Facultad Latinoamericana de Ciencias Sociales
Flacso
Dominican Republic Program

Pripode DO1

Final report
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Part I: summary description of the research operations

As mentioned in our first report, the main objective of this regional project is to develop a comparative analysis between the communities of three Caribbean countries, Cuba, the Dominican Republic and Haiti regarding environment, disaster risk construction and population and development policies. In order to do this we divided our work in two phases, the first regarding our work objective of analyzing the development processes in the region and in the countries under study and a second phase which was dedicated to empirical research in the communities of Fonds Verrettes in Haiti and Tamayo in the Dominican Republic on environmental degradation, disaster vulnerabilities, capacities, management and disaster risk.

The project has followed the work calendar which was approved with the project proposal. This calendar was reviewed and adapted for the second disbursement of funds, after the project was delayed by Cicred. We divided the project into two phases and the calendar is found in the appendix section.

The activities carried out are the following including details on meetings.

Meetings

Team work was organized on the basis of internet communication and coordination since team members are situated in different countries.

During the first part of the project, the coordinator met with Haitian and Dominican team members separately at Flacso offices to discuss the project proposal in detail, responsibilities and work calendar.

With the Cuban researcher, a meeting was held in Cuba in February of 2004, as was detailed in the first project report. The visit to Cuba was an opportunity to visit the research site and therefore the community of El Fanguito was the first to be selected.

During the first phase of the project, meetings were held with the Haitian and Dominican researchers at Flacso offices where project progress was discussed. During this first phase meetings were also held with Flacso administrative personnel to discuss budget and also with Flacso researchers and director to review the process and inform of project progress.

During the second phase of the project, meetings were scarce due to the fact that the Haitian researcher was located in Haiti. There were regular meetings with the local Dominican researcher and also with Flacso administrative personnel, to discuss the research process and the projects financial status.

Two meetings were held during this phase at Flacso offices with the Haitian and Dominican researchers together on the two occasions when the Haitian researcher was able to visit the Dominican Republic,
The data collection process also implied meetings in the communities under study with different actors, this is detailed in the section on data collection.

During the first phase of the project the following activities were carried out. These were reported in the first report and therefore are summarized here.

I.1 Work calendar

I.1.1 Revision of existing bibliography and documentation
All team members
The review of existing literature on our research topic, has been a key activity of the project, as we mentioned in our first report. The review of pertinent bibliography and documents has continued throughout the project. In our appendix is an edited copy of the bibliography which adds new material on our research topic to the original bibliography included in our first report. As was mentioned before, each country researcher made a thorough review of existing literature pertaining to general conceptual works and also to specific in country and or regional studies regarding development, specific environmental information, disaster and risk management information. Some of the information on existing literature was a result of the expert consultations of academics, international agency officials and government officials and technical personnel. This was a very valuable resource since many of our libraries and institutions have difficulties maintaining updated bibliographies, accessible to the public.

The selected bibliography responds to the possibilities of accessibility, specialization, expertise and updated findings.

There is a wide variety of perspectives in the references. We have tried to include references from different countries in the region.

I.1.2. Conceptual Framework
Lourdes Meyreles and Victor Ruiz with support from team members
As reported before, the research process has been guided by a conceptual framework which tries to be inclusive and representative of the diverse perspectives in the development, environmental and disaster risk fields. We have taken into account characterizations of the state of the region regarding these three areas, describing existing development policies, the state of the environment, disaster history and risk scenarios and population at the regional and local in country levels. There is the gender component which has been an important aspect of this conceptual framework.

As was mentioned in our first report, country researchers indicated general trends in these topics, in their specific countries and also regarding regional information which they had access to. Papers written for other Flacso projects regarding environmental degradation and risk construction by Juan Cabrera and Lourdes Meyreles for a Flacso were very useful in describing and analyzing the Cuban situation and for the Dominican Republic.
Expert consultations have also been very relevant specially in selecting and having access to bibliography.

I.1.3. Expert Consultations
Lourdes Meyreles, Víctor Ruíz, Juan Cabrera, Francois Paul

During the second half of the project, interviews with experts were carried out. During this phase these included disaster and emergency personnel from different national and regional organizations in all countries as well as international disaster experts, academics and researchers.

I.1.4. Selection of Communities
During the first stage of the project we carried out a process for community selection which was detailed in our first report. Different circumstances led us to make the decision to change the communities that were selected for the Dominican Republic and Haiti. This aspect of the work was carried out during the second stage of the project and is part of the field work.

Paraphrasing our first report we needed to choose communities which, due to their characteristics, would allow us to:

- Relate the important variables under study: environmental degradation, risk construction, population. Communities need to be characterized by the general indicators being studied:
  - Environmental conditions identifiable as degraded environment in important aspects
  - Subject of development policies
  - Identifiable risk scenarios
  - Disaster history

- Allow for interesting, useful comparisons between the countries

- Characterize the countries under study in regards to environmental degradation and risk construction so that results could be generalized.

There was an intensive process during the first part of the project to identify and choose the communities, and as was reported the communities of Batey Isabela was chosen for the Dominican Republic and Mapou and Fons Verrettes for Haiti. These were characterized for the first report. The characterizations can be found in the appendix.

I.1.5 Construction of Maps
During the first phase of the Pripode DO 1 project a series of maps were constructed which characterize the country areas to be studied.
I.1.6 Writing of Mid Term Report
Lourdes Meyreles
The mid term report included detailed descriptions of all operations carried out up to the moment. It included the following project products:

- Bibliographical review results
- Description of communities selected for study sites
- Collection of Maps

Second phase of the project
Field Work

I.1.7 Revision of Selection of Communities

For the Dominican Republic, it was decided that a more characteristic community should be chosen, one which had experienced a major disaster situation and which could help us to see more of the disaster management, preparation, and response and the institutions involved; possible disaster risk management if any, and the existing vulnerabilities and coping strategies in disaster situations. Also one which would be more characteristic of the country. This led the team to decide to change the study community to that of Tamayo, a community located in the southwestern province of Independencia. (Full description of this community in part 3 of this report). This community is a disaster risk prone area, basically subject to hydrological related hazards and disasters and which has the socio economic characteristics and environmental characteristics which we were looking for in the project. In this sense, comments made by the Pripode consultant Prof Mueller, who communicated with us during the first half of 2005 corroborated this decision since Prof Mueller suggested the inclusion of more communities in our study. Since the budget did not allow for this, the choosing of Tamayo seemed correct in that it would be more representative of Dominican vulnerable communities, which had an important disaster history, and in which disaster management and policy could be analyzed.

In the case of Haiti, it was finally decided to work with Fonds Verrettes only. This community shared the flooding experience of Mapou during May 2004 and has environmental characteristics which help us to see how these have impacted on disaster situations.

The revision of the study sites implied meetings between the coordinator and the Dominican Republic and Haiti country researchers in the Dominican Republic and various consultations with Haitian researcher via internet.
I.1.8 Developing Empirical Research instruments
Lourdes Meyreles and Victor Ruiz with input from Team Members

The basic research instrument developed for the project is a questionnaire, whose basic structure was used for the survey as well as a guide for in depth interviews and focal groups. This instrument was developed by team members in a coordinated effort. Haitian and Cuban in country researchers adapted the questions to their specific needs and in the case of Haiti; the questionnaire was translated to French. Experience by the team in other projects allowed for an integral vision where social, economic, environmental and gender aspects are taken into account in the instrument. (See appendix for a complete version of the questionnaire.

For the in depth interviews the basic structure of the questionnaire was worked “in depth” with interviewees and adapted to the type of informant and the type of group in the case of the focal groups.

Data Collection
I.1.9 Gathering Empirical Data
(Includes recruitment and training activities)
Victor Ruiz and country researchers

**Recruitment and training activities:**
For each community in the Dominican Republic and Haiti, local researchers recruited community research assistants and interviewers for the field work.

The research assistants were selected on the following criteria:

- Local civil defence members. In the case of the Dominican Republic it was the president of the Tamayo Civil Defence. In the case of Haiti, a professor, member of the Civil Protection of Fonds Verrettes.
- Educational level
- Community leadership

These research assistants helped to recruit local interviewers and key informants and also participants for the focal groups.

Key informants were selected based on the following profile:

- Role within the community: local authority, political, economic, religious disaster related,
- Vulnerability: individuals belonging to specifically vulnerable groups referring to physical, social, economic and other vulnerability.

Participants for the focus groups were selected based on the following criteria:

- their willingness to participate,
- their capacity to express ideas in the group
- Due to the fact that in these communities the population at large has been affected by disasters, most community members could participate due to experience.
- A gender balance
All local participants were trained by country researchers. The training consisted in basic research methodology and use of the research instrument. Also ethical research behaviour. The calendar for these training activities was: in the Dominican Republic, the group was trained on February 16, 2006 at the Civil Defence Bureau in Tamayo. In Haiti the training was carried out on 11th May, 2006.

**Gathering of Data:**

The calendar for surveys and interviews in the Dominican Republic was: on February 17th and 18th and on March 17th and 18th, 2006 in different stages. The calendar for surveys and interviews in Haiti was May 11th to May 13th.

In Haiti, the calendar for field work was delayed in respects to the original work calendar due to the deteriorated political situation of the country.

Fifty percent of the survey interviews were carried out in each of the countries involved in the study, Haiti and the Dominican Republic.

**Communities**

In the community of Tamayo, survey interviews were carried out in 3 different communities of the Municipality of Tamayo: In Uvilla, 17 interviews were carried out; in the community of El Jobo, 16 interviews were carried out; and in the La Altagracia Neighborhood in Tamayo proper, 17 interviews were carried out.

In Fonds Verrettes, all the interviews were carried out in Fonds Verrettes proper.

**Sex**

Forty eight percent of the interviews were carried out on persons of the feminine sex. In Tamayo there were more women interviewed, (58%) than in Fonds Verrettes where 38% of the interviewees were women.

**Age**

The age range of the majority interviewed was between 30 and 59 years of age. This was the case in 76% of the surveyed households. This varied little in the two countries.

In the Dominican Republic 11 in depth interviews were carried on key informants and 3 focal groups were carried out in the communities of La Altagracia, Uvilla and El Jobo.

In Haiti 5 in depth interviews were carried out on key informants, and one focus group with 25 participants from 4 sectors of Fonds Verrettes.

The gathering of data presented no particular inconveniences. Community members were eager to participate and the process went smoothly and according to plan in both countries.
I.1.10 Data Analysis
Lourdes Meyreles and Victor Ruiz

**Quantitative Data Analysis**
The SPSS quantitative data analysis software was used to process and analyze survey data. The data base can be seen in detail in the appendix section.

**Qualitative Data Analysis**
For analyzing the qualitative data which was gathered in the in depth interviews and focus groups, we have followed the traditional methodology (Hernández Sampieri et al:2003). This methodology is detailed in part III of this report and in the appendix section.
Part II: Presentation of the Research Team

Lourdes Meyreles  team coordinator
Sociologist, Master in Gender and Development.
Senior Researcher at the Latin American Social Science Faculty ( Facultad Latinoamericana de Ciencias Sociales ) Flacso and coordinator of the Flacso Social Studies of Disasters program since 1997. Professor at the Instituto Tecnológico de Santo Domingo INTEC since 1989. At Intec Lourdes Meyreles has occupied directive positions as Coordinator of the Human Beings and Society sub area from 1991-1994; Dean of the Social Science Area from 1995 to 1997. She has also occupied the position of Director of Division of Social and Territorial Development at the National Planning Office of the Dominican Republic.
Lourdes Meyreles has publications on the topic of disasters in the Dominica Republic, and Gender and Disasters.
For the Pripode Project, she has been responsible for project coordination and research activities and drafting of project reports. Responsible for coordinating team members, maintaining communication with team members, relations between team members and Flacso, coordination with Flacso administration and director; development of the project work calendar and managing of funds for field work. Also responsible for the theoretical framework, community selection, methodology, organization with local researchers of in country field work and visits to field sites in DR and Cuba. Also for the drafting of the first mid term report and the final report.
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Sociologist, Doctorate in Sociology from the Universidad Complutense de Madrid. He is senior researcher for the Equipo de Investigación Social EQUIS INTEC. He is also an independent consultant. Victor Ruiz has experience in social research, specializing in socioeconomic aspects of environmental problems. He is Coordinator for the Dominican Republic of the Ecost, European Union Project.
For Pripode Project, Victor Ruiz has been responsible for research coordination and field work coordination in the project. Responsible along with project coordinator for revision of documentation, conceptual framework, expert consultations, selection of communities, design of research instruments, and data analysis. Solely responsible for Dominican Republic field work and coordinated and participated in Haiti in country field work. Also responsible for the quantitative data processing and analysis.
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Francois Paul:  Haiti country researcher.
Francois Paul has a degree in Economics from the Universidad Autónoma de Santo
Domigo, UASD, and a masters degree in  Public Management.  He has research
experience.  Has worked in the Instituto de Desarrollo de la Economía Asociativa
(IDEAC) from 2001 to  2004 and is now working at Oxfam , Haiti.
For Pripode Project he has been responsible for inputs on Haiti on all areas of the
project: Responsible for field work in Haiti: Haitian documentation, expert consultations
in Haiti, community selection, development of research instruments, inputs for mid term
and final reports. Responsible for translation into French of Survey and translation into
Spanish of survey and interview and focus groups results.  Responsible for field work
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Juan Cabrera:  Cuba country researcher.  Responsible for all aspects of Cuban in
country research and of Cuba project reports.  Responsible for inputs on Cuban
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inputs for mid term report, and responsible for all Cuban field work.
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Part III: detailed presentation of research findings

Summary of initial research proposal

The project aims at establishing links between development processes, population policies, migratory trends, environmental degradation and disaster risk in three Caribbean island countries: Cuba, Haiti, and the Dominican Republic. The three countries show differences and share experiences which makes the comparative study of their situations very useful to policy making and implementation in these areas.

The research process analyzes existing research data on population and development policies and aimed at carrying out empirical research in the areas where there has been little work done such as environmental degradation and disaster management, specially in Haiti and the Dominican Republic. This will enable comparative case studies on pertinent communities in the three countries.

Research results will be shared with community members and experts in order to disseminate results and contribute to better practice capacity building and policy making.

Scientific Problem:

- What have been the regional and local development tendencies in the last decades which affect the countries under study?
- What have been the main policies in the last decades in the three countries under study linking population, development and environment?
- What is the environmental situation regarding degradation processes in the three countries?
- What are the risk scenarios regarding hazards, vulnerabilities and capacities in specific communities in the three countries?

Research Methodology:

The research has its epistemological center in an interdisciplinary perspective and a gender perspective. It applied a mix of qualitative and quantitative methods, Geographical Information Analysis, GIS, and cartographic information, analysis of existing literature and documents, statistics, consultation of experts; empirical methods such as the survey; in depth interviews, and focal groups.

Regarding the empirical methods, surveys were conducted to a representative sample of the population in the communities under study. Two basic interview methods were used: the survey, with structured questions to a pre selected representative sample, to collect general socio demographic and economic information; and in-depth interviews, less structured and more open, to selected special informants in each community, through which information regarding specific variables and their relations, eg environmental degradation - productive practices - migratory trends-gender - risks and vulnerability, development and demography were obtained. This complemented focus groups: group interviews (directed group discussions) to selected, important groups in the three communities under study to understand more dynamic aspects of the variables under study.
**Research findings**

The research findings are organized around the topics the project’s original questions referred to:

1. **Natural Resources and Environment: Degradation in Haiti and the Dominican Republic**
2. **Disasters in the Caribbean**
   2.1 Dominican Republic and Hurricane Georges
       Haiti and the flooding of May 2004
       Hurricane season 2004 in Cuba
3. **Hazards, vulnerabilities and risk: the cases of Tamayo and Fonds Verrettes**

1. Analysis of the three countries’ development models, with a historic perspective and the characteristics of the last decades, showing similarities and differences. Cuba, Haiti and the Dominican Republic have traveled three different roads and this has had an enormous impact in the differences we see today in their economic growth pattern and their development processes, their socioeconomic characteristics, but also in their population dynamics. The development models, historically analyzed show the relation of these models to natural resources and to the environment, explaining the state of environmental degradation the three countries find themselves in. The way they face this situation and the consequences for development in the near future is particular to each and of great importance. In this respect there is urgency for policy making in the different areas, for environmental management, and consequently, as the other parts of the findings show us, disaster risk management.

2. The interest in disasters has increased in the world. The changes in the type of phenomena, frequencies, affected populations, and the costs to development are at the basis of this interest and concern. There is an extensive and inclusive framework for understanding disasters, which includes aspects dealing with the relation between development processes and disasters, and specifying the need to take another look at the actors involved in all the disaster phases. This has emphasized the social aspects of the analysis and the study of vulnerabilities and capacities, the top down perspective, the obligatory inclusion of a gender perspective and a human rights perspective. It has also made it clear that there must be a continuum between environmental management and risk management.

   The three countries under study share disaster hazards and have experienced natural disasters throughout their histories. The specific experiences analyzed in each of the three countries: Hurricane Georges in the Dominican Republic, Floods of 2004 in Haiti and the 2004 Hurricane Season in Cuba, help us to see differences and similarities, strong and weak points to learn from. This analysis tells us that definitely, development processes are closely tied to the capacity for disaster resilience that a country has.

3. The empirical research carried out by the project allows a close look, from the grassroots level, of the situation of the communities under study. These communities in
Haiti and the Dominican Republic, experienced major disaster situations. The survey and the in-depth interviews and focus groups, give us information on how the community has experienced and views environmental degradation, disaster hazards, the measures that were taken when they were hit by flood or hurricane, during the different disaster phases, the vulnerabilities they face and the capacities they have, gender roles in disaster situations, damages and losses the specific disasters caused and the strategies that were implemented at the individual or family level or at the community level. All this gives us a picture of the risk scenarios the communities face.

The review of bibliography and expert consultations and analysis of documents for the first two aspects of our research findings, pertained mainly to the projects first phase. The research activity carried out for this implied the cabinet work of the research team in their respective countries. This work was all supported by Pripode. Some aspects dealing with reproduction of materials and some costs of expert interviews were supported by Flacso.

The empirical research was the main activity of the second phase of the project. This was supported by Pripode. Researchers from the Dominican Republic participated in the research for the World Disaster Report, which gave them access to information and experience on disasters and disaster management in the different Caribbean countries of Cuba, Haiti, Jamaica and the Dominican Republic. This was supported by the International Red Cross and Red Crescent Societies.

All large equipment used for the project was supported by Flacso.
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