The Demography of Large-Scale Human Rights Atrocities: Integrating demographic and statistical analysis into post-conflict historical clarification in Timor-Leste

Romesh Silva[1], Field Coordinator/Statistician
Patrick Ball[2], Director

Human Rights Data Analysis Group
The Benetech Initiative

Short Abstract

During 1975, Timor-Leste transitioned from being a colony of Portugal to being occupied by Indonesia. The occupation was characterized by large-scale political violence, including selective and indiscriminate killings, forced migration, famine-related deaths, tortures and acts of ill-treatment. The authors, formerly advisers to the Commission for Reception, Truth and Reconciliation (CAVR, by its Portuguese acronym), estimated the pattern and magnitude of excess mortality and forced migration during the Indonesian occupation of Timor-Leste between 1975 and 1999. These estimates were based on a combination of qualitative testimony data, a census of public graveyards and a Retrospective Mortality Survey. The data corroborate the eyewitness accounts and qualitative historical analysis of the period. This paper briefly presents the statistical and demographic findings along with the results from survey estimates and capture-recapture methods. A detailed discussion is presented which shows how the demographic analysis contributed to the CAVR's mandate, how the analysis was combined with historical, legal and anthropological findings, and which specific policy questions were informed by the demographic analysis.

1 Romesh.S@benetech.org
2 Patrick.B@benetech.org

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Detailed Abstract

Introduction

During 1975, Timor-Leste transitioned from being a colony of Portugal to being occupied by Indonesia. The occupation was characterized by large-scale political violence, including selective and indiscriminate killings, forced migration, famine-related deaths, tortures and acts of ill-treatment.

This paper combines demographic and statistical analysis analyzing the pattern and magnitude of large-scale human rights atrocities in Timor Leste between 1974 and 1999. This analysis draws on data from three data sources collected in collaboration with the Commission for Reception, Truth, and Reconciliation of East Timor (CAVR). We present an analysis of conflict-related mortality and displacement. A detailed discussion of how demographic data and analysis contributed to the CAVR's major findings is presented, and in particular specific attention is given to how demographic measurement can inform established international human rights norms on the scale, pattern and proportional responsibility for large-scale human rights atrocities.

The Relevance of Demographic Analysis to the CAVR's Mandate

The authors assisted the CAVR in collecting and analyzing human rights violation data relevant to the mandate period of the Commission, 1974-1999.[5] This section describes which particular parts of the CAVR's mandate this demographic analysis engaged.[6]

The CAVR required an information management system to manage and structure the

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3 Romesh.S@benetech.org

4 Patrick.B@benetech.org

5 The authors are both analysts with the Human Rights Data Analysis Group (HRDAG), a division of Benetech, Inc. in Palo Alto, CA, USA. HRDAG staff includes statisticians, computer programmers, and record linkage experts. HRDAG team members have worked in large-scale human rights documentation and analysis projects on 5 continents, in over a dozen countries for the past 20 years. HRDAG has worked with official truth commissions in Haiti, South Africa, Guatemala, Peru, Ghana, Sierra Leone; the International Criminal Tribunal for the Former Yugoslavia; and non-governmental human rights groups in El Salvador, Cambodia, Guatemala, Colombia, Afghanistan, Sri Lanka, and Iran. For more information see http://www.hrdag.org

6 The CAVR's mandate is codified in Regulation 2001/18 of the United nations Transitional Authority for East Timor. See www.un.org/peace/etimor/untaetR/Reg10e.pdf for an official copy of the CAVR mandate. (Last visited September 22, 2005)

data needed to answer the issues outlined in its mandate. Specifically, the CAVR's information management system and empirical analysis needed to allow for:

0. Descriptive statistical analyses of general patterns and trends of violations in order to describe the "nature" of human rights violations (i.e. nature in terms of the types of violations which were committed),
1. Statistical projections of total violations to establish the "extent" of human rights violations (i.e. extent in terms of the total number of violations which were committed),
2. Statistical hypothesis testing of the regularity of certain violations in order to investigate whether certain violation patterns constituted "a systematic pattern of abuse",
3. Case-level analysis by basic filing and searching of the database in order to describe the "antecedents, circumstances, factors, context, motives and perspectives" that led to large-scale violations,
4. Structured quantitative analysis and hypothesis tests in order to investigate whether "human rights violations were the result of deliberate planning, policy or authorization" on the part of specific parties to the conflict, and
5. Formal explanations of scientific and statistical methodologies employed in the final report's appendix in order to demonstrate that CAVR findings are based on "factual and objective information and evidence collected or received by it or placed at its disposal".

This section of the paper reviews the CAVR's mandate and describes the particular demographic and statistical measurements which were made to inform specific international human rights norms. In particular, specific links are made between human rights norms and quantitative measurement concepts and methods.

The Demographic Measurement Challenge for CAVR: the Need for New Data and Quantitative Methods

The CAVR was acutely aware of the sensitivity and importance of the estimation of total and disaggregated mortality patterns. Other truth commissions (particularly those in El Salvador, Guatemala and Perú) benefited from the existence of extensive, if still partial, registries of deaths that had been documented before the commission began work.

However, as the 1980 and 1990 census figures only published population counts without disaggregating the population data by key demographic variables data (such as age and sex), the ability of social scientists to apply standard demographic estimation techniques to the official population data was limited. Non-governmental sources of population information were also of limited value due to the severely restricted access independent monitors and humanitarian groups had to Timor-Leste during the conflict.

Robert Cribb laments that in 1999-2001 at the time that he published a series of papers on the subject, all the available estimates to date, including his own, were limited to the two weakest methods: indirect and intuitive estimates.[7] In his extensive review of the estimates of the conflict-related mortality in Timor-Leste , Waddingham writes "We have to concede, however, that it is not yet possible to produce from available evidence, a quantitatively accurate, generally agreed figure

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7, see Robert Cribb "How Many Deaths? Problems in the statistics of massacre in Indonesia (1965-1966) and East Timor (1975-1980) in Ingrid Wessel and Georgia Wimhoefer, eds. Violence in Indonesia. Hamburg: Abera-Verl, 2001.

on the death toll in East Timor."[8]

Thus, a key challenge we faced in Timor-Leste was the lack of pre-existing population information that could be used to develop scientifically-defensible estimates of the number of East Timorese killed during the conflict with Indonesia. In order to overcome this limitation, we developed three new datasets in partnership with the CAVR as a basis for new empirical analysis of conflict-related mortality in Timor-Leste between 194 and 1999. These included: a qualitative survey of respondents self-motivated to give testimony to the CAVR; a probability sample of 1396 households from which retrospective mortality histories were taken; and a complete census of all public graveyards in East Timor.

This paper describes the three datasets which were developed with the CAVR and how demographic and statistical methods were adapted to the Timorese context. In particular, we discuss how methods were developed to be consistent with the CAVR's efforts to facilitate reconciliation while ensuring its empirical data and methods were scientifically defensible.

The combined data from all three data streams - the HRVD, the RMS, and the GCD - were used to make independent demographic estimates, via Multiple Systems Estimation, of the total extent, pattern, trend, and levels of responsibility for past fatal violations in East Timor. Furthermore, sample-survey estimates of these phenomena were derived using the RMS.

The Findings and their policy-relevance: The Demography of Human Rights Abuses in Timor-Leste

This section provides the main demographic and statistical findings which were developed in partnership with the CAVR. These findings are briefly presented below. The paper will then discuss the context of these findings in detail and present the policy relevance of the findings given the CAVR's mandate and current challenges in addressing past violations in Timor-Leste.

We estimate that the minimum bound for the number of conflict-related deaths during the Commission's reference period, 1974-1999, is 102,800 in a confidence interval of +/- 12,000. This estimate is derived from (i) an estimate 18,600 total killings (+/-1000) using multiple systems estimation (MSE) and (ii) an estimate of 84,200 (+/- 11,000) deaths due to hunger and illness which exceed the total that would be expected if the death rate due to hunger and illness had continued as it was in the pre-invasion peacetime period.

The estimated pattern of fatal violations over time show a high concentration of killings and deaths due to hunger and illness during the initial post-invasion period between 1975 and 1980. The number of deaths attributed by respondents to "hunger or illness" rises to its highest levels during the immediate post-invasion period, 1975-1980. Whereas, 1999 marked the high point for estimated killings 2,634 (+/-626) - which was significantly greater than any other year.

The pattern and trend of deaths due to hunger and illness and killings is positively correlated over time, suggesting that both phenomena have the same underlying cause during the first phase of the conflict. Of the killings and disappearances reported to the Commission's statement-taking process, 57.6% (2,947/5,120) of the

8 See J. Waddingham, "East Timor Death Toll, 1975-1999, Submission to the CAVR," 22 July 2003.

perpetrator involvement in fatal violations was attributed to the Indonesian military and Police, and 32.3% (1,654/5,120) to Timorese auxiliaries (such as the militias, civil defense force and local officials who worked under the Indonesian administration).

Displacement was widespread: 55.5% of surveyed households reported one or more displacement events, for a total of 2011 reported displacement events between 1974 and 1999.

Most displacements occurred in 1975-1980. The maximum years are 1975 and 1976, with 61,400 (+/- 13,300) and 59,800 (+/- 7,200) displacement events, respectively. The events of 1999 were substantially fewer, with approximately 28,100 (+/- 5,600) events.

The institution that respondents reported most frequently as the group telling them to move was the Indonesian military (46.4%), followed by FALANTIL (15.0%) and militias (8.8%). Respondents reported that "conflict" motivated 52.3% of their displacements, with "forced by Indonesian military" contributing an additional16The nominal margin of error is +/- 4.2%.

Conclusion

Demographic and statistical analysis has helped to uncover and clarify our social and historical knowledge of political violence in Timor Leste between 1974 and 1999. However, as one part of its overall findings, the Commission's statistical findings need to be combined and integrated with its qualitative, historical and legal findings.

The use of information management techniques and advanced statistical analysis can provide massive, objective, and undeniable evidence of human rights violations. Good data amplifies the voice of the thousands of victims and witnesses who have come forward to tell their stories in ways that anecdotal accounts cannot. Establishing a scientifically rigorous record of reported and estimated total numbers of violations, clarifying the patterns and nature of violations, and identifying perpetrators and victims will help to write a durable history and counter ongoing impunity for past violations in Timor-Leste.

This last section incorporates lessons-learned from similar types of demographic analysis in Kosovo, Guatemala and South Africa. It notes the current challenges in Timor-Leste in clarifying the past and articulates a role for demographic analysis which takes important lessons-learned from other human rights contexts and grounds them in the current historical and policy-related challenges in Timor.