Gini index of land concentration has hardly altered over the past 20 years (0.820 according to INCRA's calculations for 2010), but in this same period some 20 million hectares have been incorporated into the agrarian reform sector. On the other hand, an equal number of hectares have been incorporated on the base of large and huge landholdings on the Cerrados frontier. While the Gini index does not capture this, extraordinary transformations in land tenure have occurred in this period, informing the nature and future dynamics of land conflicts.

Although the report correctly calls attention to the superposition of legal and administrative functions regarding land registry, no conclusions are drawn as to the type of documentation that is relevant for monitoring land tenure rights, or to the procedures that would constitute due diligence (contact with relevant bodies in the case of indigenous and traditional land rights).

A similar qualification could be leveled at the report's use of grey literature and journalistic material. Here again a number of key references are drawn upon, such as Repórter Brasil, but there is no systematic treatment of this literature and key sources are omitted, such as the Pastoral Land Commission (CPT), which produces a very complete annual report on land conflicts. A full investigation of these publications and websites is crucial, since they are the primary source for identifying land conflicts at the level of individual firms and farms and for gauging the temperature of political and social movements in different regions of the country. These are particularly important sources of information and analysis of the Brazilian sugarcane sector, which has been subject to so much transformation in such a short space of time, including rapid geographical expansion and mergers and acquisitions, followed by crises and widespread plant closures. In consequence, the report does not establish a rounded benchmark of the sugarcane sector's current positions on land-related issues, among which environmental issues are becoming increasingly important with the passing of the law establishing the Forest Code in 2012.

The report makes it clear that the study by TCCC of the land component of its supply chains was consequent on the company's public commitment to 'zero tolerance' in relation to land grabbing in 2013. The land components of the studies carried out in Guatemala and Colombia were the subject of multi-stakeholder workshops that provided input for the elaboration of draft documents in 2014. The land assessment methodology used in these studies was then revised for the elaboration of the Brazil report, and is referred to as the TCCC's 'revised land assessment methodology'. The goals of the land assessment are clearly spelled out:

- *Flag significant diagnostic findings for use in shaping future supplier land-related conducts.*
- *Permit TCCC to make suggestions or provide concrete guidance to sugar suppliers about how they can acquire land in a transparent and socially responsible way.*
- *Identify the types of land-related grievances (if any) that may have arisen in response to past land acquisition practices, and that may arise during future land acquisitions.*
- *Be used to inform the shape and implementation of future land-related grievance identification and resolution mechanisms that can be put in place when sugar supply chain actors acquire land or otherwise affect land access, use and tenure security.*

This revised methodology includes a series of questionnaires designed to obtain land-related information from different stakeholders. Unfortunately, these questionnaires are not available in the annexes to the report, and therefore the quality of the interviews can only be indirectly evaluated. In its discussions of the limitations of the study, the report singles out the fact that

access to farms and farm workers was via the mills, which gives rise to an obvious danger of bias. The report argues, however, that the triangulation of information enabled by the methodology tended to minimize this problem. Contact with other stakeholders in the locality certainly opens the investigation to other opinions, but these can hardly substitute for independent access to farm workers – although we recognize the difficulties involved.

TABLE 5: 1.2

ID	CRITERION/INDICATOR	Maximum score	TCCC Score
1.2	Primary and secondary data collection and methods used	25.0	10.00
I-1.2.1	Inclusion of comprehensive literature review	5.0	2.50
I-1.2.2	Collection of appropriate quantitative data	7.5	2.50
I-1.2.3	Review of NGO and journalistic material	7.5	2.50
I-1.2.4	Interviews – content and conduct	5.0	2.50

The third criterion in this section relates to the range of stakeholders consulted; the indicators for this are government bodies, social movements and farmers’ organizations, sugar sector organizations and local and regional bodies. The report confirms that an impressive range of fieldwork was conducted with many of the relevant stakeholders. Some 14 national organizations were interviewed, including government bodies, sector organizations, trade unions, certification bodies and leading NGOs. The full list is included in Appendix A of the report. As many as 97 members of the local communities were also interviewed, including trade unions, producer associations, community organizations, public prosecutors, Church bodies, NGOs and the local notaries. Here again the full list is included, in Appendix B of the report. There was an explicit concern to identify gender issues, although these seem to be related more to labor practices than to land. Engagement with TCCC is evident in the development of the land assessment methodology and also in the feedback to the draft report provided by members of TCCC and other external stakeholders.

TABLE 6: 1.3

ID	CRITERION/INDICATOR	Maximum score	TCCC Score
1.3	Range of stakeholders consulted	25.0	25.0
I-1.3.1	Government bodies involved in land regulation and disputes	2.5	2.5
I-1.3.2	Social movements and farmers’ organizations	7.5	7.5
I-1.3.3	Sugar sector organizations (plus certification bodies)	2.5	2.5
I-1.3.4.	Company representatives	5.0	5.0
I-1.3.5	Local and regional bodies	7.5	7.5

The fourth criterion for evaluating the formal qualities of the research concerns the representativeness of the fieldwork undertaken. Here again the range of the fieldwork is impressive, and the care taken to select mills by region, volume and type of supply is evident. TCCC is supplied by 28 sugar mills, and 21 of these were visited, involving eight person days per visit. These 21 mills reported sourcing sugarcane from around 8,000 farms, either owned, leased or independent. Some 120 of these farms were visited, stratified by size and type of relationship to the mill (owned, leased, independent), and a total of 929 agricultural workers were interviewed.

TABLE 7: 1.4

ID	CRITERION/INDICATOR	Maximum score	TCCC Score
1.4	Representativeness of assessment	25.0	22.5
I-1.4.1	Choice of mills – volume, type of contract	7.5	7.5
I-1.4.2	Choice by type of sugarcane supply	7.5	7.5
I-1.4.3	Regional inclusiveness – areas of new investment, conflicts	10.0	7.5

In concluding this section, the report scores well with regard to the quality of the contracted firm and its team. It is less successful, however, in the picture that emerges from the analysis of official data and different types of secondary literature. The result is an unsystematic discussion of land structure, legal framework and policies, which at most serves as a disconnected background to the fieldwork. We get no feel of the current dynamic of the sector or the baseline of the sector's position on land-related issues, which should serve as a benchmark for the analysis of TCCC's supply chain policy and should inform the content of the fieldwork. The range and representativeness of the fieldwork, on the other hand, is quite satisfactory, although it would have been useful to include the questionnaires in the appendices. We would suggest, however, that additional fieldwork should have been carried out in regions where conflicts exist, particularly those which involve traditional and indigenous community rights, since these (as the report correctly notes) have become the predominant form of conflict as sugarcane advances into new frontier areas in Brazil. This will be a factor that the company must increasingly take into account, as it expands its own demand for sugar or as its suppliers expand their operations.

2.2 ASSESSMENT OF THE SUBSTANTIVE LAND-RELATED ISSUES OF THE TCCC STUDY

This section evaluates the substantive land-related aspects of the study on the basis of five criteria, each broken down into five indicators with their respective scores. Unlike the above analysis of the quality of the research team and the design and implementation of the research, we have attributed different weights to each criterion in this section.

The discussion of Brazil's land tenure structure is quite weak and repetitive. It simply reaffirms on different occasions in the report that the Gini index shows very high levels of land concentration, relying on now outdated census information from 2006. There is no systematic discussion of recent trends which are affecting patterns of land occupation or the nature of land conflicts. Nevertheless, an important trend is mentioned – the shift from a dynamic of land conflicts dominated by the landless movements to one which pits traditional and indigenous communities against new investors or forms of investments. Here a discussion of the relevance of the phenomenon of land grabbing would have been appropriate. There is a brief presentation of the various initiatives relating to land redistribution in Brazil, but no lessons are drawn.

The Brazilian legal framework on land tenure is discussed in more detail, but here again it is largely descriptive. The main problems are identified – the division of responsibilities between federal, state and municipal levels and the different motives for the collection of rural records at federal and municipal levels. There is also a useful emphasis on the confused situations created by the recognition of unchallenged possession (*usocapião*) and the more recent recognition of traditional communities (*quilombolas*), whose origins lie in communities formed by fleeing slaves. Recognition of the latter communities has increased dramatically over the past decade and involves very large areas of land (4.4 million acres, according to the report). In addition to focusing on the difficulty of validating land titles, it would have been important to have identified the entitlement documents that are recognized in official transactions, particularly those involving registration, transfers of ownership, credit operations and tax declarations. A

discussion of the appropriate procedures to be adopted for the identification of land rights in the case of *quilombolas* should also have been included.

The degree to which the environment has become more important in Brazil when discussing land issues is recognized at two levels. The first of these is the legal protection now extended to conservation areas, areas of permanent protection and legal reserves, which, according to the report, now account for as much as 18 percent of Brazil's total land area. Equally important is the implementation of the Forest Code. As the report notes, this has created an important tool, an electronic GPS-supported property registration system, which will be increasingly required for all access to public funding and will be a key device for monitoring a supplier's land use practices.

Although some important issues are identified, the report does not score well on its coverage of the underlying issues involving agricultural land in Brazil.

TABLE 8: 2.1

ID	CRITERION/INDICATOR	Maximum score	TCCC Score
2.1	Underlying issues involving agricultural land in Brazil	10	4.5
1-2.1.1	Brazilian land tenure – history and current situation	1	0.5
1-2.1.2	Brazilian land legislation and registration	2	1
1-2.1.3	The nature of land conflicts in Brazil	3	1
1-2.1.4	The land grabbing phenomenon and impacts in Brazil	2	1
1-2.1.5	The interface of land and environment	2	1

Analysis of the Brazilian sugarcane sector reveals similar weaknesses. The one page which provides an overview of the sugarcane sector in no way aids the contextualization of TCCC's presence in the sector or the questions to be explored in the fieldwork. Data are presented without analysis, as in the information that some 430 mills are supplied by 70,000 farms covering an area of 9.7 million hectares. This would suggest a quite decentralized supply system relying on small to medium-sized farms. Later, without comment, we are informed that in the South-Central region 63 percent of sugarcane is produced by the mills on owned or leased land, which provides a very different picture.

The notion of the South-Central region is problematic since it conflates long incorporated lands in the state of São Paulo with recent expansions into neighboring states, where contested lands are more common and of a different nature, even if they are occupied by livestock or crops. The discussion of the scale and current expansion of the sugarcane sector is confusing, suggesting on the one hand that it is of little significance ('a little over 1% of the country's total area', p.11), and on the other that in one year expansion in the South-Central region was equivalent to 8.3 percent of the total production area of the region. Global demand for agrofuels is argued to be responsible for sugarcane expansion, although Brazil's participation in this export market has declined in relative terms over this period. Domestic demand for ethanol and global demand for sugar are in fact the two main drivers.

Just as important as the expansion in sugarcane production has been the transformation in the governance and regulation of the sugar industry and its supply chain in the recent period, which was largely motivated by the expectation and demands of a global ethanol market but also by the more determined actions of the Brazilian public prosecution system and civil society mobilization. This has led to the adoption of an agro-ecological zoning policy in 2009 excluding sugarcane production from the Amazon and Pantanal regions and also from areas of rich biodiversity. The sector has also taken important steps to adapt its production systems to the demands of low-carbon agriculture, including the issue of indirect land use impacts of sugarcane expansion. It has also led to the adoption of internationally recognized sustainability certification systems by the leading mills, most of which have opted for the Bonsucro certificate. A more systematic analysis of the positions adopted by leading mills and organizations

representative of the sector would have been important to establish a benchmark against which the measures adopted by TCCC could be evaluated.

Here again, the report fails to score well on the lessons that can be drawn from an analysis of the positions adopted by the sector on land-related issues.

TABLE 9: 2.2

ID	CRITERION/INDICATOR	Maximum score	TCCC Score
2.2	Basic features of Brazil's sugarcane sector	10	3.5
1-2.2.1	Historical and geographical dynamics	1	0.5
1-2.2.2	Industry agriculture relations in sugarcane	1	0.5
1-2.2.3	Certification in the sugarcane sector	2	1
1-2.2.4	Current drivers of expansion in the sugarcane sector	3	1
1-2.2.5	Regulation and measures affecting sugarcane land use	3	0.5

Greater weight is given to the analysis of TCCC's presence in the sugarcane sector, which is the third criterion adopted for evaluating the degree to which relevant land issues are covered in the report. The indicators for measuring this criterion are also ascribed different weights, with the highest scores reserved for analysis related to news coverage of the company and to the evidence of land conflicts.

There is no explicit mapping of the company's supply strategy and therefore no way of appreciating the priorities adopted by TCCC in its choice of suppliers. Nor are we given any idea of TCCC's projected demand for sugar over the coming period. At various points in the report the public commitments of the company on land issues are mentioned – e.g. the adoption of zero tolerance on land grabbing, which it has asked its suppliers also to take on board, and the commitment to Free Prior and Informed Consent (FPIC) in the case of land acquisitions.

Desk research coverage of the company's activities in the sector is mentioned, with discussions of specific cases where its suppliers have been associated with land conflicts. The transnational trader Bunge, one of TCCC's suppliers, is accused of operating illegally on indigenous land (Jatyvary of the Guarani-Kaiowá). Cosan (Raizen), another leading firm and TCCC supplier, is accused of being involved in a land grabbing operation with TIAA-CREF, although the location is not provided. A third conflict related to the Trapiche mill in the Sirinhaém estuary, an area of permanent preservation in the state of Pernambuco – which was a supplier to both TCCC and PepsiCo – is the subject of a detailed analysis that is also based on direct fieldwork by Arche. There is no mention, however, of Coca-Cola's supplier in Amazonas, Agropecuária Jayoro (Agropecuária Jayoro, 2016; Portal Terra das Cachoeiras, 2015 <https://www.novacana.com/usinas-brasil/norte/amazonas/usina-jayoro/>). Given the recent zoning policy, the commitment of UNICA not to invest in sugarcane in the Amazon and the sensitivity of international opinion on this issue, a full review of this investment, which was put in place well before these recent developments, would be advisable. Even though Agropecuária Jayoro is not a supplier to TCCC's bottling system, any conflicts associated with this investment would represent a risk to TCCC's brand reputation.

The fieldwork, which involved visiting 21 of the 28 mills and 120 farms supplying Coca-Cola, did not identify any land conflicts in the supply chain. On the other hand, workers interviewed mentioned three cases of land squatting or conflicts in the states of São Paulo and Pernambuco in lands near to those supplying mills contracted by TCCC. Given that nine of the mills had recently been involved in land expansions and a further seven had land acquisition plans, the existence of land conflicts in these localities should be an issue of concern for TCCC.

Although the report comes out better on this criterion, there continues to be a lack of systematic analysis and organization of the data, which makes it difficult to reach conclusions useful for the

eventual adoption of an action plan. In addition, the information based on desk research is mixed with the fieldwork findings, suggesting that the latter was not informed by this research.

TABLE 10: 2.3

ID	CRITERION/INDICATOR	Maximum score	TCCC Score
2.3	TCCC's presence in the Brazilian sugarcane sector	20	11.5
1-2.3.1	Mapping of company's sugar supply strategies	2	0.5
1-2.3.2	TCCC's public commitments on land issues	3	3.0
1-2.3.3	Studies and news coverage of company's activities in the sector	5	3.0
1-2.3.4	Evidence of supplier involvement in land conflicts	5	3.0
1-2.3.5	Evidence of land conflicts in supplier regions	5	2.0

We have drawn attention to the scope of the fieldwork, which covered 75 percent of TCCC's supplier mills and 120 farms. Although the choice of farms to be visited seems to have been largely influenced by the mills, efforts were made to cover the different types of supplier relation (own production, leasing and independent suppliers) and different farm sizes. Given this coverage, due weight must be given to the following statement in the report: 'During field visits, workers and mill managers did not report any instances of land conflicts in lands related to the 21 mills and 120 cane farms assessed by the study' (p.28).

This view is reinforced in the final paragraph of the study's section on 'Land Conflict Findings', where the respondents are stakeholders, presumably from the local communities. 'Stakeholders, when asked about the mill and farmland used by 20 of the 21 assessed mills that were part of the study, provided no indication that this land was obtained inappropriately, illegally or without the consent of the sellers and lessors' (p.29).

The fieldwork also included an examination of land records, which, the report concludes, 'appeared, on their face, to be generally complete, accurate, and in conformance with the laws and regulations governing transactions in land' (p.28).

The principal conclusion of the 'Land Conflict Findings' section points to the inexistence of 'policies in place on land rights related to land acquisition, even though TCCC has recently adopted a policy stance on the principles of Free, Prior, and Informed Consent, and has asked suppliers to do the same' (p.28). This issue is central, given the importance of recent acquisitions (seven) and planned acquisitions (nine) by the 21 mills visited.

A particularly important paragraph in this section states that '13 organizations reported that land conflicts were present in their region, which include land squatting by the MST. The paragraph then reports a very significant observation by these stakeholders, namely that squatting often accompanies the closing down of mills. The occupied lands are not accepted in the negotiation of debts, and conflicts often result between owners and squatters. This was particularly the case in the states of Pernambuco and Alagoas. This whole issue calls out for more systematic treatment in light of the crisis which currently affects many mills.

All of the items identified as indicators to measure the land and sugarcane supply arrangements of the contracted mills were explored in the fieldwork carried out. The annex attests to the large number of interviews conducted and the identification of interviewees provides an important degree of transparency. The central problem, however, is the lack of any quantification of the data collected or mapping of the supply systems. How many stakeholders were interviewed in the different localities, and who were they? Where exactly were the conflicts in relation to the locations of the contracted mills? Such a mapping would seem to be particularly important given the correlation between a tendency for expansion and land acquisition on the part of contracted

mills at a time when structural factors are leading to mill closures and the consequent potential for land conflicts.

TABLE 11: 2.4

ID	CRITERION/INDICATOR	Maximum score	TCCC Score
2.4	Contracted mills' land and sugarcane supply arrangements	30	15
1-2.4.1	Mills' land tenure conditions, historical record	6	3
1-2.4.2	Land tenure situation of sugarcane suppliers	6	3
1-2.4.3	Plans for expansion and land implications	6	3
1-2.4.4	Examination of local land registry data	6	3
1-2.4.5	Community testimony on land issues	6	3

The final item in this section of the study focuses on the relations between the company and the contracted mills in relation to due diligence prior to contracting; the inclusion or not of land tenure issues in the contracts; whether international commitments such as the VGGT and FPIC are also included; the extent to which TCCC assumes responsibility for the land situation of its sub-contractees; and the level of monitoring by the company of the contracted mills and their supply arrangements.

There is no systematic treatment of these questions in the report. We have already referred to the company's efforts to get contracted mills to adopt the principles of FPIC in their acquisition policies. We have also seen that TCCC has adopted a policy of zero tolerance for land grabbing and has carried out investigations in the case of accusations of this (e.g. Bunge, Cosan, Trapiche). According to the report, TCCC has also urged that contracted mills adopt FPIC in their acquisition policies.

TABLE 12: 2.5

ID	CRITERION/INDICATOR	Maximum score	TCCC Score
2.5	Relations between contracted mills and company	30	13
1-2.5.1	Due diligence on land-related human rights issues	6	2
1-2.5.2	Formal inclusion or not of land tenure issues in contract	6	2
1-2.5.3	Inclusion of company's international commitments – VGGT	6	3
1-2.5.4	Assumption of responsibility for sub-contractees' land status	6	3
1-2.5.5	Level of monitoring of contractee land issues by company	6	3

2.3 THE BASELINE REPORT'S CONCLUSIONS AND RECOMMENDATIONS

Discussion of land issues in the report's conclusions, which also include recommendations to the company, is limited to one sentence in the first paragraph and a short final paragraph of three sentences. The specific conclusions – that the number of land conflicts is expected to decrease as a result of the adoption of the rural cadastre (register) within the terms of the Forest Code; that although expansion is generally into land already productively occupied, squatting and land disputes are still present; that none of the mills has policies in place on land expansion – are coherent with the analysis conducted in the main body of the report. The one recommendation – that TCCC needs to promote the adoption of its guidelines around land use more broadly – can be endorsed, but hardly provides clear inputs for future company action.

TABLE 13: 3.1

ID	CRITERION/INDICATOR	Maximum score	TCCC Score
3.1	Adequacy and appropriateness	40	16
1.3.1.1	Consistency with evaluation	8	6
1.3.1.2	Company's positions and implementation	8	4
1.3.1.3	Supply chain implementation	8	2
1.3.1.4	Stakeholder involvement	8	2
1.3.1.5	Relevant local community accompaniment	8	2

TABLE 14: 3.2

ID	CRITERION/INDICATOR	Maximum score	TCCC Score
3.2	Inputs for TCCC's action plan	60	5
1.3.2.1	Measures for the company adoption	15	5
1.3.2.2	Measures for supply chain implementation	15	0
1.3.2.3	Measures for stakeholder involvement	15	0
1.3.2.4	Measures for local community accompaniment	15	0

2.4 PROPOSALS ARISING FROM EVALUATION OF TCCC BASELINE STUDY

A good deal of information was provided on the researchers and the research methodology. The scale of the research, however, clearly required the three leading researchers to set up a team at least for the fieldwork. Given that the interviews were based on open-ended questionnaires, which require a degree of expertise and familiarity with the issues, it would be useful in future to include details on the full team responsible for the research. In addition, the questionnaires should be publicly available.

Important conclusions were reached by the baseline study which point to measures that TCCC could well take on board. A good number of mills had been involved in or were planning to be involved in land acquisitions and yet there were no policies in place to orient these mills in land acquisition procedures. The formalization of due diligence procedures with the mills would be an important measure here.

While no conflicts were identified in the mills that were investigated, the study did identify conflicts in the regions where these mills operated. In addition, two important structural factors influencing current and likely future conflicts were singled out – occupations of mill lands, which have paralyzed their activities, and expansion into lands where traditional and indigenous rights are under threat. Both these factors need to be monitored and the institutional mechanisms governing the latter, in addition, require mapping.

The evaluation identified a generalized lack of systematic presentation in the baseline study, whether concerning the treatment of secondary data or discussion of the results arising from the fieldwork. In the first case, it would seem that in future studies the terms of reference need to be more clearly agreed. In the case of the fieldwork, there is a stark contrast between the extent of the investigation and the fragmentary and often unspecific nature of the conclusions. This makes it quite difficult for procedures to be elaborated, for instance in relation to due diligence in the event of land acquisitions. For future studies, it should be made clear that conclusions need to be drawn up in such a way that action plans can be elaborated.

3 ASSESSMENT OF PEPSICO'S AUDITS

PepsiCo published only a short summary report of third party audits on the social, environmental and human rights aspects of its supply chain in Brazil (PepsiCo, 2015). It did not publish the full audit results, and the summary of four pages that covers all these issues has been drafted by PepsiCo itself. What follows, therefore, cannot be considered an independent assessment of the audits. We can only reproduce the items relevant to land issues in this summary, a theme not directly mentioned in its title, as an indication of PepsiCo's concerns.

The mills audited have been certified by Bonsucro, which as the PepsiCo summary underlines, requires that a series of indicators are met, among them 'Active engagement and transparent, consultative and participatory processes with all relevant stakeholders'. Transparency is impossible if the reports of third party audits are not available for evaluation. The substantial policy commitments made by PepsiCo to ensure sustainability in its supply chains, formalized in its Responsible Sourcing Guidelines and in its commitments and initiatives on land issues, would only be reinforced if its auditing undertakings were made publicly available. In a similar fashion to TCCC, PepsiCo has committed to zero tolerance for land grabbing and to the principles of FPIC in the case of land acquisition. It adheres to the Voluntary Guidelines (VGGT) and requires that suppliers meet the IFC Performance Standards. These commitments are systematized in the PepsiCo Land Policy, which also includes the following commitments:

- *Further develop and maintain a comprehensive map of our raw agricultural commodities supply chain.*
- *Engage with appropriate industry and other groups to positively impact and respect all legitimate land tenure rights and the people who hold them.*
- *Utilize the PepsiCo Responsible Sourcing Guidelines as well as the PepsiCo Sustainability Council and processes to ensure continued engagement with and compliance by suppliers on relevant land issues.*
- *Commit to a presumption of transparency such that relevant information related to land acquisitions by PepsiCo will be made public if circumstances permit.*
- *Actively engage, and appropriately advocate, on the latest policies, programs and opportunities concerning land rights and tenure in industry, governmental and international organizations that are addressing land rights policy.*

For these audits PepsiCo contracted Control Union, an organization of Dutch origin and now a global player whose main activity is the inspection of international cargo but which also includes a certification component, specializing in agriculture and organics. Control Union is a member of the International Federation of Organic Agriculture Movements (IFOAM), and is registered in Brazil. It has considerable experience in dealing with international companies. No indication of the authors of the audit is provided.

In the 'Background' section of the summary report, it is clear that PepsiCo, in collaboration with its main supplier, Copersucar, selected the three mills to be audited prior to contracting Control Union. Although these firms represent a significant proportion – 20 percent – of PepsiCo's sugar supply, all three mills are in the same region and, as indicated on p.2 of the summary, all three belong to the same company, the Zilor Group.

This group is a traditional São Paulo-based firm which specializes in sugar-based ingredients for the food industry. Although it remains a family firm, not quoted on the stock exchange, it has adopted the principles of corporate responsibility, with the creation of an Administrative Council and the production of a Sustainability Report. It is certified by Bonsucro and has an advanced program on carbon emissions. From an analysis of its websites, Zilor presents itself as a model

firm, although it has been fined for outsourcing of what were judged to be essential activities, which is illegal in Brazil (Agência Brasil, 2013).

From a methodological point of view, therefore, there are serious weaknesses in the PepsiCo audits. There is no mapping of PepsiCo's supply arrangement by number or type of firms, by region or by type of contract. The choice of companies to be audited was made prior to contracting the firm responsible for the auditing, and the three mills chosen, which represent only a fifth of PepsiCo's supplies, all belong to the same firm in the same region, and this firm is clearly a front-runner on sustainability issues. The audits for each mill 'included detailed site observations, review of relevant documents, and interviews with responsible managers and with workers at both the mills and the farms which supply them'. There is no mention here of contacts with the local community. Each audit took 'approximately 3 days', which seems unrealistic given the range of interviews and localities (eight days per mill was the average in the TCCC study).

The terms of reference for the audit relied on the Bonsucro standard as its baseline, with additional references to PepsiCo's Supplier Code, its policies on land rights and its Sustainable Farming Initiative (SFI)¹, which also includes components on land rights, community engagement and environmental standards.

As regards the findings, no evidence was found of violations of land rights. Land questions are not included in the Zilor Group's 'materiality matrix', elaborated for the production of its first Sustainability Report.

Specifically on land rights, the summary reproduces the following excerpt drawn from the audit:

'Each of the mills has legal ownership of the land. This was verified by checking the official documentation that proves land title. Although there is no official document proving that there was no conflict over land title, it can be concluded that, at the time of the audit, no evidence was found of conflict over land title. This was determined by means of visual observation of the plant and analysis of maps created by FUNAI (Fundo Nacional do Índio) that demonstrate areas of dispute between indigenous people and (n)on-indigenous people' (p.3).

In the case of *quilombolas* and traditional communities, other sources of information would have to be checked.

The conclusions drawn by PepsiCo are that the 'audit process has proven to be an effective and efficient way to perform audits of our sugar supply chain, capturing not only the leading industry standard but also the complementary host of indicators from PepsiCo's policies and programs. The audits determined that our suppliers' mills were in compliance with these standards and requirements and that no issues concerning human rights or land rights exist at the three mills...' (p.4). However, these conclusions are inconsistent with the limitations in the methodology and the implementation of the audit identified above.

Nevertheless, the proposals for further action, and particularly the disposition to gather 'feedback on these audits from our suppliers and external stakeholders and apply what we learn and how to communicate the results more effectively and efficiently in the future', bode well for further dialogue on these issues.

Although there was no access to the audit and very little information was provided, we have scored the summary report against the common assessment framework to provide a systematic basis of comparison both against the common framework and the application of this framework to the studies conducted for TCCC.

¹ We are only concerned here with the land-related aspects of the audit.

TABLE 15: SUMMARY EVALUATION FRAMEWORK**1.1–1.4 Quality of research team, design and implementation**

ID	CRITERION/INDICATOR – DESCRIPTION	Maximum score	PepsiCo Score
1.1	Experience, skills and qualities of research team	25.0	15
I-1.1.1	Independence from company concerned	5.0	3
I-1.1.2	Expertise in land issues and current international initiatives	7.5	5
I-1.1.3	Knowledge of sugar sector and associated land issues	2.5	1
I-1.1.4	Prior engagement with relevant stakeholders	2.5	1
I-1.1.5	Field experience	7.5	5
1.2	Primary and secondary data collection and methods used	25.0	4
I-1.2.1	Inclusion of comprehensive literature review	5.0	1
I-1.2.2	Collection of appropriate quantitative data	7.5	2
I-1.2.3	Review of NGO and journalistic material	7.5	0
I-1.2.4	Interviews – content and conduct	5.0	1
1.3	Range of stakeholders consulted	25.0	5
I-1.3.1	Government bodies involved in land regulation and disputes	2.5	1
I-1.3.2	Social movements and farmers' organizations	7.5	0
I-1.3.3	Sugar sector organizations (plus certification bodies)	5.0	2
I-1.3.4	Company representatives	2.5	2
I-1.3.5	Local and regional bodies	7.5	0
1.4	Representativeness of assessment	25.0	6
I-1.4.1	Choice of mills – volume, type of contract	7.5	2
I-1.4.2	Choice by type of sugarcane supply	7.5	2
I-1.4.3	Regional inclusiveness – areas of new investment, conflicts	10.0	2

TABLE 16: SUMMARY EVALUATION FRAMEWORK**2.1–2.5 Land assessment – coverage of relevant land issues**

ID	CRITERION/INDICATOR – DESCRIPTION	Maximum score	PepsiCo Score
2.1	Underlying issues involving agricultural land in Brazil	10	0
1-2.1.1	Brazilian land tenure – history and current situation	1	0
1-2.1.2	Brazilian land legislation and registration	2	0
1-2.1.3	The nature of land conflicts in Brazil	3	0
1-2.1.4	The land grabbing phenomenon and impacts in Brazil	2	0
1-2.1.5	The interface of land and environment	2	0
2.2	Basic features of Brazil's sugarcane sector	10	2
1-2.2.1	Historical and geographical dynamics	1	0
1-2.2.2	Industry agriculture relations in sugarcane	1	0
1-2.2.3	Certification in the sugarcane sector	2	1

1-2.2.4	Current drivers of expansion in the sugarcane sector	3	0
1-2.2.5	Regulation and measures affecting sugarcane land use	3	1
2.3	Company's presence in the Brazilian sugarcane sector	20	8
1-2.3.1	Mapping of company's sugar supply strategies	2	1
1-2.3.2	Company's public commitments on land issues	3	3
1-2.3.3	Studies and news coverage of company's activities in sector	5	0
1-2.3.4	Evidence of supplier involvement in land conflicts	5	2
1-2.3.5	Evidence of land conflicts in supplier regions	5	2
2.4	Contracted mills' land and sugarcane supply arrangements	30	9
1-2.4.1	Mills' land tenure conditions, historical record	6	2
1-2.4.2	Land tenure situation of sugarcane suppliers	6	2
1-2.4.3	Plans for expansion and land implications	6	0
1-2.4.4	Examination of local land registry data	6	2
1-2.4.5	Community testimony on land issues	6	0
2.5	Relations between contracted mills and company	30	4
1-2.5.1	Due diligence on land-related human rights issues	6	0
1-2.5.2	Formal inclusion or not of land tenure issues in contract	6	0
1-2.5.3	Inclusion of company's international commitments – VGGT	6	2
1-2.5.4	Assumption of responsibility for sub-contractees' land status	6	2
1-2.5.5	Level of monitoring of contractee land issues by company	6	0

TABLE 17: SUMMARY EVALUATION FRAMEWORK

3.1–3.2 Conclusions, recommendations

ID	CRITERION/INDICATOR – DESCRIPTION	Maximum score	PepsiCo Score
3.1	Adequacy and appropriateness	40	8
1.3.1.1	Consistency with evaluation	8	0
1.3.1.2	Company's positions and implementation	8	4
1.3.1.3	Supply chain implementation	8	4
1.3.1.4	Stakeholder involvement	8	0
1.3.1.5	Relevant local community accompaniment	8	0
	Inputs for PepsiCo's action plan	60	0
1.3.2.1	Measures for company adoption	15	0
1.3.2.2	Measures for supply chain implementation	15	0
1.3.2.3	Measures for stakeholder involvement	15	0
1.3.2.4	Measures for local community accompaniment	15	0

4 PROPOSALS ARISING FROM PEPSICO'S SUMMARY OF AUDIT

It is evident from PepsiCo's public adherence to the key global conventions on land and environmental issues that the company is committed to ensuring the sustainability of its supply chains. It is disconcerting, therefore, that it has not made the results of these audits publicly available, and we would urge it do so – if not in the present case, then in all future audits.

While we do not have direct access to the audit, PepsiCo's summary raises a number of questions. The firm contracted for the audit, Control Union, is a global player with recognized experience in agricultural certifications (organics), although there is no indication of specific expertise on land issues or in the sugarcane sector. A particular weakness here is that there is no mention of the authors of the audit. It is especially important to have information on the authors when the company itself is not known for its expertise on the issues in question.

The terms of reference as presented by PepsiCo are also cause for considerable concern. The audit in practice is limited to three mills belonging to one firm, the Zilor Group, a member of Copersucar. While this firm supplies 20 percent of PepsiCo's demand, it can hardly be considered to provide a representative sample of the company's supply chain. In addition, it was not the auditing firm but PepsiCo which, together with the Zilor Group, decided on the nature of the audit.

An audit is clearly not the same as a baseline study, and it may be that PepsiCo will in the future carry out audits on the other components of its sugarcane supply chain. In this case, it should make it clear to its suppliers that periodic audits will be conducted, but that these should not be programmed and planned by the firms to be audited.

An audit at best captures a given moment in the practice of a company, although the fact of being subject to auditing can be a powerful incentive for conforming to the good practices in question. A strategic approach to the development of sustainable supply chains demands a broader assessment of the challenges facing the sector as a whole, particularly when it is undergoing marked transformations. We would recommend, therefore, that the audits be complemented by an assessment along the lines of the framework presented in Section 1 of this evaluation.

GENERAL CONCLUSION

The common assessment framework was elaborated to establish an independent reference against which to evaluate both the TCCC study and the PepsiCo audit. Given the restrictions on access to PepsiCo's audit, however, it has not proved possible to carry out a comparative analysis. Comparing the types of study/audit conducted by these companies, we can conclude that the TCCC study would benefit from a more systematic analysis both of the secondary data and the field results, while the PepsiCo audit would need to be redone.

The options in the case of Control Union were effectively foreclosed by the prior choice of mills to be interviewed and by the establishment of restrictive terms of reference (Bonsucro plus PepsiCo's own guidelines). No clear guidelines on the conduct of the study are mentioned in the Arche TCCC evaluation, and this may explain the lack of a systematic framework of analysis or presentation of results. In compensation, its sample of mills and respective supplier farms was very wide-ranging, although here again, given the absence of clear criteria, its representativeness might be open to question.

In spite of these limitations, both TCCC's and PepsiCo's commitment and promotion of global conventions and agreements on land rights emerge clearly, as does their insistence on adherence to the national legal framework on land. It is also clear that both companies go beyond formal commitments and have advanced in the elaboration of detailed guidelines and methods for their implementation.

Of the substantive factors within which plans of action need to be situated in the coming period, two emerge as the most important – the expansion of sugarcane into areas where traditional and indigenous community rights come to the fore (Repórter Brasil); and the squatting/occupation of mill lands that have suspended their operations and are negotiating indebtedness or bankruptcy. Both of these factors are highlighted in the Arche study, although neither the dynamic behind sugarcane expansion nor the context in which mills are indebted and closing down their operations is adequately analyzed (Wilkinson, 2015).

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