

# Department of Economics Conflict Analysis Group www.rhul.ac.uk/research/economics/conflict

## **Proposed Colombia Work**

We are pursuing three distinct but closely related lines of work on conflict human rights and human security in Colombia:

- Database development,
- Trust building and
- Analysis.

#### Part I. Database Development

We have already built the first time-series dataset for the Colombian conflict that is detailed (more than 21,000 events), high-frequency (daily) and long (1988-2003). For each event the database records a set of characteristics: date; geographical location; whether or not it was a clash between two or more forces or a (one-sided) attack of which we distinguish between many types; and the group(s) involved. We also include the number of killings and injuries resulting from every event. We built it using events listed in the annexes to the periodicals *Justicia y Paz* and *Noche y Niebla* published quarterly by the Colombian NGO'S CINEP and the Comisión Intercongregacional de Justicia y Paz. We complemented the dataset with other sources.

This dataset is already extraordinarily rich. We distinguish between more than forty types of attacks. We have locational information for most records down to the *vereda* and *corregimiento* level and we already have integrated it into a Geographical Information System down to the municipality level. We distinguish between civilians and combatants, while for the latter category we distinguish between all the armed groups.

Nevertheless, we plan to further strengthen the database, including in the following areas. We hope to integrate kidnapping data from the Fondelibertad database, displacement data from Codhes and the Red de Solidaridad Social, mine data from the landmine observatory at the Vicepresidency of the Republic and, given information availability we expect to integrate information from the Human Rights Observatory of the Presidency of the Republic and from the DIJIN (police) database. We also aim to enter into agreements with local data sources like the Observatorio de Violencia of Gobernación del Valle del Cauca and the Secretaría de Gobierno in Bogotá. Finally, we will return to our original CINEP source, extending the database back to 1972 and integrating information on human rights violations, international humanitarian law violations, political violence and organised crime. We are also integrating public ly available socioeconomic information from DANE and DNP at the local

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<sup>&</sup>lt;sup>1</sup> For our work, human security problems should be understood as conflict-related threats to personal safety.

level so that we can integrate these factors into our empirical analysis. Moreover, we have been developing a new set of indicators related to human rights in Colombia, with data taken from the main State institutions in charge of human rights, including the Defensoria del Pueblo, Procuraduria General y Fiscalia General.

This is an enormous project that will require many research assistants. But it is composed of many independent modules of varying sizes. We can implement any funded module of any size before we have obtained funding for the rest of the programme.

### Part II. Trust Building: A Data Clearing House

Discussions of the conflict and human security in Colombia often occur within an atmosphere of corrosive mistrust. We are working to improve this environment by creating a Data Clearing House that will be considered to be reliable by a broad spectrum of groups, both inside and outside Colombia. This will be a centralised and public information system that will encompass our own data as well as those of both governmental and non-governmental organisations, allowing for transparent scrutiny and comparison.

The Clearing House will receive data from a wide variety of organizations. Crucially, different datasets will have overlapping coverage. This will enable quality checking through comparison. We will tag all the events in the Clearing House so that the basis of the information will be immediately transparent to all users. Some events will be recorded across many sources with little variation while other events might receive sharply differing accounts. The Clearing House will lay this information bare, facilitating independent judgement on the reliability of various information sources.

This work will be a joint academic project of Royal Holloway-University of London and a Colombian university institution still to be determined. This partnership will guarantee independence and facilitate the continuity of the project. We expect the Clearing House to become a stable and key provider of timely and accurate information on the Colombian conflict and human security environment to multilateral institutions, policymakers, researchers and the media.

We have already done some of the basic legwork on this project. We have obtained written agreements to participate from the Vicepresidency of the Republic, CINEP and the Comisión Colombiana de Juristas. We also have had numerous preliminary discussions with and expressions of interest from organisations including the Instituto de Medicina Legal, Codhes, Defensoría del Pueblo, Red de Solidaridad Social, the Procuraduría General de la Nación and several agencies of the United Nations. We will strive to build on this good will by fostering dialogue and cooperation between these groups.

Part II of our research programme shares two of the main features of Part I. First, it is a very large and ambitious project but, at the same time, can proceed module by module. Second, both parts are data building projects. The difference is that Part I involves bringing new variables into the dataset while Part II is about checking the reliability of and building trust in a fixed set of variables. It will proceed by gathering together and comparing information from multiple sources on these variables.

#### Part III. Analysis

The database in its present form already affords virtually unlimited possibilities for analysis. Of course, this potential will grow substantially as the data work proceeds so it is important to define a well-focused research agenda. Our analytical work will stress policy-relevant research aimed at improving Colombia's serious human security problems. Accordingly we will seek to identify the main threats to human security in Colombia, including their evolution over time and distribution in space, and develop policy recommendations for ameliorating these problems.

The main forms that human security violations take in Colombia are killings, injuries, kidnappings and forced displacements. For each human security violation type we will begin by addressing a set of basic questions including the following. Who are the victims? Which conflict event types are associated with this security violation type? Which armed groups are involved in these violations? Where do the violations occur? What are the underlying risk factors for these violations? How have the answers to these questions changed over time? What policies can ameliorate the threats?

Our analysis of civilian killings and injuries (casualties) has already progressed fairly far along this programme. We know that the three main direct causes of civilian casualties in the Colombian conflict are: massacres by illegal right-wing paramilitaries in rural areas, massacres by left-wing guerrillas in rural areas, and guerrilla bombings, particularly causing injuries, in both the biggest urban areas and rural areas. We still must analyse the spatial structure of these threats, uncover the main risk factors and develop systematic policy advice. We plan to conduct similar studies of combatant casualties, kidnapping and displacement. Again, this is a big programme but one that can be implemented in modules.

The dataset will provide spatial and temporal information. From a physical point of view, this suggests that there might be some interesting dynamical phenomena and patterns which arise in space and/or time. Of particular interest is the extent to which the various clashes and attacks are manifestations of the co-existence of the various armed groups, and/or a competition between them for limited resources (e.g. land for growing coca leaves or extracting natural resources, or money, or arms). In fact, we feel that there are many analogies with an ecological system in which the various armed groups act as 'species' whose fortunes rise and fall as a function of the fortunes of the others. Given our experience in modelling such evolutionary phenomena within competing populations, we will use techniques drawn from mathematical biology and physics to develop a multi-agent model which looks at how competing groups begin to invade available space, fed by some kind of supply network (e.g. roads, or rivers which facilitate guerrilla/army movements). The resource which then flows on this network, keeping the various armed group 'organisms' alive, comprises combatants, money, arms or illicit drugs. This model can then be used to generate a set of simulated statistics for attacks and conflicts -- these statistics can then be compared to the empirical database. Pattern analysis can then be undertaken, and the fascinating prospect of uncovering possible deterministic evolution (and hence predictability of how a particular armed group may move and evolve) then arises.

The following is a sampling of some of the other questions we plan to address. How does conflict-related violence interact with other forms of violent crime such as homicide? What is the economic impact of the conflict? What role does land distribution play in the conflict? Is conflict violence cyclical? Can villages avoid violence through strategies such as

declaring neutrality or participating in civil resistance movements? Can the destruction of illicit crops fuel the conflict and, if so, under what circumstances does this happen? What is the role of small arms in generating human security problems? Do local development initiatives improve the security of the people in these communities?

#### Part IV. The Core Team

Professor Michael Spagat of Royal Holloway College, University of London, is the team leader. He has an economics Ph.D. from Harvard and has been an economics professor since 1988, holding positions at the University of Illinois, Brown University, and the University of London, among other places. Jorge Restrepo is a Colombian on the verge of completing his Ph.D. dissertation on the Colombian conflict at Royal Holloway. He has a strong background in the economic analysis of conflict and database development and analysis. He has held research positions at Javeriana and Andes Universities and has been an economic advisor to the Colombian government. Juan Fernando Vargas is a Colombian Ph.D. student, also studying with Professor Spagat, at the University of London, with research experience at Banco de la República and CEDE, Universidad de los Andes in Colombia. Vassilis Monastiriotis is a Lecturer at the London School of Economics. He has a PhD in Economic Geography from the LSE and has expertise in the fields of spatial econometrics and Geographical Information Systems. Elvira María Restrepo is a lawyer, specialised in criminal law with a D.Phil. in Politics from Oxford University, and Masters' Degree in Law from Harvard University. She is an associate researcher in the Economics Department at los Andes University. Neil Johnson is a Professor of Physics at Oxford University where he heads up a research group working on Complex Systems. He has a Ph.D. in Theoretical Physics from Harvard University. We can also draw as needed on the expertise of many other people. CV's for the core team are available upon request and are also downloadable from http://www2.rhul.ac.uk/~uhte014/ (Spagat), http://personal.rhul.ac.uk/pkte/126/ (J. Restrepo), http://personal.rhul.ac.uk/pnte/150/ (Vargas), http://personal.lse.ac.uk/monastir/ (Monastiriotis), http://economia.uniandes.edu.co/ (E.M. Restrepo) and http://www.lincoln.ox.ac.uk/fellows/johnson/ (Johnson).