

FINAL TECHNICAL REPORT

*A Planning Grant
for the proposed project:*

**Resistance, resilience, and change in response to fire
in tropical moist ecosystems in the
Chimalapas region of Oaxaca, Mexico**

Submitted on October 1, 2001

*funded by DFID and
administered by NRIL*

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ACRONYMS:

CAPLAC – Community Capacity Building and Planning, A.C.
DFID – Department for International Development of the United Kingdom
GEF – Global Environment Facility
IDS – Institute for Development Studies, Sussex University
IEEO – State Institute of the Environment of Oaxaca
ISU – Iowa State University
ITAO – Technological Institute of Agriculture of Oaxaca
NGO – non-governmental organization
NRIL – Natural Resources International, Limited
SEMARNAT – Secretariat for Natural Resources of Mexico
SLU – Agricultural University of Sweden
UNDP – United Nations Development Program
WWF – World Wildlife Fund

Executive Summary

This final technical report presents the results of a 3-month project extension provided by NRIL to complete the planning phase for a collaborative project between local communities and the external research team in tropical moist forests affected by extensive wildfires in the Chimalapas region of Oaxaca, Mexico.

The long-term goal of this project is to assess the ecological and social implications of the fires that occurred in the Chimalapas region in 1998, based on a participatory and interdisciplinary approach integrating applied research with community project development, and to facilitate the development and implementation of several community-based sustainable natural resource management projects. The details on the background, objectives, and previous advances for the initial 9-month of the planning phase for this project can be found in the Final Technical Report submitted to NRIL/DFID on October 31, 2000.

The primary purpose of this project planning phase was to plan the collaborative project between local communities, the external project team, and other direct stakeholders using a participatory and interdisciplinary approach to develop targeted ecological research and pilot community-based projects and develop a joint funding proposal. The project planning process included four key activity areas: (1) planning workshops and meetings, (2) field visits to assess fire-affected areas and develop the research approach, (3) collection and synthesis of baseline field data, and (4) preparation of a full project proposal to submit to relevant funding agencies.

In summary, the key outputs obtaining during this final 3-month period of the planning phase include:

- “Community Acts” approved and signed by the four communities participating in the project, indicating each community’s decision to develop a specific project and participate in its planning and implementation.
- Elaboration and signing of agreements of collaboration between the participating communities, academic institutions, and supporting government institutions and NGOs.
- Community proposals produced by each of the four communities, based on a series of community workshops, meetings, and field visits.
- Field sites selected for the ecological research, baseline data collected, and the research objectives, hypotheses, and experimental design developed.
- Proposal submitted to and approved by Iowa State University for funding to strengthen collaboration between the Technological Institute of Agriculture of Oaxaca and ISU (June 2000 – May 2001).
- PDF-A project proposal submitted to and approved by the Global Environment Facility/UNDP-Mexico City Office for completing the final project brief and initiate project activities (August 2001 – January 2002).

The above outputs comprise the necessary components for completing the final project proposal. The final synthesis and integration of these components and their incorporation into the funding proposal will be conducted during a joint workshop between the Mexican and external project collaborators to be held at Iowa State University during October 7-20, 2001.

Background

* See Appendix III of this Final Technical Report.

Project Purpose

The primary purpose of this project planning phase was to develop a proposal for a collaborative project between local communities and the external research team to conduct targeted ecosystem research on the recovery of fire-affected tropical forests in the Chimalapas region with direct applications to promoting community-based natural resource management and conservation strategies. A participatory and interdisciplinary approach based on the integration of ecological research, testing of pilot community projects, and facilitation of local management plans is being utilized to achieve this goal. Specifically, the planning phase focused on four key activity areas: (1) planning workshops and meetings among project participants, (2) field visits to assess fire-affected areas and develop the research approach, (3) collection and synthesis of baseline field data, and (4) joint elaboration of a full project proposal and submission to relevant funding agencies. In the long-term, this project seeks to assess the ecological and socio-political implications of the fires that occurred in the Chimalapas region in 1998, and to facilitate the development and implementation of effective natural resource management and conservation initiatives by local communities.

Research Activities

The project planning activities conducted during the extension period of the project planning phase were as follows:

1. Identification of study sites, development of the experimental research design, and collection of baseline data from the selected study sites in the fire-affected moist tropical forests; development of research objectives and working hypotheses.
2. Project planning workshop conducted with the 4 participating communities to assess needs and priorities, and select potential community projects.
3. Community agreements on project selection and planning process reached in the assemblies, documented through community acts and a signed Agreement of Collaboration.
4. Community project proposals developed by each community based on a series of workshops, meetings, and field visits, accompanied by the external research team.

Several collaborators (in addition to the initial participants of the research team itself) were involved in conducting the above-mentioned activities and contributed their expertise within different aspects of the project. Several of these collaborators were already introduced in the previous Technical Report, while the following individuals were recruited to assist with the planning activities during the project extension:

1. Beatriz Solís (agronomist) and Aaron Ramírez Lara (anthropologist; Capacitación y Planeación Comunitaria, A.C.). Supported community processes related to planning and capacity building, and played an important role in facilitating the social and community participation aspects of the planning process phase, especially in the “Zona Centro”.

2. Juanita Sandoval (community facilitator). Assisted with community project planning workshops and facilitated the development of the community project proposals.
3. Collaborators from Iowa State University: Ricardo Salvador (agronomist), Cornelia Flora (sociologist), Jan Flora (Sociologist), Patricia Negreros-Castilla (forestry, agroforestry), Michael Whiteford (anthropologist). Participated in field assessments and development of collaborative research proposal.
4. GEF/UNDP/SEMARNAP offices in Mexico City: Olav Lundstol, Jonathon Ryan, Horacio Bonfil – provided support in development of GEF PDF-A proposal, and in working towards producing the final project brief.

Several additional institutions have also contributed important resources and in-kind support for the project activities conducted during the planning phase, and which were essential to attaining the progress achieved thus far:

1. SEMARNAP, WWF-Oaxaca, and IIEEO have participated in numerous discussions related to project planning and analysis of current events and the overall situation in the Chimalapas region, and have provided logistical support through use of vehicles for field visits and communication assistance.
2. The municipality of San Miguel Chimalapas and their communities provided local people to accompany and assist us with the community meetings and workshops, helped make arrangements for travel, accommodations, and space for gatherings, and facilitated communication among the research team and the local communities.
3. The collaborating academic institutions (ITAO, ISU, SLU, and IDS) provided support through the participation of their researchers in the project planning process, and well as contributing towards overhead and logistical assistance.

Modifications:

One of the original objectives of this planning phase was to initiate project planning activities with the municipality of Santa María Chimalapa. This has not yet been possible due to territorial conflicts and intense political negotiations occurring during the entire period of this project planning phase in Santa Maria Chimalapa. It appears that the final negotiations for a resolution are currently in progress, so we are hopeful that project planning activities with Santa María Chimalapa can begin in the coming months. Based on a few preliminary meetings and communications with the municipal authorities, we have received several indications that they are interested in exploring these possibilities with our team.

Outputs

Due to the nature of this project being specifically focused on planning, most of the results and products are in the form of field reports, workshop proceedings, literature reviews, agreements of collaboration, and other dissemination materials related to the planning activities. A summary of these outputs is presented in the following table, organized according to product type.

| REFERENCE TYPE CITATION/PRESENTATION DETAILS | STATUS |
|--|-------------------------------|
| DISEMINATION REPORTS AND MATERIALS | |
| Proceedings of the community project planning workshop (January 2001) | Appendix I |
| Community project proposals completed by 4 pilot communities in the municipality of San Miguel Chimalapa: | Appendix II |
| Project report on the ecological research including results of preliminary data and development of hypotheses and experimental design: "Preliminary research results: Ecological effects of fire on tropical cloud forest in the Chimalapas Region; Oaxaca, Mexico". | Appendix III |
| Presentation to collaborating institutions in Oaxaca on the advances of the planning process for the community projects and the ecological research (powerpoint presentation – June 21, 2001). | Appendix IV |
| Acts of the community assemblies: Signed community acts indicating each community's selection of a community project that will be planned and implemented in collaboration with the external project team. | Appendix V |
| Agreement for the Planning and Collaboration of the project "Evaluation and Monitoring of the Ecological Impacts of the Fires of 1998 in Los Chimalapas, Oaxaca" (Signed by participating communities, researchers, and institutions) | Appendix VI |
| Agreement of Collaboration in Research and Education between ITAO and ISU (Signed by the participating institutions) | Appendix VII |
| Project proposal (PDF-A) submitted to and approved by the Global Environment Facility (August 2001 – January 2002) | Appendix VIII |
| Project proposal submitted to and approved by the Iowa State University, Council on International Programs proposal (June 2001 – May 2002). | Appendix IX |
| Masters thesis: Einar-Naess, L. The effect of fire on soils in tropical moist cloud forest in the Chimalapas Region of Oaxaca, Mexico. Masters thesis: Department of Forest Sciences, Agricultural University of Norway. 1432 Ås, Norway. | Appendix X (Abstract only) |

Contribution of Outputs

The results obtained during the planning process conducted to develop this project contribute to DFID's long-term goals by providing guidelines for developing participatory planning approaches to integrate applied research and community natural resource management. In particular, the following key findings and observations can be summarized:

1. The development of an approach for integrating applied ecological and social research with projects that address more immediate needs of facilitating management and conservation initiatives in local communities. While the former is primarily aimed at enhancing the knowledge base for improving natural resource management, having intermediate to long-term applications, and often externally driven, the latter involves the support of production-oriented projects and conservation initiatives for improving quality of life, providing direct benefits in the short term, and primarily locally- or community-driven.

2. The participatory planning process between the research team and local communities must have a flexible and iterative approach that allows for the incorporation of and adaptation to new knowledge, ideas, and experiences resulting from the dynamic planning process itself. This also includes the importance of understanding and respecting local traditions and customs in terms of decision-making, time requirements, and communication.
3. The complexity of including the participation of different stakeholders having varying interests and opinions requires a continual process of discussion, negotiations, and analysis in order to create the conditions necessary for developing agreements on the approach for working towards common goals.
4. The value of working as an interdisciplinary team in the project planning stage for enhancing the team's capacity to analyze the situation and develop a project approach that integrates knowledge and methodologies from different disciplines from both the natural and social sciences.
5. Community involvement in the project planning process is an important component in building community ownership of the project, as highlighted by the active role in defining project objectives and activities, and initiating a process of negotiation and consolidation towards external entities.
6. Promotion of communication between institutions and local stakeholders at the community and municipality levels during the beginning stages of project development has been useful in establishing common goals and facilitating joint initiatives, emphasizing the importance of bringing together different stakeholders in research from beginning, ensuring transparency and commitment to participatory approaches. These developments also reflect a potentially important role and utility of an external research group in catalyzing from the "outside" collaborations among diverse stakeholders, and possibly even diffusing existing conflicts that often create obstacles for achieving common objectives.
7. The involvement of a conventional academic institution at the local level (ITAO) within the participatory planning research, and including multiple stakeholders, as proven to be an effective mechanisms for enhancing interdisciplinary and participatory approaches to research, and which may have significant long-term impacts on local educational structures, as well as having applications to solving natural resource problems in the region.
8. Finally, the participatory project planning process carried out thus far as described above has consolidated interest by various funding agencies and collaborating institutions in supporting the continuation of the project on a long-term basis, and we anticipate that this will be confirmed in the near future.

The series of workshop proceedings, field reports, and other dissemination materials produced during the project planning phase provides information about the experiences gained and lessons learned, and are freely available to interested groups or individuals. A scientific publication documenting the results of the preliminary research on the effects of fire in tropical moist forests in the Chimalapas is currently in progress. These results

provide the foundation for initiating the next phase of the project, for which we are currently in the process of soliciting funding support. This next phase will involve the implementation of the community projects and the ecological research, including capacity building activities with the communities on technical and organizational aspects related to both of these project components. The results of the project will be disseminated in a on-going manner through workshops with local communities, as well as appropriate dissemination materials and/or presentations developed for diverse stakeholders and decision-making groups. Research results will be published in recognized scientific journals. A separate series of publications will be aimed at disseminating the process and results of the participatory research approach being developed in this project, with the aim that this experience can provide a useful model for other programs having similar goals.

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También queremos reconocer el valioso apoyo operativo y asistencia brindados durante este fase de la planeación del proyecto por las siguientes instituciones: la Secretaría del Medio Ambiente, Recursos Naturales, y Pesca (SEMARNAP-Oaxaca), el Instituto Estatal de Ecología de Oaxaca (IEEO-Oaxaca), el Fondo Mundial para la Naturaleza-Programa Oaxaca (WWF-Oaxaca), la Sociedad para Estudios de los Recursos Bióticos de Oaxaca (SERBO, A.C.), y la Procuraduría Agraria de Oaxaca.