MONITORING AND EVALUATION PLAN FOR THE SUSTAINABLE USES OF BIOLOGICAL RESOURCES PROJECT (SUBIR) USAID/ECUADOR

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Monitoring and Evaluation Plan

for the

Sustainable Uses of Biological Resources Project (SUBIR)

USAID/Ecuador

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GENESYS

Sustainable Uses for Biological Resources Project (SUBIR)
Monitoring and Evaluation Plan

I. Introduction

The 10-year FY-1992 SUBIR Project is the flagship project for USAID/Ecuador's Strategic Objective 5 (SO5), to "slow the loss of biodiversity by accelerating a transition from resource mining to resource management in and around selected protected areas." The project will move toward this goal by seeking "to identify, test, and develop ecologically and socially sustainable resource management models in selected protected areas and their buffer zones to preserve biodiversity and improve the economic well-being of local communities through their participation in the management of natural resources" (purpose statement). SUBIR is funded through a US$15 million grant from USAID to a consortium of non-profit organizations (CARE, The Nature Conservancy (TNC), and Wildlife Conservation International (WCI)), and a US$5 million matching fund (in cash and kind) from consortium members and the GOE. The collaborating GOE institution is the Subsecretariat of Forestry and Renewable Natural Resources (SUFOREN) in the Ministry of Agriculture.

The project has five major components: organizational strengthening, protected areas management, ecotourism development, improved use of land and biological resources, and research and monitoring. In addition, the project envisions a "program" to seek interorganizational collaboration for conflict resolution and support for policy reform. The central office in Quito is responsible for management of the five components and for insuring integration among them. CARE manages the organizational strengthening and improved land use components, TNC manages the protected areas management and ecotourism components, and WCI is responsible for the research and monitoring component. The research and monitoring component focuses on basic and applied biological and ethnobiological research in the field and is not concerned with monitoring project activities per se.

During the first phase (three years), the project will work in and around three protected areas, Yasuni National Park (PNY), Cayambe-Coca Ecological Reserve (RECAY), and the Cotocachi-Cayapas Ecological Reserve (RECC). Field activities will be designed and carried out in collaboration with local community and regional organizations, and implemented through contracts with NGOs, development organizations, government organizations, and individuals. Field operations will be supervised out of three regional offices in the project sites, staffed by a regional coordinator, a social promoter, and an office administrator. The activities for each region are being developed in response to the particular problems in the area and

the perceived needs of the residents. All five components will not necessarily operate in each of the three regions.

II. Purpose of the Monitoring and Evaluation Plan

The information gathered through the SUBIR monitoring and evaluation plan will serve several ends: (1) to measure the impact of the Mission program at the strategic objective and program output level; (2) to measure impact and progress at the project level, for USAID and project managers, and for the USAID semi-annual reports and project authorizations (at three year intervals); and (3) to adjust project implementation at the local level. SUBIR has a "rolling design", meaning that the details of the implementation plan will evolve through interactions in the field. Monitoring has been built into project design as the foundation for this flexibility.

SO5 Tree: Because SO5 rests almost exclusively on the SUBIR project, all data for the indicators of the SO5 tree will come from data sets developed by SUBIR (except measures related to national policy formulation.) Both the project and SO5 rest on the assumption that change in land use practices will slow the loss of biodiversity. Further, the project assumes that (1) it can develop economically attractive and socio-culturally acceptable models, (2) residents will adopt non-destructive land use practices that are economically attractive, and (3) with increased local economic diversity and improved technology, residents will opt for intensive rather than extensive land use.

The SO indicators are measures of biodiversity and land management, and therefore are based on land area. The three indicators are: "(1) Change in abundance and distribution of species indicating diversity; (2) Change in land cover in and around selected protected areas; (3) Percent of land area under non-destructive management in and around selected communities." During 1992, SUBIR will collect the baseline information for the SO indicators under three components, Improved Use of Land and Biological Resources, Protected Areas Management, and Research and Monitoring. Data to measure change will be collected as a part of SUBIR project evaluations, every three to five years.

The essential link between human behavior (land management practices and economic activities) and land use is tapped by the program outputs, measured by people-level indicators. These data will be collected by each component of the project as indicators at the project purpose level. While two of the three indicators at the SO level are regional (in and around selected protected areas), the people-level indicators are community measures, since the purpose of SUBIR is to develop community models. The project purpose includes no explicit expectation of regional impacts. Baseline data will be collected as the first step in each local

community program.

Project management: SUBIR is organized and managed vertically by component. The five components all contribute to the project purpose but have separate "end of project status" statements in the logframe. Although all components are operating in the same three geographic regions (and in most cases, in the same communities), the project paper and the annual workplans, objectives, inputs, and outputs are divided by component and not by region. Further, separate components are associated with different consortium organizations for management and budget purposes.

The horizontal integration of the project across components is less concrete, and presents project management with three coordination problems that the monitoring and evaluation system should address. First, while each of the organizations in the consortium is pursuing a particular and somewhat separate task, the anticipated project impact depends upon coordination and links among these tasks. Second, SUBIR has adopted a decentralized implementation structure in which community-level activities and research tasks will be contracted out to a myriad of organizations and individuals. Third, SUBIR will be managing activities simultaneously in ecologically, socially, and ethnically diverse and geographically widespread areas.

To some extent, the linkages across components will occur through formal and informal personal interactions among central office and regional staff. The monitoring and evaluation system should reinforce this process through the types of data collected, the way the data are stored, and the kinds of analysis planned.
Gathering the pieces of information for the indicators is only the first step. The next step of analysing the data and feeding it back into the project is equally important, especially when information gathered under one component is critical to the operation of another.

Analysis and reporting should be explicitly built into the management structure and project workplan. To effectively support the project management, the monitoring and evaluation plan should be backed up by (1) a computerized, user-friendly database, (2) equipment for data management in the regional offices, and (3) staff time and skills for analysis.

Monitoring information should report what is being done, whether planned activities are being carried out and at what cost. The monitoring data must be uniform across contractors, regions, and to some extent activity, as a means of assuring quality of services, aggregating for the project as a whole (for assessing project impact and for meeting A.I.D. reporting requirements), and making comparisons across "models". A data

information system should be set up to facilitate coodination across project components (and across consortium members' tasks) at both the Quito and the regional level by emphasizing the connections among the components, and by allowing cross-tabulation and analysis of indicators.

Because the project is decentralized, it will inevitably generate numerous pieces of information. For this information to be useful at the central office level, some of it must be aggregated periodically at the regional level. For it to be useful to the USAID project manager and to GOE sponsoring institutions, some aggregation and analysis must be carried out by the CARE project coordinator. It is essential that the component managers in Quito, and particularly the CARE project coordinator explicitly budget time for the analysis of monitoring information, for assimilating it into programming, and for disseminating the information.

Activity implementation: SUBIR has opted for a participatory rolling design at the local level. In theory, this design will maximize the input of local community and regional organizations, of interested NGOs, of government organizations, and of individual researchers. If all of these people are to have a part in project implementation, they also must have a stake in collecting and using the monitoring information. The monitoring plan should be discussed with the counterpart organizations to insure that they can use the data they will be reporting to SUBIR.

The rolling design also requires that some data aggregation and analysis of data from different components be done at the local level so that it can be fed back into the programs directly at regular intervals. The staff of the regional office must have the skills and the time to activate this "feedback" process, in conjunction with local counterparts and collaborators. The number of activities within each component makes it impossible for the component manager in Quito to assume this local coordination task in each of the three regions. Further, an essential part of the local feedback will be the linkages across components in the communities.

In general, some information needs to aggregated, analysed, and used at each level of the management structure. The project should try to avoid bottlenecks in processing and analysing data by aggregating pertinent data at each level so that management at that level can access and use it.

III. The Monitoring and Evaluation Plan

The monitoring and evaluation plan is presented in five matrices. Like the workplan and management structure, it is organized by component, and by activity within component. The

matrix format of presentation is useful in accomodating the large quantity of information required by the decentralized structure, and particularly, in pointing to gaps in the plan and to personnel responsibilities for management and reporting. Some activities and reports appear in more than one matrix. These activities might serve as a focus for integrating across components.

Each matrix is accompanied by a short narrative to flesh out the information in the boxes, note additional work needed in the plan for that component, and define the terminology and assumptions particular to that component. In all matrices, the column labeled "Metas Especificas" refers to the targets for the component during the first three-year phase of the project, in either the workplan or the project paper. "DGEA" in the "Indicadores" column means that the information should be "disaggregated by gender, ethnicity, and age."

The matrices have columns for "Fuentes de Informacion" and for "Responsabilidad". These entries should be reviewed carefully. Aggregation of the data and control over the collection and dissemination of information affect control over activities and personnel, and the management structure of the project For example, whether the component manager or the regional coordinator receives (and approves) the information from contractors operating in a particular region is related to whether the contractors report to the regional coordinator or to the central Quito office.

Because monitoring was written into the project as essential to the implemenetation process, the plan shows few unanticipated costs to carry out the monitoring plan. (NA in the "Costos" column indicates that the cost has been included in budgeting for the activity.) The collection, analysis, and reporting of baseline data, however, for all components except "research and monitoring", and project evaluations do require specific additional(?) budgeting of money and staff time.

The monitoring and evaluation system should be in place by the end of FY 92. The format for collection of community baseline data, organizational profiles, and protected areas baseline information, and actual data collection for the first communities, organizations, and the three parks should be completed. The MIS for storing and analysing monitoring information should be operating, and the requirements for data collection should be defined for the contractual agreements with collaborators and counterparts. The contracts for remote sensing data and/or aerial photgraphy should be signed. Twelve months will be required from the time work is begun to establish baseline data on indicator species and other measures of biodiversity in the research and monitoring component.

Monitoring

The project will report two types of monitoring information - on activities, and on impacts of activities. The monitoring of activities involves the counting of inputs and processes (e.g., number of training courses, number of participants, costs, time), traditionally required of A.I.D. projects. In general, this information will be required monthly, or at the termination of discrete activities like training.

This information is important in the SUBIR project because of the decentralized implementation structure that relies on collaborators and contractors. Standardized information requirements will be included in the terms of reference on all contracts and agreements so that the regional and central offices can have an accounting within and across components for how the money is being spent, and how many and which people are being contacted. The process information is also necessary to keep track of the timing of activities across components within regions and communities. It is extremely important, for example, that the local community organization be on-board with SUBIR before the biological research begins. These data should be reported and reviewed on a regular basis.

The second type of monitoring information is indicators of the impact of the activities. What changes occur in local organizations after the workshops? Do people receiving training successfully use new technologies? Has the encroachment on national park lands ceased? The impact measures are essential to programming for two reasons. First, SUBIR needs information to adjust the mix of activities at the local level and to understand which inputs are effective. The impact measures are an integral part of the model building and testing process. Second, the loss of biodiversity is a relatively slow, long-term process. Because SUBIR is only a 10-year project (which will be re-assessed at three-year intervals), it needs intermediate measures of impact and of progress toward its broader goal.

Impact data also will be collected by the contractors and collaborators, with follow-up and checks by personnel in the regional offices. As in the case of activity data, standardized reporting requirements will be included in terms of reference, and costs are incorporated into the contracts. In general, this information will be aggregated semi-annually (in some cases, quarterly) to correspond to the project annual internal evaluation and planning cycle, and the A.I.D. reporting requirements.

In addition to the quantitative information collected at regular intervals in the field, impact monitoring will require some case studies and other special studies to examine particular effects and their causes. Each component has a budget item for

this purpose. Some suggested studies are included in the matrices and in the component workplans. These are not definitive lists. The case studies and special studies can fill an intermediate role between semi-annual monitoring and three to five year evaluations, in analysing strengths and weaknesses of local approaches.

Monitoring reports should include not only accounting of the activities and impacts by component but also a synthesis of findings across components. The synthesis will be particularly important for the annual internal project evaluation and planning meeting. In reporting to A.I.D. and the GOE, to supplement the quantitative A.I.D. reporting requirements, the project should consider submitting annual(?) case study reports to A.I.D. documenting the activities and impacts of the particular "models" being developed and tested. These reports would make explicit the linkages across components, and the timing and scheduling of various activities. They would give SUBIR an opportunity to suggest terms for the evaluation of the broad project impact. Through this type of report, SUBIR also would define what a "model" is and the possibilities for application and replication. The "special studies" approach to measuring impacts would be particularly appropriate to this reporting mode.

Evaluation

Whereas monitoring provides an on-going review of project activities and effects, the evaluation examines cumulative impact. The timing and content of the evaluation vary with the project. In the case of SUBIR, at least two and perhaps three evaluations are indicated over the ten year span to examine the assumptions on which the project is based, measure sustainability of the process activated by the project (i.e., institutional structure, spread effects, conflict resolution, etc.), and assess cost effectiveness relative to the project goal and SO5.

The three to five year time frame is recommended so that he overall project impact and progress toward the goal can be measured directly. Because of the vertical management and the decentralized implementation structure of the project, the data collected through monitoring cannot be adequately aggregated to reflect how the disparate parts are contributing to slowing the loss of biodiversity. If the project opts to issue annual reports on "models", which deal with the interrelationships and assumptions at the community level, the five-year time span should be sufficient for the region-wide evaluation.

The evaluation will measure change relative to the baseline data collected in each component, and use these data to test the project assumptions about causal links among components. Additional discrete analyses are needed to assess sustainability of project impacts in terms of the capacity and willingness of

local organizations to adopt and promote the project methodologies, of other local organizations to seek project assistance, of the resolution of conflicts in the region, and of whether the technical packages are spreading to communities in the region without direct project input.

To evaluate the cost effectiveness of the project, the MIS should be set up so that project expenses and costs can be linked to impacts. The project organizational and implementation structure also should be evaluated in terms of both quality and costs.

Baseline data: Baseline information will be of two types: regional baseline of land use, forest cover, and indicator species; and community measures of economic and social characteristics. The land-based data will be collected through remote sensing and/or aerial photography, using 1987 baseline data on forest cover already acquired by the project. (See Weatherly memo, 2/8.) The extent and frequency of area coverage for evaluation purposes will depend on cost. Negotiations for access to Clirsen digitized remote sensing data will be carried out in conjunction with MAG. The selected protected areas and zones of influence should be observed at least every five years during the project, and more often if possible. Experience has shown that land use changes and deforestation in an area can occur rapidly. The project also needs to verify that it is in fact working in the appropriate parts of the selected areas to slow the loss of biodiversity.

Establishment of baseline information on flora and fauna indicator species is the task of the Research and Monitoring component. Tracking these species to determine the speed of loss of biodiversity will continue throughout the project. The component will establish a baseline at the end of a full year of biological studies. A similar, in-depth study will be conducted at three to five year intervals as a part of the project evaluation. In the interim, species biologists will track indicator species on an on-going basis. The baseline and evaluation data will be compared in relation to the variations indicated by on-going monitoring.

The Management of Protected Areas component is collecting baseline data on biological characteristics of the parks and social information on communities within the park boundaries. Data will be drawn from secondary sources and verified through field observation. The information should be systematically recorded for the three areas and entered in the MIS.

The social and economic baseline data will be collected by the Organizational Strengthening, Ecotourism, and Improved Use of Land and Biological Resources components. All SUBIR local projects will operate under the auspices of local community

organizations and/or federations (OSG - organizacion de segundo grado). At the initiation of activities with an organization or federation, during the diagnostic phase, an organizational profile will be prepared. The profile will include data on factors that will be tracked in the component monitoring, including membership and leadership characteristics, decision-making structures, administrative capabilities, capacity for self-management and financing, legitimacy in the region, etc. The format and data collected for the profiles should be standardized across organizations and included in the MIS.

The SUBIR "models" for improved land use and economic diversification are being developed at the community level. Ideally, baseline social and economic data would be collected regionally so that comparisons could be drawn between the targeted communities and control communities without project activities, spread effects could be measured overtime, and the relationship between regional land use patterns and regional socio-economic characteristics could be drawn directly.

A regional baseline survey is not practical given the project's broad geographic area, dispersed population, and ethnic diversity. As an alternative, before SUBIR starts to work in a community, the project will systematically collect baseline social and economic data at the community level. (In the matrices this is cited as "estudio de factibilidad".) The baseline information will consist of a household survey, standardized across communities, with sample sizes and sampling methodologies adequate to generate statistically reliable and valid measures of relationships and change. The household survey will collect information on household demographic characteristics, economic activity and income sources for all members of the household, land tenure and land use patterns, and organizational affiliations.

Note: The community development component of the project is predicated on the assumption that changes in land use and alternative employment opportunities will take place only if they increase household incomes. Given that income is extremely difficult and cumbersome to measure accurately, particularly in a rural frontier region where much of the income is in kind and barter exchanges are common, the formal community surveys will measure only household economic activity and income sources. Assuming that people have opted for new practices because they perceive some benefit from them, the measure of income sources becomes a proxy for increases in income or lack thereof. If people do not adopt the new technologies or employment opportunities, it will be necessary to investigate if that is because the options are not economically attractive or due to other constraints. A separate ethnographic case study of change in household and individual income is recommended as a basis for

interpretation and verification of the survey findings.

In addition to the household survey, the feasibility study will collect information for the Environmental Assessment, which, according to the Project Paper, will have to be prepared for each intervention in and around protected areas. Baseline measures of land management practices by area, in and around the community will be developed for measurement of the SO5 indicator.

The major costs for the community feasibility studies are the design of the standardized survey methodology and instrument, and setting up the MIS, entering, analysing, and reporting the data. The costs at the community level should be minimal. Tasks will include explaining and getting permission to do the survey, training interviewers from the area, and supervising the collection of data. It is important that the studies be explicitly scheduled in developing the workplan and that staff responsibility for overseeing them (from data collection through report preparation) be assigned. The survey design and questionnaire should be prepared as soon as possible so that they can be applied at the start of the community-based activities.

In the project evaluations, the communities will be re-surveyed to provide quantitative measures of project social and economic impact, and of the relationship between the community development activities, land use, and biodiversity (i.e., the models), at the community level. The results will be keyed to the types of activities and length of time SUBIR has worked in particular communities. Because the community baseline surveys are based on random samples of residents, comparisons can be drawn between households which have and have not subsequently adopted the technologies or practices espoused by SUBIR.

To incorporate the questions of institutionalization and sustainability of the project approach and process, the evaluation also will carry out less formal surveys and short-term community studies in surrounding, comparable communities to measure spread effects of the project. This research will be particularly important in evaluating the impact of the organizational strengthening component and the OSG.

Analysis

The monitoring and evaluation plan collects data on indicators. The analysis and interpretation of the data is a separate step.

Gender, Age, Ethnicity: In the plan, particular emphasis has been given to "people-level" indicators, and to the disaggregation of this information by gender, ethnicity, and age (DGEA, in the matrices), which can be done with little additional cost or effort. To insure that gender (and in conjunction with

ethnicity and age) are integrated into the project, gender-specific analysis is required, and staff (or consultant) time and responsibility should be specified for this purpose.

Because the SUBIR regions are diverse in culture and ethnicity, it is unrealistic to define, up front, particular targets or guidelines for integrating gender, ethnicity, or age into the project. SUBIR has too little information on the roles, responsibilities, and expectations by gender and age within diverse cultural groups to specify how the project will relate to these sub-groups. The interaction of these factors within cultural groups may lead to different expectations in different settings. The first step for SUBIR is to collect disaggregated data on gender, ethnicity, and age in the baseline studies and on participation in project activities. After a period of six months to a year, analysis of the roles and relationships by gender and age within ethnic groups, and by ethnicity within activities, can be used as the basis for adjusting activities to reflect differences within the population.

The analysis should look at the following questions, among others. The SUBIR participatory rolling design at the local level means that the effects of gender, and particularly the participation of women, must be taken account of at the design stage. The disaggregated data about attendance at workshops and training for the community organizations and OSG are key, since these sessions will set the framework for the activities in the communities.

The baseline household social and economic data should be used in designing training programs and recruiting participants. The information on participation in training activities (short-term and long-term) should be used to determine if SUBIR is providing services or reaching all segments of the population, appropriate to the social and economic organization within that cultural group, and taking account of change over time. In project areas with fluid population dynamics, it is essential that this analysis be done on an on-going basis since roles, responsibilities, and decision-making processes can change rapidly.

Since SUBIR will be organizing and training for income generating activities, questions of who benefits within the household and what happens to additional earnings are important. For questions of sustainability and institutionalization it will be important to know if key decision-makers in the households and the communities are involved in the activities, if young people are receiving training, are if the people participating in the programs and trying new economic endeavors are in a position to continue them.

Quantitative and Qualitative Data: The emphasis in the plan

presented in the component matrices is quantitive data to be collected, in general, as part of on-going activities. Not all of the activities and impacts of the project can be presented adequately in this way, however. For example, an important task of the project, listed within in the workplans of all of the components, is facilitating conflict resolution. Only a narrative format is appropriate for documenting the terms of the conflicts, the steps taken to move toward resolution, and the outcome of the efforts. Assessments of improved organizational and technical capabilities of local institutions and of park rangers are not easily quantifiable but are essential benchmarks of project effectiveness. In addition, some of the questions to be examined in special studies, like household time allocations, require ethnographic data and analysis. The monitoring information on research studies and reports should include not only the number of studies but also summaries of findings and potential applications in the project. (Each report should require an executive summary to this effect.)

Unanticipated Outcomes: SUBIR is working in new regions and developing models for new ways of utilizing biological resources. The indicator data are important not only to report on progress and impacts but also as a basis for analysis of why things are or are not working out as expected. The data should be collected with an eye toward analysis which will allow project managers to isolate causal factors, social and biological, which contribute to success or failure of the models.

IV. Next Steps

Review and revise matrices: The monitoring and evaluation plan laid out in the component matrices is based on activities projected in the workplans for phase 1. As the workplans are revised, SUBIR and A.I.D. should review the matrices to insure that the key activities are included and that the indicators reflect the way in which each activity fits into the overall scheme.

The fourth program output on SO5, "change policies governing access to, and activities in and around, selected areas of high biodiversity", will involve SUBIR activities at the local level which are not included in the component matrices. In addition to facilitating conflict resolution surrounding national policies, SUBIR plans to monitor local compliance with national policies affecting biological resources. SUBIR also is planning to provide training to the Ecuadorian military to increase its effectiveness in enforcing these policies and in reducing incursions into national protected areas.

The project paper also discusses the formation of regional and national interorganizational coordinating committees. These committees do not appear in phase 1 workplans and have not been

included in the matrices.

Although the matrices show numerous pieces of information to be collected and reported, in general, these tasks will be accomplished as an integral part of on-going activities and should not interfere with project implementation. Monitoring will interfere less if the people involved in the collection process also have a stake in the information. SUBIR should review the plan with the regional personnel and the counterpart organizations, and field test both the data collection techniques and the utility of specific indicators. Monitoring data are most valid if they are uniform across time but revisions should be made if measures are not useful.

Costs: Collection of baseline and evaluation data for the SO5 indicators and for the Improved Use of Land and Biological Resources component will involve specific activities not included in component contracts. The tasks have been identified but the costs have not been estimated.

Also, the plan does not include a system for recording, analysing, or reporting cost data. Since this project is testing a particular methodology to enhance biodiversity, the question of cost of the achieved impact is important. The system also should provide for reporting the relationship between cost and progress toward goals at the end of phases 1 and 2 of the project.

2/28/92

COMPONENTE: INVESTIGACION Y MONITOREO DE RECURSOS BIOLOGICOS

Productos	Indicadores	Metas Específicas	Fuente de datos	Frecuencia	Costos	Responsabili-dades
META: Establecer y hacer funciónar sistemas de monitoreo de los recursos biologicos y las conse cuencias del uso humaño para apoyar a las actividades de los usos sos-tenibles de los recursos	-No. de estudios con resultados que sirvieron a los demas componentes para desarrollar modelos transferibles	-nueve modelos desarrollados a base de los estudios	-Informes de Jefes de los componentes de investigación y monitoreo y de Manejo de recursos biologicos	-anual	-n/a	-Jefes de los componentes de investigación y monitoreo y de Manejo de recursos biologicos

Productos	Indicadores	Metas Específicas	Fuente de datos	Frecuencia	Costos	Responsabili-dades
PRODUCTO 1: Linea base biologica establecida	-Convenios firmados con las comuni-dades dando permiso de re-alizar inves-tigaciónes -Linea base de la abundancia y distribución de las espe cies indica dores	-Convenios con todas las comonidades donde realizan in-vestigaciónes -3 publicaciónes sobre resultados botanicos; 3 publicaciónes sobre resultados faunisticos	Informes tecnicos del proyecto	12 meses desde cuando inician los estudios (antes de fin de año 2 del proyecto)	-n/a	Jefe de com-ponente de investigación y monitoreo y or-ganizaciónes e individuos contratados
<u>Actividades</u> 1.Inventarios Floristicos	1. lista de areas de estudio selec ciónados -lista de especies indi cadores iden tificadas -Muestras sacadas en areas de estudio	1. 12 parcelas permanentes de una hectarea establecidas y inventariadas	1.Informes y publicaciónes	1. semestral	1.no hay costo adición-al	1.Jefe de componente deinvestigación y monitoreo y de organizaciónes e individuos contratados
2.Inventarios Faunisticos mediante cen-sos, tran-sectas, tram-pas, y redes (mist netting)	2. Areas de estudio selecciónados e inventari-ado	2. 2-3 areas de estudio por región	2.Informes y publicaciónes	2. semestral	2. n/a	2. Jefe del componente

Productos	Indicadores	Metas Específicas	Fuente de datos	Frecuencia	Costos	Responsabili-dades
PRODUCTO 3: Conocimiento Etnobiologico y practicas de manejo estudiadas	-a) No. de tec-nicas replica- bles; b) No. de modelos es-pecificas y recomendadas	-no establecieron metas específicas	-Informes de los Jefes de Manejo de recursos y de Investigación	-anual	-n/a	-Jefes de Manejo de recursos y de Investigación
<u>Actividades</u> 1. Estudios Etnobotanicos 2. Estudios Etnozoologicos 3. Estudios de impacto y usos economicos	1./2./3. -No. de estudios financiados -No. de estudios termi-nados -No. de estudios divulgado	1. 1-3 estudios publicados 2. 1-3 estudios publicados 3. 3 estudios publicados	1./2./3. Informes de Jefe del componente	1./2./3. semestral	1./2./3. n/a	1./2./3. Jefe del componente de Investigación y Monitoreo

Productos	Indicadores	Metas Específicas	Fuente de datos	Frecuencia	Costos	Responsabili-dades
PRODUCTO 2: Linea base socioeconomica establecida	-Encuesta socioeconomico administrado y analizado	-Medir cambios cada 3 años	-Encuesta y informes analiticos	-una vez y cada tres años	-no hay costo adición-al	-Jefes de los componentes de Organizaciónes y de mejoramiento de la tierra y recursos biologicos

Productos	Indicadores	Metas Específicas	Fuente de datos	Frecuencia	Costos	Responsabili-dades
PRODUCTO 4: Mejorar la in-vestigación medioambiental mediante la capacitación de profe- siónales	-No. de estudios terminados y divulgados	-n/a	-archivos del proyecto	-anual	-n/a	Jefe del componente
<u>Actividades</u> 1.Cursos Tecnicos	1. No. de participantes por genero y diciplina No. de propuestas hechas; No. de propuestas financiadas	1. -2 talleres por año para tecnico para 9 y 15 personas cada uno; 5 cursos tecnicos por año para un promedio de 30 personas cada uno;	1. Informes de los Profesores/ catedraticos de los cursos	1. anual	1. n/a	1. Los profesores y catedraticos de los cursos/Jefe del componente
2. Programa de becas	2. No. de estudios (o teses) financia-dos; No. de estudios (o teses) terminados	2.-6-8 estudios financiadas (becas generales)/año -4 estudios financiadas (becas universitarios)/ año	2. Informes del comite de becas	2. anual	2. n/a	2. Jefe del componente

Productos	Indicadores	Metas Específicas	Fuente de datos	Frecuencia	Costos	Responsbili- dades
PRODUCTO 5: Monitoreo de recurses biologicos	-No. de especies monitoreadas; No. de veces que sacan muestras de los areas de estudio	-n/a	-Informes de los biologos contratados	-semestral	-n/a	-Jefe del componente; contratistas
Actividades 1. Talleres comunitarios sobre monitoreo de impactos ambientales	1. No. de personas (DGEA) conformando la red de monitoreo	1. 270 (30 en cada uno de 9 comunidades)/año* *no establecieron metas DGEA	1. Informes de los individuos/ instituciónes contratados	1. semestral	1. n/a	1. Jefes de los componentes de Organización; Monitoreo; Manejo de recursos

COMPONENTE: MEJORAMIENTO DEL USO DE LA TIERRA Y LOS RECURSOS BIOLOGICOS

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
META: En comunidades seleccionadas, estabilizar el uso de la tierra, mejorar el uso de recursos biologicos, y crear fuentes de ingreso mediante actividades no destructivas	% de area en usos no destructivos % personas (DGEA) con ingresos de actividades no destructivas	4700 has./area total 35% (2000 familias)	estudios de linea base y evaluacion	cada 3 a 5 anos	?	equipo Quito
PRODUCTO 1: Modelos de manejo de recursos desarrollados	1. No. tecnologias identificadas, adaptadas, promovidas; 2.No. personas usando las tecnologias	1. 9 modelos (3 por area) 2. 2000 familias (personas ?)	1.archivos del SUBIR; (informes del componente Investigacion Biologica) 2.total de personas en Actividades 1,2,3	cada 6 meses	NA	Coordinador del componente

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
ACTIVIDAD 1: Modelos de manejo forestal						
Comunidades y tecnologias identificadas	1. No. estudios de factibilidad; 2.No."paquetes tecnologicas" identificadas; 3. No. comunidades por "paquete"	1. YNP: 14 comunidades; RECAY: ?; RECC: 64 comunidades (comuna Rio Santiago y Federacion Chachi 2. ? 3. ?	archivos del SUBIR	cada 6 meses	?	coordinador del componente y equipo Quito
Parcelas de demonstracion establecidas, mantenidas, y evaluadas	1. No. comunidades con parcelas activas; 2. No. parcelas activas 3. Rendimiento/parcela 4. Costo de produccion 5. Ingreso bruto/parcela	1-2. 10 por region, a lo menos (incluyendo parcelas forestales, agroforestales y agricolas); 3-5. mejoramiento en relacion a datos de linea base de la comunidad	informes de extensionistas y coordinadores regionales	cada 3 meses	NA	coordinadores regionales
Taller: manejo de recursos forestales	1 No.talleres; 2 No. participantes (DGEA); 3.No. participantes implementando la tecnologia (sobre tiempo)	?	informes de colaboradores y coordinadores regionales	mensual para (3). recontar cada 6 meses	NA	coordinadores regionales

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
Plan de manejo preparado e implementado	1. No. planes aceptados por las comunidades 2.No. familias colaborando (no. nuevos; no. en atricion); 3. no. personas (EGEA) empleadas para maño de obra 4. Has. forestal sujeto al plan/has. forestales totales de la comunidad	1. 78 communidades + communidades de RECAY 2-3. varia por comunidad 4. 100%	informes de colaboradores y de coordinadores regionales	cada 3 meses	NA	coordinadores regionales
Centros de acopio identificados y/o construidos	1. No. comunidades con centro de acopio (no. nuevos, no. abandonados); 2. No. centros con equipos de trabajo del SUBIR; 3. No. familias usando cada centro; 4. No. centros auto- gestionados; 5. No. centros auto-financiados	?	informes de colaboradores y de coordinadores regionales	cada 3 meses	NA	coordinadores regionales

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
Plan de mercadeo elaborado e implementado	1. No. planes aceptados por las comunidades; Por communidad/centro(?): 2.No. compradores potenciales y actuales; 3.Ingreso neto al vendedor; 4. Pago (acciones) por persona; 5. Valor anual de ventas.	1. ? 2. ? 3-5 mejoramiento en relacion a los datos de linea base en la communidad	informes de colaboradores y de coordinadores regionales	cada 3 meses	NA	coordinadores regionales
Taller: mercadeo de madera	1. No. talleres 2.No. comunidades; 3. No. participantes (DGEA) 4.No. participantes colaborando en el plan de mercadeo (sobre tiempo)	?	informes de colaboradores y de coordinadores regionales	mensual para (4): recontar cada 6 meses	Na	coordinadores regionales
ACTIVIDAD 2: Modelos de intensificacion y diversificacion de practicas agropecuarias/ agroforestales						

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
Comunidades y tecnologias identificadas	1. No. estudios de factibilidad 2.No."paquetes tecnologicas" identificadas; 3. No. comunidades por paquete	1.PNY-15 communidades; RECC-30 communidades; RECAY-? 2-3 ?	archivos del SUBIR	cada 6 meses	?	coordinador del componente y equipo Quito
Taller: que es la tecnologia; porque y como implementarla	1. No. talleres 2.No. comunidades; 3. No. participantes (DGEA); 4.No. participantes implementando la tecnologia (sobre tiempo)	?	informes de colaboradores y coordinadores regionales	mensual para (3) recontar cada 6 meses	NA	coordinadores regionales
Parcelas de demonstracion establecidas, mantenidas, y evaluadas	1. No. comunidades con parcelas activas 2. No. parcelas activas 3.Rendimiento/ parcela 4.Costo de produccion 5.Ingreso bruto/parcela	1-2. 10 por region, a lo menos (incluyendo parcelas forestales, agroforestales y agricolas); 3-5 mejoramiento en relacion a datos de linea base de la communidad	informes de extensionistas y coordinadores regionales	cada 3 meses	NA	coordinadores regionales

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
Viveros establecidos, mantenidos, y utilizados	1.No.viveros; 2.No. communidades con aceso al vivero; 3. No. plantas y especies en el vivero; 4. No.plantas vendido y sembrado; 5.No. compradores 6. Maño de obra para establicimiento y mantenimiento-DGEA-(remunerado?) 7.No.viveros auto-gestionados/auto-financiados	1. 125 2. PNY-40; RECC-59; RECAY-? 3. ? 4. 934,000 5. ? 6. ? 7. ? (unos no son permanentes)	informes de extensionistas y de coordinadores regionales	mensual	NA	coordinadores regionales
Asistencia tecnica otorgada	1.No. personas/ comunidad recibiendo asis. tecnica (DGEA) 2. tipo de asistencia /persona; 3. No.comunidades y familias por extensionista; 4. No. personas (DGEA) recibiendo insumos del SUBIR;	1. familias: PNY-300; RECAY-1050; RECC-? personas-? 2-4 ?	informes de extensionistas y coordinadores regionales	mensual	NA	coordinadores regionales

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
Tecnologia adoptada	1. No. (DGEA) personas/comunidad implementando la tecnologia parcialmente, completamente; 2.No. personas abandonando la tecnologia; 3. area de implementacion/area de cultivacion.	?	informes de extensionistas y de coordinadores regionales	cada 3 meses	NA	coordinadores regionales
Extensionistas/promotores capacitados (Vease componente fortalizacion de orgs.)	1.No.personas locales colaborando efectivamente con SUBIR como extensionistas agronomos (DGEA); 2. meses de colaboracion	?	archivos del SUBIR; informes de colaboradores	cada 6 meses	NA	Coordinador del componente
ACTIVIDAD 3: Modelos de procesamiento y comercializacion de recursos biologicos						
Comunidades y artesanias (u otras actividades economicas alternativas) identificadas	1. No. estudios de factibilidad 2. No. artesanias	1. ? 2. RECAY-2 PNY-1 RECC-2	archivos del SUBIR	cada 6 meses	?	coordinador del componente y equipo Quito

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
Estudios de factibilidad tecnica y de mercadeo realizados	1.No. estudios financiados; 2. No.estudios terminados	?	archivos del SUBIR	cada 6 meses	NA	coordinador del componente
Taller: tecnicas de produccion	1.No. talleres 2. No. comunidades; 3. No. participantes (DGEA) 4.No. participantes colaborando en el proyecto-DGEA (sobre tiempo)	1. a lo menos uno por artesania (5) 2-4 ?	informes de colaboradores y coordinadores regionales	mensual para (4) re-contar cada 6 meses	NA	coordinadores regionales
Plan de asistencia preparado y implementada	1. No. comunidades aceptando y colaborando en el plan de asistencia 2. No. personas/ comunidad-DGEA produciendo los articulos (no. nuevos; no. en atricion; meses de participacion con el proyecto y con SUBIR)	?	informes de colaboradores y de coordinadores regionales	cada 3 meses	NA	coordinadores regionales

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
Asistencia tecnica otorgada	1. No. personas/ comunidad recibiendo asis. tecnica (DGEA) 2. tipo de asistencia /persona; 3. No. comunidades y familias atendidas por extensionista; 4.No. personas (DGEA) recibiendo insumos del SUBIR	?	informes de extensionistas/colaboradores y de coordinadores regionales	mensual	NA	coordinadores regionales
Centros de acopio identificados y/o construidos	1. No. comunidades con centro de acopio (no. nuevos, no. abandonados) 2. No. centros con equipos de trabajo del SUBIR; 3. No. personas-DGEA- usando cada centro 4. No. centros auto-gestionados 5. no. centros auto-financiados	1. RECC - 1 PNY y RECAY-? 2-5 ?	informes de colaboradores y coordinadores regionales	cada 3 meses	NA	coordinadores regionales
Plan de mercadeo elaborado y implementado	1. No. compradores potenciales y actuales; 2. Ingreso neto al vendedor 3. Pago (acciones) por persona; 4. Valor anual de ventas por centro	1 ? 2-4 Mejoramiento en relacion a datos de linea base de la comunidad	informes de colaboradores y de coordinadores regionales	cada 3 meses	NA	coordinadores regionales

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
Seminario para inversionistas y compradores del sector privado	1. No. seminarios; 2. No. participantes (DGEA) 3. Valor anual de inversion y/o de compras por participantes	?	archivos del SUBIR; informes de colaboradores	1-2 cada 6 meses 3. anual	NA 3. ?	coordinador del componente
PRODUCTO 2: Mejorar la produccion y las fuentes de ingreso en la comunidad (Vease tambien componente de ecoturismo)	1. Para familias colaboradoras y no colaboradoras en la comunidad: produccion, rendimiento y valor unidad de madera, de cultivos seleccionados, y/o de artesania;	1. Mejoramiento en relacion a datos de linea base de la comunidad (y en relacion a no colaboradoras)	informes de colaboradores o de contrapartes	anual	?	coordinador del componente y equipo Quito

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
	2. Fuentes de ingreso/ familia, DGA (cultivos, productos recogidos de areas naturales, artesania, maño de obra, etc.); no. fuentes y fuente principal; 3. fuentes y fuentes principales agregados a nivel comunal 4.estudios de caso de fuentes de ingreso familiar, uso de tiempo familiar (DGA), y cambios de ingreso y calidad de vida (DGA)	1-3 Mejoramiento en relacion a datos de linea base de la comunidad 4 uno/modelo (9 estudios)	1-3 estudios de linea base y evaluacion 4 estudios especiales	cada 3 a 5 años	?	coordinador del componente y equipo Quito
	5.Mercadeo de cultivo/producto principal en comunidades colaborando: nivel de procesamiento local; precio local; precio local/precio final;	5 uno/comunidad o modelo (?)	5 estudios especiales			

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
PRODUCTO 3: Estabilizar o incrementar la cobertura forestal y/o el area en uso no destructivo	Para comunidades colaborando y areas de control: 1. Has. de bosque natural y artificial, cultivos permanentes, otros cultivos, pasto, etc.; 2. no. cultivos y area/cultivo; 3. has. bajo tecnicas promovidas por SUBIR	1. sin cambio o mas bosque 2-3. ?	estudios especiales; "remote sensing" o fotografia aeria; 2-3 informes de coordinadores regionales	(dependera en negociaciones en cuanto a costo) cada 6 meses	? NA	coordinador del componente y equipo Quito

COMPONENTE: FORTALECIMIENTO DE ORGANIZACIONES

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
META: Fortalecer a las orgs. comunitarias y de segundo grado (OSG) en su capacidad de manejar programas y resolver conflictos	1. No. orgs. colaborando con SUBIR y no. capaces de autogestion 2. % de comunidades (OSG) y familias (orgs comunitarias) participando en las actividades de la organizacion	1. 53 comunitarias; OSG-? 2. ?	archivos del SUBIR	cada 3-5 años	NA	coordinador del componente
PRODUCTO 1: Fortalecer sistemas de administracion y apoyo para programas de manejo de recursos	1. No. orgs capaces de autogestion 2. No. orgs. promoviendo proyectos de manejo de recursos	53 comunitarias; OSG-?	archivos del SUBIR	anual	NA	coordinador del componente

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
ACTIVIDAD 1: Colaboracion con SUBIR de organizaciones comunitarias y OSG	1. No. perfiles organizacionales (datos de linea base) 2. No. de organizaciones con convenios o cartas de entendimiento firmados con SUBIR	53 comunitarias; OSG-?	archivos del SUBIR	cada 6 meses	?	coordinador del componente
Taller: Auto-diagnostico socio-organizacional	** No. talleres; participantes DGEA; meta realizada o no; etc.	?	*** Indicadores y formularios para talleres se definaran en colaboracion con los(las) promotores(as) sociales regionales	Informes de colaboradores y de promotores(as) sociales regionales	NA	colaboradores y promotores regionales

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
ACTIVADAD 2: Fortalecimiento de la estructura administrativa de orgs. comunitarias y OSG	**No. orgs.: 1. con libros de cuenta actualizados; 2.con sistemas de archivos actualizados; 3 recibiendo y utilizando para fines de la organizacion, equipos de oficina y/o motores del SUBIR**	**53 comunitarias; OSG-?**	**1-3 informes de las orgs. y informes de los(las) promotores(as) sociales regionales**	**cada 6 meses**	**NA**	**promotores(as) regionales**
Taller: Tecnicas de administracion, archivo y contabilidad	**	?	***			

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
ACTIVIDAD 3: Fortalecimiento de la capacidad de orgs. comun. y OSG de planificar y administrar programas	**1. No. orgs. que han preparado propuesta para SUBIR u otra ONG; 2. No. orgs. con propuestas aceptadas 3.No. orgs. con planes anuales de trabajo cumplidos, parcial o totalmente; 4. no. cumpliendo con la obligacion co-financiera; 5. % familias afiliadas practicando la nueva tecnologia; 6. no. de orgs. abandonando al SUBIR**	**53 comunitarias; OSG-?** **6. NA**	**1-5 informes de las orgs. y de los(las) promotores(as) sociales regionales**	**cada 6 meses**	**NA**	**promotores(as) sociales regionales**
Taller: Programacion, planificacion, administracion de proyectos de manejo de recursos	***	**?**	****			

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
Taller: Analisis de problemas relativos al uso de recursos biologicos y valorizacion de su aprovechamiento	**	?	***			
ACTIVIDAD 4: Cursos Tecnicos	1.No. personas terminando cursos de contabilidad u otra area apropriada, DGEA (con becas del SUBIR); 2.no. orgs. representadas 3.No. personas capacitadas que vuelvan a trabajar con las orgs.	?	1-2. archivos del SUBIR 3. informes de promotores(as) sociales regionales	cada 6 meses 3. anual	NA	coordinador del componente promotesor(as) regionales

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frequencia	Costo	Responsabilidades
ACTIVIDAD 5: Fortalecimiento de la capacidad de la org. comun. y OSG de definir y proponer politicas comunitarias	**1.Promedio de personas (DGEA) asistiendo a las reuniones mensuales; 2.Para OSG, no. de comunidades afiliadas (no. nuevas y no. saliendo; 3.No. orgs. que han tomado pasos (denuncias, reuniones interorganizaciones, manifestaciones, etc.) a reformar politicas en general y en cuanto a recursos naturales.**	**53 comunitarias; OSG-?**	**1-2. archivos, informes de las orgs.** **3. informes de promotores(as) sociales regionales**	**cada 6 meses** **cada 6 meses**	**NA**	**promotores(as) regionales**
Taller: Promocion popular y fortalecimiento de liderazgo	**	?	***			
Taller: Analisis de las ieyes y politicas, los grupos sociales/etnicos y su relacion con los recursos biologicos	**	?	***			

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
ACTIVIDAD 6: Fortalecimiento del nivel de interes y capacidad de las orgs. comun. y OSG de participar en el manejo y monitoreo de recursos naturales (Vease los demas componentes)	1.No. orgs. con reuniones convocadas para actividades del SUBIR y no. de participantes (DGEA) 2. No. orgs. con promotores colaborando efectivamente con SUBIR (DGEA y meses de colaboracion); 3. No. OSG promoviendo la filosofia y tecnologias del SUBIR: (1) materiales educativos producidos; (2)cartillas distribuidas	?	1-3. informes de las orgs. y informes de promotores(as) sociales regionales	cada 6 meses	NA	promotores(as) regionales
ACTIVIDAD 7: Fortalecimiento de la educacion en manejo de recursos mediante actividades de las OSG en colaboracion con DGEIB y SUBIR	1. Curriculum disenado y elaborado; 2.No. escuelas aplicando el curriculum (dento y fuera de areas del SUBIR); 3.No. profesores y/o capacitadores capacitados en el curriculum (DGEA)	1. uno 2-3. ?	archivos del SUBIR; informes de colaboradores	cada 6 meses	NA	coordinador del componente

Productos	Indicadores	Metas Especificas	Fuente de Datos	Frecuencia	Costo	Responsabilidades
ACTIVIDAD 8: Investigaciones participativas	No. estudios: 1.financiados; 2.terminados; 3. Con resultados incorporados en programas del SUBIR	?	archivos del SUBIR	cada 6 meses	NA	coordinador del componente
PRODUCTO 2: Apoyo al proceso de resolucion de conflictos (Vease componente areas protegidas)	1. No. situaciones conflictivas identificadas 2. No. situaciones en negociacion mediante colaboracion del SUBIR; 3.No. situaciones conflictas resueltas	NA	archivos del SUBIR	equipo Quito	NA	equipo Quito

COMPONENTE:MANEJO DE AREAS PROTEGIDAS

Objectivo	Indicadores	Metas Específicas	Fuente de datos	Frecuencia	Costos	Responsabili-dades
META: Reducir el avance de la occupación/ colonización hacia la reserva y procurar el uso raciónal de las tierras dentro la re serva por las comunidades que actualmente viven dentro de ellas	**-Nivel de ocu-pación/activi-dades dentro de las reser-vas; No. de comunidades dentro de las areas prote-gidas aplicando manejos no-destructivos**	**n/a**	**Censo del población en las areas protegidas; encuesta socioeconomico (vease los compo-nente de organización y usos sostenibles**	**cada 3 años**	**-vease el componente de manejo de recursos biologicos**	**Jefes de los compo-nentes de Organiza-ción y Areas Pro-tegidas**

Productos	Indicadores	Metas Específicas	Fuente de datos	Frecuencia	Costos	Responsabili-dades
PRODUCTO 1: Limites de la reserva definidos y marcados	-kms definidos	-50km RECC -80km RECAY -limite por el rio Tipu-tini (PNY)	Informes de inspección	-Semestral	n/a	Jefe del componente de areas protegidas

Productos	Indicadores	Metas Específicas	Fuente de datos	Frecuencia	Costo	Responsabili-dades
<u>Actividades</u> 1. Resolver conflictos y establecer derechos a los recursos	1. No. de colonos en la reserva;% de los grupos indigenas con reconocimiento legal de sus territorios	1. n/a	1.Censo de personas en areas prote-gidas; estudio socioeconomico*	1.Cada 3-4 años	1. vease componente de manejo de recursos biologicos	1. Jefe del componente de Manejo de Recursos Biologicos
2. marcar limites	2. No.de kms marcados	2. n/a	2.Informe de GPs	2. mensual	2. n/a	2.SUFOREN/ MAG y Jefe del componente de Areas protegidas
3.Asegurar respaldo de las comunidades dentro y afuera de las areas prote-gidas a las resoluciónes	3.No. de incursiónes al parque	3. n/a	3. Informes de GPs y de coordinadores regiónales	3. mensual	3. n/a	3. SUFOREN/ MAG y Jefe del componente de Areas protegidas

Productos	Indicadores	Metas Específicas	Fuente de datos	Frecuencia	Costos	Responsabili-dades
<u>Actividades</u> 4. Establecer comites de coordinación interinstituciónal (IERAC, MAG, SUBIR, ONGs,orgs. comunales)	4. No. de re-uniónes de los comites; Pre-sencia de las organizaciónes en las reu-niónes (vease el componente de organiza-ción	4. n/a	4.Informe delJefe del componente	4.semestral	4. n/a	4. Jefe del componente de areas protegidas

Productos	Indicadores	Metas Específicas	Fuente de datos	Frecuencia	Costos	Responsabili-dades
PRODUCTO 2: Reforzar la administración de las reservas	-MAG: % de cumplimiento con las metas de sus planes de manejo	-n/a	-informes de persona contratado a ayuda MAG en la planifica-ción	-anual	-n/a	-Jefe del componente; contratista
<u>Actividades</u> 1.Planes de manejo: -revisar -monitorear -evaluar -desarrollar una metodologia de evaluar planes	1. No. de planes de manejo elaborados y puesto en practica; metodologia aplicado	1. 3 planes	1. Informes de persona contratado a ayuda MAG en la planifica-ción	1. anual	1. n/a	1. Jefe del componente; contratista
2.Apoyo a SUFOREN en planificación	2.Calidad de los planes anuales de trabajo; grado de cumplimiento con las metas	2. n/a	2. Informes de persona contratado a ayuda MAG en la planifica-ción	2. anual	2. n/a	2. Jefe del componente; contratista

Productos	Indicadores	Metas Específicas	Fuente de datos	Frecuencia	Costo	Responsabili-dades
3.Fomentar colaboración interinstituciónal (MAG, IERAC, etc)	3.No. de conflictos; No. de conflictos en negociación por los comites; No. de conflictos resueltos	3. n/a	3. Informes del Jefe de componente y de coordina-dores regiónales	3. semestral	3. n/a	3. Jefe del componente; coordinado-res región-ales
4. Apoyo infra estructural	4. No. y distribu-ción de los guardaforestales equipados y trabajando; No. de refugios; No. de guarderias que tienen personal	4.RECC: 15 refugios 1 guarderia RECAY: 10 refugios 1 guarderia PNY: 5 refugios 1 guarderia	4. Informes del Jefe de componente y de coordina-dores regiónales	4. semestral	4. n/a	4. Jefe del componente; coordinadores regiónales

Productos	Indicadores	Metas Específicas	Fuente de datos	Frecuencia	Costos	Responsabili-dades
PRODUCTO 3: Red de monitoreo establecido	–No. de denuncias por las comuni-dades; No. de personas multadas; No. de personas (DGEA) haciendo cosas ilegales en las areas protegidas	- n/a	-Informes de los GPs; Jefe del componente y de coordina-dores regiónales	-semestral	-n/a	-Jefe de componente; MAG

Productos	Indicadores	Metas Específicas	Fuente de datos	Frecuencia	Costos	Responsabilidades
<u>Actividades</u> 1.Entrenar GPs	1.No. de GPs entrenados; Calidad y regularidad de los informes de los GPs	1. 11 cursos	1. archivos del proyecto	1. anual	1. n/a	1. Contratistas; Jefe del componente
2. Ganar la colaboración de lideres de las comunidades mediante educación ambiental en-focando a lideres	2.No. de personas DGEA entrenados; No. de personas por comunidad con lideres entrenados quienes estan participando en actividades del proyecto	2. vease componente de organización	2. Informes del componente de organización	2. anual	2. n/a	2. Jefe del componente de organización
3. Establecer canales y medios de comunicación	3.No. de contactos regulares entre comunidades y guardaparques	3. n/a	3. Informes de GPs; Jefe del componente	3. mensual; semestral	3. n/a	3. Jefe del componente
4. Implementar conceptos y practicas de reservas de biosfera	4. No. de talleres de información; Plan preliminar para el manejo de la Biosfera del Noroccidente	4. 8 talleres; 1 plan preliminar	4. Informes de contratistas; Jefe del componente	4. anual	4. n/a	4. Jefe del componente

*vease los componentes de organización y usos sostenibles de recursos biologicos.

COMPONENTE: ECOTURISMO

Productos	Indicadores	Metas Específicas	Fuente de datos	Frecuencia	Costos	Responsabili-dades
META: Apoyar al desarrollo de ecoturismo a fin de dar un fuente de ingreso alternativo para los residentes oriundos a las areas protegidas	**-% de las per-sonas de las comunidades seleccionadas que realizan ingresos de ecoturismo; -Cambios en el numero de visitantes**					

Productos	Indicadores	Metas específicas	Fuente de datos	Frecuencia	Costos	Responsabili-dades
PRODUCTO 1: Evaluacion del potencial turistico de sitios especificos	-No. de planes de implementacion	-4 planes	Archivos del Proyecto	-anual	-n/a	-TNC/contra-tistas
Actividades 1.Inventarios de atractivos turisticos	1.No. de inventarios financiados; No. de inventarios terminados	1. 4 inven-tarios	1. Contratos/ Archivos del Proyecto	1. una vez (primer año) una vez (segundo año)	1. n/a	TNC/contra-tistas
2. Evaluacion y orientacion comunitaria	2.-No. de evaluaciones; No. de evaluaciones siendo usados por las comunidades en la toma de decisiones -No. de cursillos; No. de asistentes por cursillo (DGEA)	2. 4 evalua-ciones	2. Informes de personas/ instituciones contratadas	2. una vez (al final de primer y segundo año)	2. n/a	TNC/contra-tistas

Productos	Indicadores	Metas específicas	Fuente de datos	Frecuencia	Costos	Responsabilidades
PRODUCTO 2: Centros de Informacion establecidos y senderos interpretivos trazados	-Numero de visitantes/mes (por genero y nacionalidad) cada centro; ganancias netas	-n/a	-Informes de los guardaparques; informes financieros de los centros	-mensuales	-n/a	-TNC/contratistas/MAG/ Cuerpo de Paz
<u>Actividades</u> 1. Construir los centros	1. No. de centros construidos	1.3 centros	1. Informes del Jefe de componente	1. semestrales	1. n/a	TNC/contratistas/MAG/ Cuerpo de Paz
2. Equipar y armar las exposiciones	2. No. de centros equipados	2.3 centros	2. Informes del Jefe de componente	2. semestrales	2. n/a	2.TNC/contratistas/MAG/ Cuerpo de Paz
3. Trazar y habilitar los senderos	3. No. de senderos abiertos al publico	3. 9 sin letreros; 3 interpretivos	3. Informes de los contratistas y del Jefe de componente	3. semestrales	3. n/a	3.TNC/contratistas/MAG/ Cuerpo de Paz

Productos	Indicadores	Metas específicas	Fuente de datos	Frecuencia	Costos	Responsabili-dades
PRODUCTO 3: Comunidades capacitadas para manejar ecoturismo	-No. de comunidades entrenadas que estan autoges-tionando eco-turismo en sus alredadores	-4 comunidades	Informes del Jefe de component/ informes de las contratistas	semestral/ resultados a final de 3 años	n/a	Jefe de componente/ contratistas
<u>Actividades</u> 1.Capacita-cion de personas interesados como guias, administra-dores, cocineros hoteleros, etc	1. No. de personas entrenadas; no de personas empleadas (DGEA)	1. no esta-blecieron metas específicas	1.Informes de los contratistas; estudio socioeco-nomico (vease componente de manejo de re-cursos)	1. anual; cada 3-4 años	1. vease costo del estudio bajo el compo-nente de manejo de re-cursos	1. Jefes de los 4 componentes
2. Talleres de promocion para operadores de empresas turisticas	2.No. de talleres; No. de asistentes (DGL); No. de empresas; No. de viajes organizados por las empresas a las comunidades y a las areas protegidas	2. minimo de 2 talleres	2. Informes de contratistas/Jefe del componente	2. Semestrales	2. n/a	2. Jefe del componente

Productos	Indicadores	Metas específicas	Fuentes de datos	Frecuencia	Costos	Responsabili-dades
PRODUCTO 4: El ecoturismo comunitario vinculado con la empresa privada	-No. de comuni-dades colaborando con empresas pri-vadas	-2 comuni-dades	-Informes del Jefe del componente	-anual	-n/a	-Jefe del componente
<u>Actividades</u> 1. Promocionar el concepto de ecoturismo comunitario	1. No. de seminarios ejecutados y empresas con-tactadas; fondos invertidos por em-presas	1. minimo de 2	1. Informes del Jefe del componente	1. semestral	1. n/a	1. Jefe del componente
2. Asesorar a modelos de ecoturismo privados como fincas y bos-ques privados	2. No. de modelos privados fun-cionando con assesoramiento SUBIR; fondos invertidos por SUBIR	2. 2 haciendas/ fincas (La Florida mas una);	2.Informes del Jefe del componente	2. anual	2. n/a	Jefe del componente

Productos	Indicadores	Metas Especiñcas	Fuente de datos	Frecuencia	Costo	Responsabili-dades
3. Capacita-cion de fun-cionarios de areas protegidas	3. calidad de los controles de visitas por nacionalidad y genero y mantenimiento de senderos	3. no esta-blecieron metas específicas	3.Informes de Jefe del componente y Jefe Regional	3. semestrales	3. n/a	3.Jefe del componente y Jefe Regional
4. Publicacion de una guia para des-arrollo de actividades de turismo	4. guia publica	4. una guia	4. Archivos del Proyecto	4. Una vez	4. n/a	4. Jefe del componente