Name: Pia Paaby Hansen

Experience - total: 22 years

Conservation, biodiversity and climate change have been my recent areas of work particularly mainstreaming these issues into long term planning processes of local governments and territorial conservation offices, based on CC adaptation and risk decrease. I have worked in Costa Rica, El Salvador, Nicaragua, Honduras, Guatemala, Colombia, Bolivia and Venezuela, interacting with professionals in the engineering, social-anthropological, economical and financial, environmental and administrative fields, all of which have given me experience working in multidisciplinary groups and allowed me to acquire transdisciplinary skills. My professional background together with my work experience strengthens my ability to participate in the processes of introducing the "ecosystem approach" to biodiversity conservation, CC adaptation and human impacts definition.

EDUCATION (DEGREE AND SPECIALIZATION):

- B.Sc. Biology Universidad de Costa Rica 1983
- Ph.D., Tropical Ecology and Limnology University of California, Davis. 1988

LANGUAGE SKILLS:

Language	Reading	Speaking	Writing
English	Excellent	Excellent	Excellent
Spanish	Excellent	Excellent	Excellent
Danish	Good	Good	Regular

Scientific and Professional Publications:

- Alvarado, J.J., B. Herrera, L. Corrales, J. Asch y P. Paaby. 2011. Identificación de las prioridades de conservación de la biodiversidad marina y costera en Costa Rica. Rev. Biol. Trop. (June): 000-000.
- Paaby, P. 2008. Vacíos en los esfuerzos de conservación de la biodiversidad en aguas continentales de Costa Rica. Recursos Naturales y Ambiente 54: 28-36.
- Arias E., O. Chacón, G. Induni, B. Herrera, H. Acevedo, L. Corrales, J. R. Barborak, M. Coto, J. Cubero, P. Paaby. 2008. Identificación de vacíos en la representatividad de ecosistemas terrestres en el sistema Nacional de Áreas Protegidas de Costa Rica. Recursos Naturales y Ambiente 54: 21-27.
- Pringle, C. M.; F. Scatena, P. Paaby y M. Núñez. River Conservation in Latin America and the Caribbean. 2000. In: P. J. Boon, B. Davis y G. E. Petts (Eds.). Global perspectives on river conservation: Science, policy and practice. John Wiley and Sons.
- Paaby, P. 1999. The benthic macroinvertebrate community in the lotic systems draining the south Caribbean zone in Costa Rica. (Costa Rica) Rev. Biol. Trop. (Suplemento).
- Ramírez, A.; P. Paaby; C.M. Pringle y G. Agüero. 1999. Effect of habitat type on benthic macroinvertebrates in a tropical lowland stream, Costa Rica. Rev. Biol. Trop. (Suplemento).
- Paaby, P. and D.B. Clark. 1995. Conservation and local naturalist training programs (Costa Rica). Ch.13. pp.263-275. In S.K. Jacobson (editor). Wildlife Conservation: International Education/Communication Approaches. Columbia University Press.
- Paaby, P. 1995. Características físico-químicas de las aguas de los afluentes del Embalse Arenal y su relación con el fitoplancton en el Embalse. (Costa Rica) Rev.Biol.Trop. 43:139-149.

- Sanford, R. L., P. Paaby, J. Luvall y E. Phillips. 1994. The La Selva ecosystem: Climate, geomorphology, and aquatic systems. Ch. 1. In L. McDade, K. S. Bawa, H. Hespenheide and G. Hartshorn (Eds.), La Selva: Ecology and Natural History of a Neotropical Rainforest. Chicago Press, U.S.A.
- Paaby, P. 1994. The Organization for Tropical Studies: A method of education. International Wildlife Management Congress Proc., Utah State University.
- Paaby, P. y C. R. Goldman. 1992. Light and nutrient limitation of primary producers in a lowland Costa Rican stream. I. Chlorophyll, primary productivity and respiration. Rev. Biol. Trop.(Costa Rica) 40(2):185 198.
- Paaby, P., C.B. Clark and H. González. 1991. Training rural residents as naturalist guides: Evaluation of a pilot project in Costa Rica. Conservation Biology (E.U.A.) 5(4):542 546.
- Umaña, G. y P. Paaby. 1991. Limnology in Costa Rica. SILNEWS 6:31 May.
- Paaby, P. 1988. Light and nutrient limitation in a lowland costarrican stream. Tesis de Doctorado (Ph.D.), University of California, Davis. 194 p.
- Pringle, C. M., P. Paaby, P. D. Vaux y C. R. Goldman. 1986. In situ nutrient assays of periphyton growth in a lowland Costa Rican stream. Hydrobiologia (Alemania) 134: 207 213.
- Paaby, P. y D. E. Rojas. 1991. Ecología Acuática, Península de Osa, Costa Rica. Fundación Neotrópica. 35 pp.
- Vaux, P. D., C. M. Pringle y P. Paaby. 1984. A study of the feeding ecology of fish in La Selva streams. Organización para Estudios Tropicales.
- Paaby, P. y E. Phillips. 1983. Caracterización de la estructura de la comunidad de diatomeas perifíticas en tres quebradas de la Estación Biológica La Selva, Costa Rica. Organización para Estudios Tropicales.

Total Computer Literacy. Use of ArcView

PROFESSIONAL EXPERIENCE:

2011. Assessment of the Program to Support Environmental and Labor Compliance under CAFTA-DR. Ecoditt for USAID in Central America. Cassie Ann Hoffman, <u>choffman@ecodit.com</u>. El Salvador, Guatemala, Dominican Republic, Nicaragua, Costa Rica, Honduras. June-August.

2011. Compilation of scientific studies to support the creation of the National Park Los Acuíferos in the Tortuguero Conservation Area. Costa Rica for Ever-SINAC. Costa Rica. June-November. Pamela Castillo <u>pcastillo@costaricaporsiempre.com</u>

2011. Technical Support for Developing Climate Change Adaptation Guidelines. CATIE for CEM of the IUCN. May-August. Bernal Herrera <u>bernalhf@catie.ac.cr</u>.

2011. Climate change impact assessment on biodiversity and ecosystem services with an emphasis on protected areas. CATIE for SINAC-Costa Rica for Ever. March-September. Bernal Herrera bernalhf@catie.ac.cr.

2010-2011. Environmental system implementation in small milk enterprises ("MIPYMES"). Cabal-Nicaragua with CEE support. Shared field and technical coordination with Margarita Núñez. <u>margaritanf@hotmail.com</u>. August 2010-March 2011. **2010.** Elaboration of Project Document "Towards a development low in Carbon and Resilient to Climate Change" with a territorial approach in Nicaragua. PNUD-Nicaragua. Leonie Argüello leonie.arguello@undp.org June-September.

2010. Designing training modules: Coastal and marine biodiversity conservation. TNC-Costa Rica por Siempre. March-June. Fabian Sánchez <u>fsanchez@tnc.org</u>

2009-2010. Evaluation of investment and financial fluxes for climate change adaptation of the biodiversity and water sectors. Responsible for coordinating work for the water sector. October 2009-March 2010. GFA and FUNDECOR for MINAET and PNUD, Costa Rica. Julio Guzmán julioantonioguzman@gmail.com

2009. Data gathering in area of influence of infrastructure development and operation of Hydroelectric Project "El Salto – YY", Siuna, Nicaragua. Coordination of field work, quality control of data gathering and report elaboration (flora, reptiles, amphibians, mammals and fish) as well as a preliminary assessment of the fluvial geomorphology of the YY (WAY-Bambana) river and a final report. October-December. Nicaragua. Desirée Elizondo <u>dec@ibw.com.ni</u>

2009. Baseline study and environmental monitoring system in wildlife protected areas to measure the effects of tourism. National Park Fund, SINAC and IDB. March through July 2009. Guiselle Mendez guisselle.mendez@sinac.go.cr

2009. Freshwater classification and template uploading. IABIN – TNC. May through – September. November-December. Steve Schill <u>sschill@tnc.org</u>

2008- 2009. A comprehensive analysis of terrestrial, freshwater and marine biodiversity in Costa Rica: Insights for the development of an integrated conservation agenda. TNC-Costa Rica. Until March 2009. Bernal Herrera <u>bherrera@tnc.org</u>

2008. Freshwater gap analysis in Guatemala. The Nature Conservancy (TNC)-Guatemala. Estuardo Secaira <u>esecaira@tnc.org</u>

2008. Updating the current USAID/Honduras Biodiversity and Forestry Resources Assessment. USAID/MIRA. 5 weeks. Anne Lewandowski <u>ALewandowski@irgltd.com</u>

2008. Dredging Evaluation in 6 reservoirs in Costa Rica. Short term evaluation for ICE and IDB. 8 weeks. Completed by June 10th, 2008. Role: Freshwater tropical ecologist. Rapid Impact Assessment. Carlos Roberto Rodríguez Mesa <u>CRodriguezM@ice.go.cr</u>

2007-08 – Designing the Strategy for Filling the Gaps in Biodiversity Conservation both Terrestrial and Freshwater. Costa Rica. Role: Tropical Ecologist and Institutional Strengthening Specialist. Once the Gap analysis in a country is finished, the most important step is to define the road to filling these conservation gaps. My responsibility is to work with the personnel in Costa Rica's conservation areas and the central office (SINAC-MINAE) and develop the tools for them to be able to define an effective planning process. It should be completed in February 2008. Bernal Herrera@tnc.org

2007 - Introducing the Priority Sites Portfolio for the Conservation of Inland Water Ecosystems. Panamá, El Salvador, Nicaragua and Chiapas-Mexico. Role: Freshwater tropical ecologist. The final stage in the Mesoamerican portfolio development included the integration of the data into each of the countries process for GAP identification. I went to Panamá, El Salvador, Nicaragua and Chiapas in Mexico to present the results and analyze the process for the Gap analysis. Lenin Corrales lcorrales@tnc.org

2007 - Design of a strategy for monitoring the success of conservation actions in priority sites Program TNC-Costa Rica and a contribution to the analysis of conservation gaps of the protected area system in Honduras. Honduras and Costa Rica. Role: Ecologist. As a tropical ecologist I was hired to finalize the analysis of two of The Nature Conservation's long term conservation sites in Costa Rica; La Amistad and Osa. The analysis was done on the basis of pre-exiting information and preidentified parameters for the monitoring of biodiversity elements. Two documents were generated and are currently being applied in the field. Bernal Herrera <u>bherrera@tnc.org</u>

2007 – <u>Writing</u> of the Final report for the conservation gap analysis for the National System of Conservation Areas, Costa Rica. The Nature Conservancy - Sistema Nacional de Áreas de Conservación, Costa Rica. Vol. 1. Land Systems and <u>Developing</u> Vol. 2. Freshwater Ecosystems. Costa Rica. Role: Ecologist. As an ecologist I was to prepare the final report and do some of the final analysis in the Gap analysis work. It entitled checking the data and running the shapes and comparisons to identify conservation gaps. Additionally, I did Vol.2. Identifying the gaps in conservation regarding biodiversity in freshwater ecosystems. The documents were published in October 2007. Bernal Herrera bherrera@tnc.org

2005-06 - Development of the Freshwater Conservation Sites Portfolio in Mesoamerica as well as supporting the Gap Analysis in Costa Rica. Role: Freshwater ecosystems specialist. The project was inserted in the development of the Mesoamerican Portfolio of conservation sites. I was in charge of the freshwater ecosystems. The project lasted 18 months and resulted in a portfolio (maps) and a book which will be published in December 2007. The identification of priority sites involved working with experts in the various countries in Panama, Costa Rica, Nicaragua, El Salvador, Honduras, Guatemala and Mexico (Chiapas). Lenin Corrales lcorrales@tnc.org

2005 - Ecological Effects of pineapple cultivation in "el valle del río Grande de Térraba" in Costa Rica. Role: Consultant in the area of both aquatic and terrestrial ecology. This project was done for The Nature Conservancy (TNC) analyzing the agroindustrial activity of pineapple in Costa Rica (PINDECO). During the work I had to check in the field and with current and available information make an analysis of effects of the activity as a whole, on the freshwater and terrestrial ecosystems. Carlos Borge seder@ice.co.cr

2005 - Middle Term Evaluation for the Second Phase of the Socio-Environmental and Forestry Development Program (POSAF-MARENA, Nicaragua). Nicaragua. Role: Team coordinator for GEA-INDES. A team of seven specialists came together to do the middle term evaluation for the second phase POSAF project in MARENA. As coordinator I was leading the team both in the field checking on the work done, providing the tools to evaluate the information and doing the synthesis for the final report. Mauricio Leonelli indes@ibw.com.ni

2004-05 - Institutional Strengthening Program for Five Municipalities in northern Nicaragua. Nicaragua. Role: Technical Assistance, Environmental Specialist. Implementation of a "sistema municipal de gestión ambiental" (SIMGA). Andrés Blackwell <u>andres@cablenet.com.ni</u>

2004 - Programa Integral de Manejo de Cuencas Hidrográficas, Agua, y Saneamiento (PIMCHAS). ACDI-SOGEMA-Programa Bolívar. Nicaragua. Role: Technical Assistance, Environmental Specialist. Gathering of biophysiscal and cartographical information for the northern zone of Nicaragua and the preparation of a classification of drainages methodology. Andrés Blackwell andres@cablenet.com.ni

2004. Environmental analysis for the Development of the Management Plan of the International Park La Amistad-Costa Rica, for The Nature Conservancy. Costa Rica. Role: Environmental Specialist, SEDER-Costa Rica. The project had the objective of providing the necessary information regarding the environment (biological, ecological and anthropological) for the design of the management plan of the Park. I was in charge of the ecological diagnosis. Carlos Borge seder@ice.co.cr

2004. "Strengthening of the Environmental Impact Assessments in Guatemala, Nicaragua and Costa Rica". Role: Environmental Impact Specialist - Technical support for IUCN-Government of Holland 2004 as part of an external evaluation mission for the project "Fortalecimiento de las Evaluaciones de Impacto Ambiental en Guatemala, Nicaragua y Costa Rica". This work was done with Margartia Núñez Ferrera. The work involved an evaluation of impacts of the projects, objective and goal achievement as well as the definition of the developed process. Grettel Aguilar grethel.aguilar@iucn.org

2003 - Regulatory and institutional responsabilities for the fishing sector around Lake Nicaragua, in the communities of Puerto Díaz, El Nancital, Morrito, San Miguelito and San Carlos. Nicaragua. Role: Environmental Specialist. Technical Advisor to AdPesca, designing a procedure to apply a strategy to fulfill needs in norms, regulations and coordination between central sector, municipalities and departments, and international cooperation efforts. Providing a planning scheme to apply the recommendations. 5 weeks. Isolina Sánchez promociontejidoeco@aecinicaragua.org.ni

2000 - Consultant in development and realization of the workshop on freshwater ecosystems of Central America: "Biodiversity and Conservation Sites". Role: Environmental Specialist. The work consisted of identifying projects and research being conducted in the Central American region in aquatic ecosystems, identifying key personnel in these processes and databases. During the workshop identified ecological criteria to define key aspects of aquatic ecosystems and conservation in the definition of sites relevant to the conservation and development of future projects. Rafael Calderón, e-mail: rcalderon@tnc.org

1999-2002 - **Project Institutional Strengthening. PASMA. Programa de Apoyo al Sector Medio Ambiente. DANIDA-MARENA. Nicaragua. Role: Environmental Specialist.** Continuation of work initiated in 1999 including two different Direcciones Generales: Calidad Ambiental and Biodiversidad y Recursos Naturales. I was functioning as a Long Term Consultant which included being a link between the source of funds, the Danish Embassy, and the institution receiving the support. To be able to monitor changes and evaluate the efficiency and efficacy of the work, a base line study based on indicators for evaluation was designed from the beginning. The process of support involved an application of the indicators and evaluate their usefulness. 2.5 years. Rasmus Odum, Director de Proyecto COWI-SOGEMA, e-mail: rao@cowi.dk

1999 - Process specific reorganization of the directorates of the General Directorate for Biodiversity and Natural Resources MARENA and definition of Annual Operating Plan and the identification of priorities for action. Draft Long Term (PLP) Nicaragua, para MARENA y DANIDA. Role: Environmental Specialist. Technical Advisor in the process of reorganizing the specific addresses of the Directorate General for Biodiversity and Natural Resources MARENA and definition of Annual Operating Plan and the identification of priorities for action. Draft Long Term (PLP), Nicaragua to MARENA and DANIDA, Work involved in defining the optimal functional structure for the General Directorate for Biodiversity MARENA, considering its institutional mandates, personnel and the budget was allocated. Likewise defined an action plan for the long term and the POA by the year 1999. Carlos Rivas crivas@ibw.com.ni **1999** - Process specific reorganization of the directorates of the General Directorate of Environmental Quality and MARENA definition of Annual Operating Plan. Draft Long Term (PLP), Nicaragua to MARENA and DANIDA. Nicaragua. Role: Environmental Specialist. Technical Advisor in the process of reorganizing the specific addresses of the General Directorate of Environmental Quality and MARENA definition of Annual Operating Plan. Draft Long Term (PLP), and Nicaragua to MARENA DANIDA The work entailed in defining the optimal functional structure for the General Directorate of Environmental Quality MARENA, considering its institutional mandates, personnel and the budget was allocated. Likewise defined an action plan for the long term and the POA for the year 1999. Denis Fuentes, Director de Planificación MARENA, e-mail: dgp-marena@sdnnic.org.ni

1999 - Analysis of projects executed by MARENA, historical and economic development and impacts of the same in the capacitate technical and human institution, Nicaragua, and DANIDA for MARENA. Role: Environmental Specialist. Technical Advisor of the Draft Long Term (PLP). Analysis of projects executed by MARENA, historical and economic development and impacts of the same in the capacitate technical and human institution, Nicaragua, and for MARENA DANIDA The work entailed an identification of all projects that had seconded the MARENA defining funding source, duration, targets and institutional commitments. It is also developing a historical analysis of the external assistance received by the MARENA over a period of 5 years. Denis Fuentes, Director de Planificación MARENA, e-mail: dgp-marena@sdnnic.org.ni

1999 - Extraction of material from a river for the construction of a Hydroelectric power plant, Peñas Blancas. Costa Rica. Role: Team Leader and Environmental Impact Specialist.

Extraction of material from a river for the construction of a Hydroelectric power plant, Peñas Blancas. EIA. Consulting Company MeRida S.A.-Costarrican Institute of Energy (ICE). The task consisted of coordinating 4 specialists for the identification of mitigating measures of the contaminating and altering effects of the activity within the river and integrating the assessments into the design of an implementation plan. Margarita Núñez margarita@hotmail.com

1998 - Project Institutional Strengthening. Nicaragua. Role: Environmental Specialist. Long Term Project DANIDA-MARENA. Analysis of projects developed by the MARENA, historical and economic development and impact of their presence on the availability of human and technical resources in the institution. 1.5 months. Denis Fuentes, Director de Planificación MARENA, e-mail: <u>dgp-marena@sdnnic.org.ni</u>

1998 - Capacity Building at the Municipal Level in Venezuela. Role: Environmental Specialist. Geographical Information Systems and Cadaster Management Programs. In charge of the Municipalities found in Tachira and Merida. A World Bank funded project. The capacity building involved the introduction of a new tool for decision making and, initially, to manage their cadaster data base. 2 months. I had been involved in the design of the project and in the introduction of the environmental variable of projects in 1997 for 4 months. José Núñez Ferrera jose@uniderma.net

1997-98 - Construction of Patuca II Hydroelectric Power Plant. EIA Honduras. Role: Environmental Impact Specialist. Member of Consulting Group. Construction of Patuca II Hydroelectric Power Plant. EIA. Consulting Company Bioconsult S.A., Honduras. I was a member of a multidisciplinary local team of around 15 people including engineers, social-anthropologists, other environmental specialists, economists, planners, etc. My task involved the identification of area of influence of the activities surrounding the construction of a 195 MW plant in regard to all the aquatic systems pre- and post-construction. This involves the analysis of solid waste, waste waters and behavior of a newly created aquatic system in view of an increasing human development. Rafael Calderón rcalderon@tnc.org **1998** - Design: database geo-referenced for managing municipal land Venezuela. Role: Environmental Specialist. Consultant responsible for the incorporation of the environmental variable in the project "Design: database geo-referenced for managing municipal land" for CCBinary and World Bank, Venezuela. The work was to assist the staff in charge of system development in the integration of environmental criteria in zoning and municipal land base. Likewise received training in the use and management of Geographic Information Systems. José Núñez Ferrera jose@uniderma.net

1997-98 - Heart of Palm Processing Plant. Costa Rica. Role: Project Leader and Environmental Impact Specialist. Heart of Palm Processing Plant. EIA. Consulting Company MeRida S.A.-FUNDECA-CARE. Costa Rica. Coordinating 7 specialists. The heart of palm is processed into a terminated canned product. Thus the analysis involved management of solid waste and residual process waters. It also involved the building capacity of the members of the producers as to integrate the costs of "clean technology" into their investment. They finally committed themselves into initiating the process of acquiring a "Green Seal" to compete in the European markets.

1997-98 - Construction of a La Virgen Hydroelectric Power Plant. Heredia, Costa Rica. Role: Project Leader and Environmental Impact Specialist. Construction of a La Virgen Hydroelectric Power Plant. EIA. Consulting Company MeRida S.A.-Energy Enterprise of the Province of Heredia, Costa Rica. The task consisted of coordinating 10 specialists for the identification of mitigating measures of the contaminating and altering effects of the activity within the rivers and affected population, and integrating the assessments into the design of an implementation plan. This type of project involves the identification of engineering solution that incorporates the environmental needs.

1997 - Course ''Water Quality, Development Projects Energy and the Environment,'' El Salvador. Role: Environmental Specialist. Consultant for the design and implementation of the Course "Water Quality, Development Projects Energy and the Environment" to the staff of the Executive Committee on Energy Rio Lempa (CEL), Ministry of Environment (SEMA), and other government institutions in El Salvador, for IDB.

1996-97 - Study of the freshwater area of Las Crucitas, Alajuela, Costa Rica. Role: Coordinator and Environmental Impact Specialist. For the Study of the freshwater area of Las Crucitas, Alajuela. Lifting of the Base Environmental freshwaters for the Environmental Impact Study of Mining Project Crucitas.

1996 - Explotation of the Las Crucitas Gold Mine, EIA. Placer Dome-Costa Rica., Costa Rica. Role: Environmental Impact Specialist. Member of Consulting Group. Explotation of the Las Crucitas Gold Mine, EIA. Placer Dome-Costa Rica. Consulting Company MeRida S.A. My task involved the identification of area of influence of the activities surrounding the exploitation and closure of the open pit gold mine in regard to all the aquatic systems pre- and post-exploitation. This involved the analysis of solid waste generation, polluted waste waters, acid generation and behavior of a newly created treatment aquatic systems in view of an increasing human development and closeness to the border with Nicaragua.

1996 - Construction of Pacuare Hydroelectric Power Plant. EIA. Consulting Company MeRida S.A.- Costarrican Institute of Energy, Costa Rica. Role: Project Leader and Environmental Impact Specialist. Construction of Pacuare Hydroelectric Power Plant. EIA. Consulting Company MeRida S.A.- Costarrican Institute of Energy, Costa Rica. The task consisted of coordinating 9 specialists for the identification of mitigating measures of the contaminating and altering effects of the activity within the rivers and affected population (including indigenous groups), and integrating the assessments into the design of an implementation plan. This type of project involved the identification of engineering solutions that incorporates the environmental needs. This project in particular was critical because of the concurrent planning of the construction of two more hydropower plants in the watershed. **1995 - Environmental Audit of the Energy Sector in El Salvador. AGRA Earth and Environment. El Salvador. Role: Environmental Impact Specialist.** Member of Consulting Group. Environmental Audit of the Energy Sector in El Salvador. AGRA Earth and Environment. The energy sector included all the thermal (5), the geothermal (3) and hydropower plants (4) in El Salvador; thus, the analysis of the management of fuel (thermal plants), the generation of toxic waste (geothermal plants) and the effects on the functioning of an entire watershed and coastal systems (4 power plants on the same river) had to be incorporated. As a member of the team we analyzed the Energy Public Sector as a unit.

1995-96 - **Project** "**Coastal Ecosystems: aquatic macroinvertebrates as indicators of land-use, variable (water quality).**" **Region Sur-Caribeña of Costa Rica. Role: Principal Investigator and Environmental Specialist.** Principal investigator of a project located in Southern Caribbean of Costa Rica. The main objective concentrated on the analyses of the effects of land use cover on the functioning of the streams draining these coastal watersheds. Additionally, to the design and field work, Dr. Paaby designed a monitoring program for local communities to apply. The information generated from this monitoring was to be used as triggers for land – use change or management.

1992-94 - Construction of Guayabo and Siquirres Hydroelectric Power Plants, Costa Rica. EIA. Role: Environmental Impact Specialist. Member of Consulting Group. Construction of Guayabo and Siquirres Hydroelectric Power Plants, Costa Rica. EIA. Consulting Company CAURA Engineers of Venezuela. I was a member of a multidisciplinary team of at least 25 people including engineers, social-anthropologists, other environmental specialists, economists, planners, etc. My task involved the identification of area of influence of the activities surrounding the construction of a 217 MW plant in regard to all the aquatic systems pre- and post-construction. This involves the analysis of solid waste, waste waters and behavior of two newly created aquatic systems in view of an increasing human development. Two watershed were involved in the project and the transport of most water of one river to another. I was part of the design, negotiation and commitment of minimum water-flow bellow both dams, group integrated by ecologists, engineers, and economists. In addition, I was part of the identification of mitigating measures of the contaminating and altering effects of the activity within the river and integrating the assessments into the design of an implementation plan.

1992-93 - Creating a database and setting standards for the design and implementation of a monitoring program for water quality. Costa Rica. Role: Environmental Impact Specialist. Consultant Aquatic Ecology, Creation of a database and setting standards for the design and implementation of a monitoring program for water quality.

1990-91 - Rapid Ecological Assessment: Design of Methodology in Southern Costa Rica. WWF-Neotropica, Costa Rica. Role: Environmental Impact Specialist. Member of Consulting Group. Rapid Ecological Assessment: Design of Methodology in Southern Costa Rica. WWF-Neotropica, Costa Rica. My main task was to integrate myself into the working of a multidisciplinary group that was to assess the environmental quality of this region, through the development of techniques and generation of information. The task had to integrate an area that consisted of a mosaic of altered land used as cattle ranching, forestry plantations, some agriculture, pristine forest with slash and burn activities, and protected areas in the form of national parks, biological and indigenous reserves.