Final Midterm Evaluation Report on the “Project to Eliminate Child Labor in the Fireworks in San Juan Sacatepequez and San Raimundo, Guatemala”

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I. Introduction

Antecedents and Project Description

In April 2000—after previously having worked on sensitizing and labor training with 12 communities of the municipalities of San Juan Sacatepequez (SJ) and San Raymundo (SR)—the ILO initiated the Project for the Progressive Elimination of Child Labor in the Fireworks Industry of San Juan and San Raymundo. The projected duration of this project was 21 months. Due to internal circumstances which will be analyzed throughout this evaluation, and in order to complete its objectives, IPEC authorized that the project be extended until November 2002, for a total of 32 months.

Following its customary procedures, IPEC delegated implementation of the project to implementing agencies. In this case, three organizations were chosen to implement each of the project’s main components:

- **HABITAT** (Guatemalan Association for Sustainable Development)
  Area of Social Protection: Education and Health

- **ASI** (Association for Holistic Support)
  Area of Community Manufacturing Options

- **CONMIGUAT** (National Coordinator of Small Businessmen of Guatemala)
  Area of Manufacturing Options in the Relocation Fireworks Industry

These agencies, in collaboration with IPEC, designed work plans for the development of each area. The following chart shows the general and specific objectives for each one:
### Social Protection

- Children who were already working in the fireworks industry will have been removed and will be incorporated into the school system and technical training. 4700 children and their families will have received health care.

### Community Manufacturing Options

- New manufacturing options.

### Manufacturing Options in the Relocation of the Fireworks Industry

- Fireworks factories and the collecting and marketing of the products will have benefited.

#### Specific Objective 2

- By the end of the program in SJ and SR, 12 communities, 1634 parents, 17 factory owners, factory managers, workers and local authorities will have been sensitized and mobilized to act in favor of the eradication of CL.

- By the end of the program, 600 parents will have satisfied the basic needs of their nuclear family and will be able to do without the income that their children generated through work in the manufacturing of fireworks.

- By the end of the project, 1034 families involved in the manufacturing chain (production, transportation and marketing of the final product and the services generated by these manufacturing activities) will have removed their children from fireworks manufacturing activity.

#### Specific Objective 3

- By the end of the program, specific actions will have been identified and developed which will allow the eradication of child labor in the fireworks industry throughout the country.

### Methodology

This evaluation examines the relevance of the project design, as well as the results obtained and their contribution to achievement of the objectives. It analyzes the implementation of the activities from their beginnings to the present time, with emphasis on their relevance, effectiveness, efficiency and the sustainability of the results over time. The chapter of conclusions and recommendations includes proposals for redirecting some aspects of the project in terms of goals and strategies to be employed in order to achieve the desired results and objectives.

### Desk Review

The office task has encompassed the revision of the project’s technical documentation—PRODOC (project document), Baseline Study, Agreements, Technical Progress Reports, Reports for the donor country, and Summarized Outlines of the agencies working on the project—as well as the documents which have been produced during its implementation, such
as the new “Regulations for the Importation, Storage, Transportation, Use and Marketing of Chlorate, Perchlorate, and Similar Substances,” the National Report on the State of Child Labor in Guatemala and the National Plan for the Prevention and Eradication of Child Labor and the Protection of Adolescent Workers, among others. This stage also included a revision of evaluation criteria and questions, the definition of indicators to guide the analysis, and the development of instruments for gathering information.

Criteria, questions and indicators

On the basis of the aspects to be considered and the points included in the Terms of Reference—validity of the design, implementation and performance (implementation, relevance, efficiency, effectiveness, unforeseen effects, sustainability) and points of interest of the IPEC project—the issues were developed and the evaluation indicators were defined, as shown in Annex 1.

Field Work

The tools employed for gathering information have been designed according to the characteristics usual to a midterm evaluation and based on the type of information which was needed for later presentation at a workshop which took place with all stakeholders of the project. The amount of time available for field work was also taken into consideration.

Because of the nature of the object of analysis, qualitative methods were chosen for the gathering and analysis of information in the field, combined with quantitative methods resulting from project documentation. The quantitative data allowed analysis of the efficiency and effectiveness in terms of the number of beneficiary families integrated into solidarity groups, and in terms of the number of children who participated in summer schools and pre-school centers.

In order to gather information, semi-structured interviews were used with the main participants, both institutional and communal, including the beneficiaries. The information was gathered, on the one hand, by the personnel of the three implementing agencies of the project by means of semi-structured interviews, and, on the other hand, through a sampling of the beneficiary population, by means of a combination of quantitative and qualitative methods. Lastly, information and opinions were gathered from all those institutions which are involved in or committed to the project, both at local and national levels. These institutions are:

- Instituto Nacional Técnico de Capacitación (INTECAP, National Technical Training Institute)
- Ministry of Education (MINEDUC)
- Ministry of Labor (MITRAB)
- Army Engineer Corps
- Municipality of San Raymundo
- Municipality of San Juan
- San Raymundo Health Center
- San Juan Health Center
- Education Supervisor for San Raymundo
- Ecodesarrollo (Ecodevelopment, the firm in charge of the National Study)
- SI Consultants (in charge of updating the base line study)
- Guatemalan Institute of Social Security
The Schools of Cerro Alto and Pasajoc

As concerns the child and adolescent population of beneficiaries and their families (most of them part of the Solidarity Groups), their numbers did not make working with all of them viable, so instead the option of analyzing a sample of children and adolescents in the schools and preschool centers was chosen. Additionally, group interviews took place in the case of the Solidarity Groups. In determining the sample, the focus was on choosing cases which were representative of the different conditions of the population for detailed analysis, rather than on statistical rigor. The key informants at this level were:

- Fireworks families
- Solidarity groups formed by the project: 17 in the context of the area developed by ASI and 2 in the area implemented by CONMIGUAT
- Benefited families

Not being able to depend upon a data base of the target population created difficulties in the process of selecting the sample of those to be interviewed. This difficulty was overcome thanks to the control the implementing agencies had over the target population classified into solidary groups and the knowledge these agencies had in terms of geographical location of the families in these groups in each of the communities.

**Stakeholders Workshop**

After the field work, a workshop was held with all the stakeholders of the Project, which included representatives from the following institutions and groups:

- Ministry of Labor
- Ministry of Health and Social Assistance
- Ministry of Education
- Office of the Mayor of San Raymundo
- Department of Labor of the United States (donor)
- IPEC/ILO Costa Rica
- IPEC/ILO Guatemala
- Technical Team of ASI
- Technical Team of CONMIGUAT
- Technical Team of Habitat
- Community groups
- Summer School Teachers
- Parents
- Adolescent workers

In this workshop, which was facilitated by the authors of this report, the current situation of the project was presented, based on its objectives and results. A SWOT analysis, carried out by the evaluators, was also analyzed and discussed.

Secondly, the work was done in three groups, one for each component, based on the analysis of the SWOT which had been presented and validated. The goal of the group work was to redirect the project and modify the goals in accordance with the time available and the results...
already obtained, in those cases deemed necessary because of circumstances related to the participating communities (which will be analyzed later in this report). This group work was presented in a plenary session so that everyone there could participate and validate the proposals, which are included the recommendation chapter of this report. Finally, a document-agreement document was developed with points to be taken into account during the extension period of the project by the different parties present at the workshop. (See Annex 2.)

**Preparation of the Evaluation Report**

The office work, field work, and stakeholders’ workshop have provided the basis for this report, which was revised and enriched by suggestions from the IPEC office in Costa Rica and the IPEC headquarters in Geneva. The report first analyzes the project design, taking into account the quality of previous studies, intervention logic, and the participation of the beneficiaries in this stage. Later it examines implementation, using relevance, effectiveness, efficiency and unforeseen effects as key criteria. One chapter is specifically dedicated to perspectives of sustainability of the results over time. Finally, conclusions are reached and specific recommendations are made, directed towards the different parties involved in the implementation of the project. The annexes present certain methodological issues, the conclusions of the workshop with the stakeholders, and a proposal for a monitoring system.
II. Design

Baseline

The project baseline was defined by a consultant hired for that purpose. The results of this baseline were later presented at the beginning of the implementation, in the third trimester of 2000. In it, 500 families and 3000 children and adolescents were identified, fewer than the project's target population of 4700 children, 600 adolescents, and 1634 families.

There are two reasons why an incomplete study was presented. On the one hand, the complexity of the forms used made the field work too costly, and on the other hand, the surveyors' work coincided with more intense presence of policemen and inspectors in the very communities where the project was taking place to search out children working in the fireworks factories, given the number of accidents which had occurred this year in that occupation. This second factor, in combination with the lack of trust of the families who labor in the fireworks business, because of the illegal nature of that activity, was determinant, since people were afraid to give true information and withheld information from the task force, thus underestimating the target population.

In any case, this diagnostic study, which could have been improved through the participation of the implementing agencies, should have permitted sufficient, precise identification of the target population. However, an information base on the beneficiary population which was handled in coordinated fashion by the three implementing agencies was never achieved. HABITAT, which was in charge of maintaining said base and coordinating with the other agencies, did not facilitate its information to the others, so that for all practical purposes, ASI and CONMIGUAT had to establish their own beneficiary databases during the first months of their incorporation into the project, with the concomitant loss of time and resources.

Several factors contributed to this situation. In the first place, HABITAT, and especially the director, did not demonstrate sufficient capacity in carrying out the project and in the control of the beneficiary data base, frequently failing to duly coordinate with the other implementing agencies. On the other hand, the project coordination, which should have provided follow-up on HABITAT's performance and have taken necessary measures in due time, failed to duly carry out their responsibilities. This situation was detected by IPEC and provoked a change in the project coordination and the HABITAT agency.

At present, the baseline is being expanded in 9 of the communities on which the project focuses. The methodology being employed in this baseline, with a simpler survey and the knowledge of the project that the target population has, is facilitating its implementation, although a degree of uncertainty still exists due to the difficulty implicit in social research in a sector with the conflicts this one has. For this reason, the implementing agencies should permanently maintain and update their information. Currently the preliminary data of this second baseline is being verified by the agencies, and it is hoped that final results will be ready in March 2002.
**Beneficiaries**

The project estimated the beneficiary population based on available data from studies carried out on a national scale. Because of this, the numbers do not clearly reflect the magnitude of the problem in the municipalities of San Juan and San Raymundo.

The project was designed for a context in which the fireworks industry was located in medium-sized factories where adults and children worked as salaried employees for a businessman. In the past two years, which coincide with the implementation of the project, these manufacturing processes have been moved from the factories to homes. At present, most of the factories are abandoned and the fireworks are made in the homes of former factory workers. Currently, the businessman or an intermediary supplies the workers with the raw material at the beginning of the week, and at the end of the week stops by to collect the finished product and to pay the maker, minus the cost of the raw materials. Thus, the businessman avoids fixed expenses in the form of social security fees and working capital, as well as workers’ insurance, responsibilities and fines derived from inspections, and only pays for the finished product, of predetermined quality. On his part, the producer directly assumes the risks associated with the handling of explosives, to which his family and household are also liable, and he has no guaranteed fixed income under this system.

**Intervention Logic**

Child labor in the fireworks industry is a reality which arises as a consequence of a series of coexisting factors in the community and family context. The principal factors include the need to exploit the entire working capacity of the family due to conditions of extreme poverty, the lack of access to income-generating alternatives because of the poor working skills of the parents, lack of work opportunities, deficient manufacturing infrastructure, and the lack of basic utilities. Intervention in this complex issue demands a holistic approach which encompasses the social and economic causes of child labor and combats the negative effects it has on the children involved in the fireworks industry.

In accordance with this situation, the project is a multidimensional action designed to address the principal causes of the problem: the insertion and retention of children in the formal education system, technical training for adolescents, health care, awareness raising, and an increase in family income through different alternatives to the manufacturing of fireworks or improvement of this activity.

The division of the project into three coordinated functional components (social protection, community manufacturing options, and manufacturing options in the relocation of the fireworks industry) is viable because each one has its own internal coherence and cohesion, thus allowing for implementation by specialized NGOs.

In general, the project is formulated with defined quantitative goals; however, these are not entirely realistic because they are based on estimates taken from studies carried out at the national level and on the first baseline, which was deficient. Updating the baseline will provide a more accurate panorama of the reality of child labor in this region.
Participation of the Beneficiaries

The project was designed by IPEC after consultation with certain local institutions in the identification process. The beneficiary groups (community organizations, families that manufacture fireworks, children) only participated in the formulation of the project through the information they provided for the situation analysis. Greater community participation would have resulted in a better project design. For example, in the area of manufacturing alternatives, some of the obstacles which the project currently confronts, such as the competitive disadvantage of traditional activities when compared to fireworks, could have been foreseen. Nevertheless, in the complex social context in which the fireworks production takes place, with a variety of groups involved and in a quasi-illegal context, it would have been difficult to successfully involve the beneficiaries in the project design. This difficulty is being overcome through modifications in project strategy and better knowledge of that reality ever since the implementing agencies began interacting with the population.

Institutional Framework

The legal and institutional framework in relation to the eradication of child labor and support to the children is being reinforced in Guatemala as a result of the efforts of IPEC in this nation. The most recent advances are the elaboration of a National Plan for the Eradication of Child Labor (2001-2005) and ratification of ILO Convention 182 (2001).

In keeping with this framework, the project coordinates actions among a group of public and private Guatemalan institutions, mainly the Ministry of Labor (MITRAB), the Ministry of Education (MINEDUC), the National Institute of Technical Training (INTECAP), and Army Engineer Corps of the Ministry of Defense, the municipalities of San Raymundo and San Juan, and the health centers and schools of both districts.

Generally speaking, there has been good coordination, which has resulted in important project results, such as the elaboration of a proposal for new “Regulations for the Importation, Storage, Transportation, Use, and Marketing of Chlorate, Perchlorate, and Similar Substances”. This said, institutional weaknesses which affect successful implementation of the project remain, especially limited institutional capacity in terms of personnel and resources, as well as the high degree of personnel rotation which is found in some counterpart agencies, such as the Ministry of Labor.

III. Implementation and Results

Implementation and Relevance

Interagency Coordination

The integration of three specialized implementing agencies in each of the three program components is a successful strategy which nonetheless gives rise to important challenges, especially within a framework in which the realization of joint NGO projects is not common.
Good coordination among the implementing agencies is an important aspect which must be taken into consideration in order to avoid difficulties such as those encountered in the project.

HABITAT has revealed a lack of project management capacity which has translated into very few accomplishments in the area of social protection compared to those projected, especially in terms of health and education, with the exception of the Summer School (academic reinforcement classes during vacation time in the local schools), which has surpassed all predictions since its student population has been greater than that of the regular school year. It is essential to point out that the period of most intense fireworks manufacturing coincides with the period of school vacation (between November and December), since this is the time when there is the greatest demand for fireworks because of end-of-the-year festivities. The school year in Guatemala goes from January to November.

HABITAT also failed to maintain adequate coordination with the other two implementing agencies, as was their responsibility due to the crucial role played by the area of social protection. They neither shared their data base of the beneficiary population, which presumably was not kept updated, nor were they active in the integration of activities among the three NGOs. Consequently, ASI and CONMIGUAT had to use the first months of their participation in the identification and registration of beneficiaries, a task in which they invested both time and resources.

These aforementioned difficulties have caused a serious delay in the implementation of the project, although the leave-taking of HABITAT has eliminated the existent coordination obstacle. Currently, the ASI agency has assumed institutional and technical leadership and has been able to maintain a good level of coordination and collaboration among the teams in the field, although it is still necessary to reinforce articulation between ASI and CONMIGUAT at the institutional level. The social component of the project has become directly dependent upon ASI.

Here it must also be said that the coordinator who was initially chosen to head the project failed and had to be fired in May 2000. Her actions followed HABITAT’s guidelines and made the work of the other agencies more difficult. In addition, she failed to get involved in the project, which resulted in it having to function without a person in control of the situation, as well as one to guide all those involved in the same direction. When these problems were identified, the coordinator was fired, which caused a second problem: the absence of a centralized decision-making entity. This situation continued until it was decided that ASI would temporarily assume a coordinating role through the person primarily in charge of this agency.

Program scope

Initially the project was designed to cover 12 communities. HABITAT expanded this number to 17 in order to include other communities in which there was fireworks manufacturing activity and because the baseline, not having been carried out under ideal circumstances and not having provided realistic data about the population, failed to encompass the target population indicated in the project. This caused repercussions in the project, since in practice it has become clear that this number of communities is not easily handled, mainly because of communication problems related to their geographical isolation. Additionally, in one of the communities included by HABITAT, it was later found that only one or two families were potential beneficiaries. Once aware of the actual situation of the problem and the existence of a larger target population than that indicated in the baseline, the implementing agencies have proposed that the project be concentrated in the 9 communities where the problem of child labor in
fireworks activity is most severe. During field visits, the difficulty of mobilization within the communities became clear, and 9 communities were considered sufficient, since they meet the projected target population of project beneficiaries.

**Work plan**

The work plan has been subject to a variety of modifications as a consequence of its management by HABITAT and the strategic changes which have been introduced in order to adapt it to the context which the implementing agencies have encountered.

Besides the delay in implementation, which has been partially resolved by the time extension given the project, the most substantial changes have taken place in the reorientation of the Area of Manufacturing Options in the Relocation of the Fireworks Industry, headed by CONMIGUAT. The main one has been a change of strategy: from the establishment of one huge factory to the setting up of several smaller model workshops. The main causes of this change have come about because of the characteristics of the target population: conditions do not exist for a collective business enterprise of large dimensions; the beneficiaries prefer to be organized in small groups in each community, and the home manufacturing culture to which they have become accustomed leads them to refuse to travel long distances to the workplace.

On the other hand, the financial projections underestimated the construction costs of a factory (building materials have risen in price, and safety measures must be taken into account, given the danger implicit in the raw material), and given the available budget, it was only feasible to organize two model workshops, which would benefit a total of 117 families: 13 involved in the production of each shop and 91 families in the marketing of the material produced in these shops.

At the time of the evaluation, CONMIGUAT was working on the establishment of five credit unions, each consisting of approximately 20 people (almost all men).

In terms of the other areas (social protection and community manufacturing options), the changes in the fireworks industry have not affected the programmed strategy, since they focus on the family unit, the schools, health centers, and community organizations.

**The Participation of the Beneficiaries**

The project has had difficulty involving the beneficiaries in its implementation. The network of community organizations and leaders is complex and, in many cases, conflictive. Many local communities are at odds or lack the support of their communities or of local authorities. The strong economic interests that underlie the fireworks sector make attempts at integration among the beneficiaries of the project even more difficult.

This “high risk” situation has caused repercussions in the project. Some of the organizations and leaders initially contacted have turned out to be inadequate, and the implementing agencies have had to modify their interlocutors as they have become more firmly established in the area. This is a common adjustment in this type of project.

Of a somewhat different nature are the risks which exist for participation due to the opposing actions of the intermediaries and the fireworks entrepreneurs the beneficiaries currently work
for, and whose interests are very large because of the volume of money involved in this sector and other closely related ones, such as the chlorate and perchlorate business, which are necessary to the manufacturing of fireworks (the Ministry of Defense is in charge of granting licenses for the importing and distribution, which creates a very reduced circle which has lead to speculation and black markets). The project constitutes a threat to these people, who from the beginning have worked hard at discrediting the project and the implementing agencies teams, as well as undermining the participation and organization efforts of the beneficiaries. So far the project has been able to handle the situation satisfactorily, but it would be advisable to pay careful attention to this as the project progresses, especially when the manufacturing components are put into practice, which will become a very important source of competition for the intermediaries and entrepreneurs. Sensitizing and communication tasks are crucial in dealing with this type of difficulty.

The Project Monitoring System

Project monitoring is being carried out through a double system. The IA write two types of follow-up reports, one for USDOL and another for IPEC. Although their nature is essentially the same, the formats and deadlines differ. This implies a certain degree of redundancy and additional work load for the project personnel.

In spite of the exhaustive nature of the reports, the most important obstacle in monitoring has come about as a consequence of the participation of HABITAT. With the departure of this organization, a large part of the information concerning the activities that have taken place and the people involved in the project has been lost, and with it a systematic account of the work done. At this time, ASI and CONMIGUAT are reconstructing those databases and reactivating the monitoring system.

Effectiveness and Efficiency

Social Protection Component

Specific Objective 1:

By the end of the AP, in San Juan and San Raymundo 2500 children will have been prevented from assimilation into the fireworks industry, and 2200 who were already working in the fireworks industry will have been removed and will be incorporated into the school system and vocational training. 4700 children and their families will have received health care.

At the time of evaluation (2002 school year), the project has successfully removed 314 children and adolescents from work, according to follow-up reports of the project.

The problems with HABITAT in managing the data base of beneficiaries makes it difficult to be precise with other quantitative data. There is little available information on the activities carried out by HABITAT from the beginning of the project up to the recent date on which ASI took over that area, especially in terms of how many people have benefited from those activities. In any case, visible results on site reveal that there has been little progress, and that the most significant achievements took place after the change in the project coordination.

At the level of pre-school attention, the project created 16 pre-school centers for attending children who are not yet of school age. These are supervised by a promoter from the very
community who is continuously trained by the project, and they provide care for about 20 children each, although this number varies. The centers have been equipped with furniture and academic material and are located in places provided by the community. Although these centers meet the need of pre-school care in the communities, their results have been quite limited up to the present time. The people in charge have very little formation, in spite of the training the project provides, and lack of follow-up on HABITAT’s part has resulted in very erratic performance. This is being worked on at present, and the people in charge who are not performing well will be replaced, at the same time that attempts will be made to guarantee continuity of the pre-school centers through alliances with other institutions. One example is the Program of Community Homes (which looks after pre-school children), which is headed by the First Lady and with whom the installation of 5 of these homes is being coordinated in communities benefiting from the project.

In relation to the distribution of school supplies, there are few records which allow identification of those who have benefited from this. Most supplies were handed out by the school principals, who distributed them equally without taking into consideration those children who belonged to the project and those who did not, in order to avoid claims of discrimination. Likewise, the academic centers themselves received materials. It is difficult to determine to what extent the provision of school supplies contributed to the incorporation and retention of school children. The lack of family financial means for buying necessary supplies is one factor which limits school attendance. According to the children, their families, and the teachers interviewed, along with financial solvency, other key factors include the value given to education within the family, the low educational level of the parents, the training of the teachers, and in some cases the distance from school centers.

The greatest accomplishment of the Project has been the channeling of funds donated by Scholarships for Peace to the schools. These are scholarships created by the Ministry of Education to facilitate the schooling of poor children in the most underprivileged areas of the country. During the second semester of 2001, the Ministry signed an agreement with the ILO so that each of the children benefiting from the Action Program that IPEC has in the country will receive one of these Scholarships for Peace. These scholarships are good for three years and are given to the children’s parents as assistance for their schooling, but in the case of IPEC projects, the scholarships are given directly to the project or to the schools where the target population is enrolled and are managed by project personnel, along with the school principals.

The Ministry of Education has destined a total 2200 scholarships for this project, to be distributed equally among the children of the 9 schools of the communities chosen. These scholarships are not given directly to the children but rather are managed by the project in conjunction with the school. These resources are used to/for: 1) pay registration fees, 2) school lunch, 3) materials, 4) a small amount goes to the parents to cover potential additional expenses, 5) extra teacher hours for reinforcement and recreation. The rest is invested in improving the school infrastructure, which is generally deficient.

During 2001, using funds from these scholarships, and given that when the agreement was signed between ILO and MINEDUC the school year was ending, so-called Summer Schools were established, which consisted of extra school time to reinforce the education and care of the children during vacation months (November and December). During the 2001 school vacation time, three Summer Schools were created. The project has provided scholastic material and the Scholarships for Peace have covered the other expenses, such as teacher payment and the school lunch given to students. These schools included all regular school
students as well as a significant number—another 10-20%—of children who had not been attending school. In this sense, the project has been very successful at creating awareness and mobilizing parents to take their children to school, especially in those cases where they had not been attending or had left. This achievement is especially significant when one takes into consideration the fact that it is in these months when the greatest number of fireworks are produced.

The biggest problem which has been detected in the area of adolescent education is vocational training in the communities. On the one hand, there is no high school or technical training center in the area, in addition to the fact that studying in the capital implies additional expenses for transportation and food, as well as loss of the financial support for the family provided by the adolescent from his work.

The project made an agreement with INTECAP to give vocational courses to 600 adolescents. At present, only 9 have received this training. This figure reveals the difficulties of traveling (food and transportation costs) which are incurred by the adolescents who travel daily to the capital, where the courses are given, as well as certain communication or visibility problems of the project, since in the evaluation it was found that adolescents interested in receiving training did not know whom to consult nor how to get access to that training.

In terms of the achievements in health care for the children, adolescents, and their families, not many results have been verifiable. The project has not had a situation analysis of the health of the target population which identifies the illnesses and main risks to use as a basis for planning goals and specific actions, but rather has worked in a continuous if rather disperse manner in accordance with available resources and specific support measures on the part of the health centers and institutions that have donated medical equipment, or on the initiative of HABITAT promoters. At the present time, this area is being redirected towards more rigorous action, and the health center at San Raymundo has provided a health analysis for one of the communities, although further improvement on the plan for this area is still necessary.

The efficiency achieved in this objective (and in general in the entire project) is proportionate to the coordination achieved with national institutions. To the degree that the institutions responsible have mobilized resources for the care of project beneficiaries, there has been a corresponding rationalization of project costs. In this sense, there have been significant accomplishments related to the Scholarships for Peace of the MINEDUC, as has been mentioned.

In the steps taken in the area of health care for the beneficiary population, the project has channeled resources acquired through different donations, as well as technical assistance of the personnel from the health centers in San Juan and San Raymundo. Coordination has been established with their medical teams.

**Specific Objective 2**

By the end of the AP in SJ and SR, 12 communities, 1634 parents, 17 factory owners and managers, workers and local authorities will have been sensitized and mobilized in favor of eradication of child labor.
At the community level, the project is making progress in creating awareness within the beneficiary population of the problem of child labor. Likewise, health center and school personnel are significantly aware of the problem and are being mobilized by the project. As for local authorities, there have been fewer results. The way in which municipal mayors have response to the project and its goals of eradicating child labor has not been the same. The mayor of San Raymundo has been more receptive, especially in terms of sensitizing and creating awareness in the community and in terms of facilitating the agencies’ work in the field by publicly supporting them, although without concrete contributions of resources. The mayor of San Juan, on his part, has not given any practical support to the project.

Relations with the municipalities have been equally unstable. Child labor is not part of their political agenda, and the project is a new and influential agent introduced into their territory which sometimes clashes with mayors’ interests. On the other hand, this is an unavoidable reality which must be dealt with, since short-term or mid-range favorable structural change is unforeseeable. Thus, work must continue as it has up to this time, involving the municipalities as much as possible, continuing the task of sensitizing them, and maintaining cordial relations with the mayors.

The project has had distant relations with the factory owners and managers, since this is a group whose interests are threatened by the project. However difficult, in the future closer ties with these businessmen will be necessary because of their key role in the use of child labor and their strategic role in facilitating project implementation.

In terms of efficiency, the sensitizing and mobilization actions in the community are taking place within the general context of the project’s other activities. Training events, school activities, etc., are utilized as a platform for sensitizing various social agents. This has resulted in a significant degree of efficiency. On the other hand, it must be pointed out that the sensitizing carried out by IPEC at a national level has contributed to the objectives of this project. For example, the National Plan for the eradication of child labor, which defines fireworks as one of the worst forms and therefore identifies this sector as a recipient for assistance; and the ratification of Convention 182 of the ILO, whose public signing included the participation of 182 children from the project schools.

Specific Objective 3

By the end of the AP, specific actions will have been identified and developed which permit the eradication of child labor in the fireworks industry throughout the country.

This objective encompasses the development, based on the accumulated experience with this project, of new projects to eradicate child labor in other parts of Guatemala. The activities of this objective, by their very nature, are left to the final stages of this project, and for the time being there has been no progress in this area.

Area of Community Manufacturing Options

Specific Objective 1
Contribute to the eradication of child labor in the fireworks industry of San Juan Sacatepequez and San Raymundo through improvement of the manufacturing practices of the parents and the introduction of new options.

Since ASI has become part of the project, 21 solidarity groups have been established, consisting of about 10 people—mostly women—each. These groups are only beginning to receive credit, so it is somewhat premature to draw conclusions about their functionality and consolidation, or their credit behavior. However, the efficiency with which communities have mobilized and organized is noteworthy, taking into consideration that the credit conditions are similar to those of the market although slightly less harsh than those of other local credit organizations.¹

The credit system now in place is based on solidarity committees, which are groups of credit beneficiaries who respond collectively for the credit given each member. This mechanism facilitates better selection of credit recipients because the group will not admit individuals with a bad credit history, and control is reinforced through group supervision of its members meeting their credit obligations.

ASI has depended on these groups for training and follow-up, which has resulted in the system working at a high level of efficiency. Through its representatives, the group keeps track of each individual credit, of collecting fees, and of making the payments. This system is very efficient and permits for two field technicians to keep track of a roster as large as that proposed by the project.

**Specific Objective 2**

By the end of the AP, 600 parents will have succeeded in meeting the basic needs of their family group and will be able to do without the income generated by their children through the manufacturing of fireworks.

Manufacturing activities now being supported by revolving credit are traditional options which the beneficiaries know well or are even carrying out at this time. Small credit provides them with a small sum to operate at a very reduced scale.

Traditional activities have the advantage that they are familiar to the beneficiaries, which makes small businesses viable and facilitates credit return and roster maintenance. In this sense, it can be affirmed that the credit system is highly efficient, since it immediately translates into the creation of small-undertakings, at no cost to the project other than those which derive from the organization of solidarity groups and system operation. Nevertheless, this characteristic can also become a limitation to achieving the objective, since these traditional activities at the level of single-family small businesses cannot compete with the manufacturing of fireworks, which generates greater income.

At the individual level, these small businesses may serve to generate a complement to family income, maximizing the exploitation of family work potential and assets (housing, land). But for them to truly substitute fireworks production, they must generate similar or greater income without the use of child labor. For this to happen, credit is not the only factor which should be

¹ Market conditions are now 24% interest. The project gives loans at 20%, with a solidarity guarantee rather than assets
included in the project strategy: improving the quality of the product, the search for more advantageous marketing routes, and the introduction of nontraditional activities, among others, must also be taken into consideration. A meaningful example of this is the case of one of the solidarity groups which requested technical assistance to improve its textile crafts production instead of credit. The project trained them and put them in contact with a crafts dealer who now buys their entire production and they have a considerable margin of profits.

**Area of Manufacturing Options in the Relocation of the Fireworks Industry**

**Specific Objective 1**

By the end of the AP, 1034 fireworks manufacturers organized into business associations who are directly involved in the semi-industrialized manufacturing of fireworks and the collecting and marketing of those products will have benefited.

Given that the model workshops are not working yet, it is premature to draw conclusions concerning the degree to which results and objectives have been accomplished. Nevertheless, a series of processes which could be influential in this aspect have been observed.

This component has the special characteristic that the beneficiaries are perfectly aware of the manufacturing technology the project aims to consolidate. For the most part, they have years of experience (many of them began work as children) and have in-depth knowledge of the entire manufacturing process. This mastery of the technology on the part of the beneficiaries constitutes a strategic advantage for the project, to which must be added the potential of the new powder formula being developed, both in terms of safety and possibly also of cost.

On the other hand, the market for fireworks products is very solid and there is strong demand, and San Juan and San Raymundo are known as manufacturing centers. Initial contacts have been made with possible buyers, such as the municipalities which use fireworks in their patron festivals and at Christmas, and the interest shown has been high. In terms of marketing, the project plans to offer a brand image based on the non-employment of children which could be of special interest to public institutions such as the municipalities, who are important consumers, at the same time that it can serve as a means for creating awareness of the problem.

Nevertheless, there are some limitations. As has been shown, one of them results from the project’s inability to construct enough model workshops to cover the entire target population. Manufacturing costs are much higher than initially calculated, due to the increase in material costs and the special construction requirements for this type of installation (reinforced walls, etc.), and it is only possible to set up two workshops with the funds available. This will diminish the number of direct beneficiaries of the project. The selection of those groups who will eventually benefit from the workshops will be made from among those who can best guarantee what is asked of them, especially the locating of lands available for construction.

Failure to meet expectations because of the construction of fewer workshops may affect the project, especially if, as is expected, this fact is used by intermediaries to attack it. Nonetheless, the project has already confronted intentional discrediting on the part of the intermediaries and has been able to neutralize it, and the project’s present position in the region is one of support and legitimacy. The task of communication on the part of the team will be fundamental in this sense. In addition, there is the possibility of generating wealth through the workshops which are
created during this first stage, as well as the possibility of reaching the population which was left out during a possible second stage. Possibly, if it is explained to the beneficiaries that the costs impeded the construction of the programmed workshops, they may accept this, especially if there is the possibility of a second stage, because the evaluation process has made clear the high degree of credibility and trust that the implementing agencies have with the population.

The structure of these shops will directly involve 26 parents in the manufacturing process and 91 families in marketing the product, that is, a total of 117. Thus, 441 families whom it was originally believed would directly benefit from the shops will no longer do so, according to the estimates of CONMIGUAT. On the other hand, these shops will generate a series of related activities that will involve the rest of the families, who will benefit indirectly, since they may also receive small credit to finance their undertakings. It is important to emphasize that these first two workshops will set a precedent in the region, since it is an innovative model which could be replicated on a larger scale in a second stage of the project, and on the other hand it will launch a new fireworks brand, “Free of Child Labor.” This is a double accomplishment, since it guarantees the total withdrawal of children from work by removing the production from homes, at the same time that it creates awareness of the need to eliminate this child labor practice.

Along with the construction of the workshops, the area on which CONMIGUAT is concentrating its efforts at this stage, there remains the important challenge of organizing the groups of beneficiaries and their transformation into a business organization. This is an aspect of crucial strategic importance since the beneficiaries have no previous business experience and their level of education is very low. Management of the workshop implies a series of functions and decision-making of a complex technical, financial, and managerial nature which requires trained personnel. The resources and activities planned by the project, as well as the implementation schedule, appear insufficient to meet this goal, although the high motivation of the group members who have jeopardized their relationship with intermediaries because they trust this new manufacturing model constitutes no small advantage.

Nevertheless, the importance of the project resides in its potential to offer beneficiaries an organizational and business model which is substantially different from the manufacturing of fireworks under the current extremely exploitative working conditions, as well as one which can be validated and replicated in the future elsewhere in the country. Additionally, these workshops can indirectly benefit part of the community through increased income and the generation of small service businesses which grow up around it. A second phase of the project could encompass the construction of the workshops which it has not been possible to build during this first stage, taking advantage of the experience accumulated so far.

In this objective, the project has achieved noteworthy efficiency in three strategically important aspects.

- The introduction of a new formula for the elaboration of powder for the fireworks, through the technical assistance provided by the Association of Fireworks of Valencia, Spain (PIROVAL), and the collaboration of the Technological University. This new formula, which uses fewer chemical compounds and, above all, is safer to manipulate, is currently in the stage of testing and validation by manufacturers. Massive implementation could bring about significant safety improvements, as well as lowering production costs (at this time, the raw materials are not available in Guatemala, and would be imported from El Salvador once the demand is created). Project costs are
those resulting from providing technical assistance and from organizing the training and field demonstrations.

- In the elaboration of the new proposal for the “Regulations for the Importation, Storage, Transportation, Use and Marketing of Chlorate, Perchlorate and Similar Substances,” the project has had the collaboration of the Ministry of Defense, the IGSS, the Ministry of Labor, the health center of San Raymundo, and a youth leader in articulating a version for the general public. This has resulted in a low-cost regulatory proposal which is presently in the legal department of the Ministry of Defense.

- The design of the model workshops was made possible through the support of the abovementioned institutions, which has made possible a low-cost constructive model with all the required safety measures for the project.

**Specific Objective 2**

By the end of the AP, 1034 families involved in the manufacturing chain (production, transportation, and marketing of the finished product and the services generated around these manufacturing activities) will have permanently withdrawn their children from fireworks manufacturing activity.

Concerning this objective, since the model workshops have yet to begin functioning, there are no corresponding results in terms of the withdrawal of these boys and girls from child labor.

**Unforeseen Effects**

Progress in the project has not revealed any significant unforeseen effects. This is one aspect to which the monitoring system should pay attention in the future. In any case, it has been possible to observe certain tendencies that were not originally contemplated.

The solidarity groups formed by ASI are mostly made up of women, with the men almost exclusively constituting the beneficiary groups of the model workshops. This would appear to coincide with the labor division within family units, in which the man is responsible for the manufacturing of fireworks, even though the entire family is involved in different aspects of the process, and the woman is in charge of other economic activities which complement family income, including some part of the fireworks manufacturing process (for example, the making of the tube). Therefore, the credit given by ASI is being used by the women to improve their existent small businesses or to begin new undertakings, always within traditional activities, while the men who formerly worked as salaried employees in the fireworks factories are now heading towards the model workshops.

While these are not effects which have been generated by the project, there are two factors strongly influencing it, and which have been discovered while implementing the project: the opposition of fireworks entrepreneurs and intermediaries, and the conflictive nature of the community network. The two elements are intertwined to the degree that many entrepreneurs are also powerful figures at the local level. The project represents a threat to them, because of which they are working at opposing it, and this opposition could intensify in proportion to the
results shown by the project. On the other hand, community organization in this region is complex, with many interests at odds, and insertion of the project has been difficult, although it is nevertheless beginning to overcome the conflicts created by some leaders.

Sustainability

Social Protection Area

In terms of incorporating the children into the educational system, sustainability depends on two fundamental factors.

The first one is the capacity of public institutions, essentially MINEDUC and MITRAB, to continue the channeling of resources into the schools which the project has begun. In this sense, the agreement signed between ILO and MINEDUC to grant Scholarships for Peace to the scholastic centers of SJ and SR which have children covered by the project is an important advance. Nevertheless, it is important to note the time limit for these scholarships, since the Government has committed to three years. On the other hand, if the project functions correctly, presumably during this time family incomes will have increased, and the families should be better able to handle the children's school expenses. Even so, along with the funds from these scholarships, more resources are needed to improve the quality and quantity of the teaching staff and the number of teaching positions, which is insufficient for the demand, because the needs of the region in terms of educational structures are great.

On the other hand, the parents' attitude is fundamental. Besides the difficulty of managing the expenses incurred from school, the parents' low motivation to send their children to school is a decisive factor in their desertion. Frequently a child is withdrawn from school once s/he has acquired basic reading and writing skills because the parents believe that is sufficient knowledge to collaborate with generating family income. Sensitizing, which is related to the next specific objective, is fundamental for sustaining school attendance over time so the children complete elementary school.

As far as supplying school materials is concerned, it is unlikely that it will continue once the project is completed because of the lack of financial resources for such costs on the part of the institutions.

The deficiencies detected in the technical training of adolescents reveal the need to coordinate with several institutions, whether the INTECAP or the Ministry of Labor through its DICAFORE program, which could send teachers to the region if space were donated; or a travel grant could be given to students so they could attend learning centers in the capital. Besides this, it is necessary to reach an agreement which binds these institutions to continuing technical education for adolescent students once the project has ended.

Maintaining the improved health conditions achieved by the project for the children and their families will depend on the creation of local capabilities. In terms of primary health care, the key role belongs to the health centers of San Juan and San Raymundo. Currently, the human and material resources of these centers are minimal, which has lead them to the strategy of using volunteer promoters, who by their very nature tend to be erratic and abandon the work readily. In this sense, commitments from the Ministry of Health will be fundamental. Whatever the
project can accomplish in terms of prevention (good hygiene habits and care, etc.) will also be important, since the hygienic conditions of these families (in many cases because of learned customs) are very deficient. Therefore, the project must give special emphasis to changing attitudes and practices, focusing on intense sensitizing of the communities.

Very few results have been achieved in mobilization and sensitization, which impedes any profound analysis of their sustainability. Nonetheless, mobilization and sensitization of all the social agents is considered a key factor for sustainability of the entire project in terms of its ultimate goal of eradicating child labor.

Area of Community Manufacturing Options

In this component, sustainability differs according to whether it relates to the revolving credit fund or the small businesses supported by that fund.

- In terms of the revolving fund, although the first credit grants have begun to be handed out and it is premature to analyze their sustainability, the current operational conditions may cause difficulties for future sustainability. The interests now charged, 20%, while close to those of the market, are insufficient to cover management costs and capitalization of the funds, part of which are financed by the project. When the project ends and the fund must be self-financing, there is a risk of progressive decapitalization, or of having to strengthen operation conditions by raising interests, not taking on high-risk operations, or other measures.

- In terms of the small businesses the fund supports, because these are small, traditional, economic activities with little added value, their sustainability is subject to all the risks which affect subsistence family units. It is quite feasible that they will last long enough to complete one credit cycle and repay the borrowed capital, and to the degree that they are complementary activities, they may remain part of the economy of the family unit.

Given that the first credits are just being granted and that none of the small businesses are yet generating alternative income, it is difficult to analyze whether the need for the children-generated economic support has been eliminated. In previous sections, comments have already been made on the difficulties which may exist for these small businesses to really compete with fireworks activity and to permanently eliminate the need for child labor, although they may serve to complement family income.

Area of Manufacturing Options in the Relocation of the Fireworks Industry

This component still does not include working model shops (although they are being built); however, there are some elements which are noteworthy in relation to sustainability.

In terms of technological knowledge and mastery, the beneficiaries qualify as experts in the manufacturing of fireworks, so in this aspect the project is sustainable. Introduction of the new formula is pending the resolution of certain technical obstacles which do not appear difficult (fuse quality), and acceptance by the manufacturers is high, with the possible exception of the points still to be resolved.
In terms of financial sustainability, the project covers a large part of the infrastructure investment, which is the most onerous. Preliminary analyses suggest the shops will be viable once they are operating, although there is no feasibility study to confirm it. As for market, an aspect which CONMIGUAT has begun by contacting potential customers, prospects are good, given the high demand for these products.

In spite of the project strengths in this sense, certain factors exist which could endanger future sustainability.

In the first place, the duration of the benefits depends on the degree of management capacity achieved by the beneficiary groups in charge of the model workshops. Currently, the capability of these group members is very low, totally insufficient for minimal functioning of a business of this nature. Most of them have completed only a few years of elementary school, and many are functionally illiterate. The project should dedicate intense effort to the organization, training, and follow-up of these groups. Besides, once the project is completed, they should seek out opportunities for the model workshops to have access to technical assistance which will permit them to consolidate, since the implementation periods are not long enough to support the initial stages of shop operations, during which time the group will require close supervision, which will be crucial for future viability. Because of this, it would be advisable for the project to have a second phase to provide technical follow-up for these activities.

On the other hand, the new formula being developed for fireworks manufacturing, while notably improving workshop safety, includes perchlorate potassium, a product which, as has been stated, is not currently sold in Guatemala. Expectations are that said product can be imported from El Salvador, where it is now being used in fireworks, by the same means now being used to import similar chemical products. Nevertheless, the project has not done a careful study to see if these expectations are realistic and if the future demand created by the project will be sufficient to start a national market for perchlorate, and if the characteristics of this eventual market will satisfy the needs of the model workshops in terms of price, timely supply, product quality, etc. If not, project sustainability is at great risk, either because manufacturing costs might not be competitive or because supplies of raw material are inadequate. Nevertheless, throughout the evaluation it was clear that the representatives of the Ministry of Defense who were interviewed (and who grant import permits for these substances) did not seem to find it problematic that this new material might need to be imported from a neighboring country, as is done now with chlorate.

Another important aspect concerns ownership of the land where the model workshops will be built. The present project design foresees that the land will be rented, with a purchasing option. This option, which was chosen because of the budget limitations already discussed, is considered extremely risky, both because the lack of guaranteed land tenancy may provoke dangerous conflicts over the revaluation of the land where the shops will be and because the property will be subject to future negotiation once the contract ends. It is also advisable to keep in mind that property problems are among the main sources of conflict in the construction of infrastructure in countries like Guatemala. Therefore, it is essential that the solidarity groups who will build the workshops buy the land.

Relations with the intermediaries are complex, but it must be kept in mind that their strong point is community disarticulation. Thus, once the workshops have begun and the target population has formed management groups capable of generating production and of presenting a united
front in supplying products and in the purchasing of raw material, the intermediaries will see them as one more force with which they must negotiate or compete. This will result in an additional problem for project sustainability, and in the need for a strategy for approaching and negotiating with the intermediaries, as well as a search for the support of government institutions.

It is worth emphasizing that participation in the community workshops, like that of any other beneficiary who becomes part of a solidary group or is a candidate for small credit, is absolutely conditional to the withdrawal of children from the workplace and their registration in school, a commitment made official by their signature upon receiving credit. This condition is explicitly stated in the Credit Regulation that IPEC enforces.

As concerns relations with the municipalities, the project should continue to work with them as has been done up to this time. Through close ties with the municipalities and in the face of a second stage for the project, specific agreements could be reached with them, especially in the endowment of basic resources (within possibilities). It would be necessary for the beneficiary communities to have access to water, even if through wells, and for communication among communities to be improved as much as possible (paved highways and/or more buses to the communities farthest away to facilitate school access for both students and teachers).

V. Conclusions and Recommendations

For: IPEC/Implementing Agencies

1. Concentrate geographic project coverage on 9 communities and villages (Patzanes I, Patzanes II, Cerro Alto, Los Ajuix, Sacsuy, Los Siney, El Ciprés, Pamocá, and Llano de la Virgen) in the municipalities of San Juan Sacatepéquez and San Raymundo, in order to optimize project resources, based on operability and mobilization criteria.

When HABITAT withdrew from the project and ASI assumed responsibility for the social protection component, the need was seen to reduce the geographic area in order to optimize both financial and human resources, and thus alleviate communication difficulties among the communities, without affecting the chance to reach the target population. Because of this, once the reality of the field work difficulties was recognized, the implementing agencies proposed concentrating the project on 9 communities which were chosen according to the degree of the child labor problem in fireworks manufacturing. The difficulties in traveling among the communities became clear through visits the evaluating team made to the region, and the proposed selection of 9 communities was believed adequate.

It must be pointed out, as it has previously, that these 9 communities meet the figure proposed by PRODOC for beneficiary population, as has been confirmed by the agencies in their field work. This fact highlights the deficiencies of the first Baseline.

For: Implementing Agencies

2. Evaluate the commitment and performance of the agents in order to change those who are not performing as expected within the time of the project so far.
At this time, the need to change part of the personnel has become clear, since the 9 current promoters who were originally chosen by HABITAT are not working as expected and continue to have a rather passive attitude.

For: IPEC, Ministry of Labor, and Ministry of Defense

3. Point out to the competent authorities the current problem in the chlorate and perchlorate resale market in order to regulate the situation through the passing and enforcement of the guidelines proposed in the new “Regulations for the Importation, Storage, Transportation, Use, and Marketing of Chlorate, Perchlorate, and Similar Substances.”

The project's role through the implementing agencies should be that of support for approval of this regulation, since this will permit regulating the black market situation which fireworks manufacturing families currently face. At this time, the Ministry of Defense is the only official supplier of chlorate and perchlorate, but the families which make a living from fireworks production are not in a position to acquire it legally, and are thus obligated to accept the conditions imposed by the intermediaries. This makes those families dependent upon the intermediaries.

On the other hand, these intermediaries are influential in the communities and sometimes close to local power circles, so they see the project as a risk facing their present source of income. Because of this, one of the main project tasks should be implementation of these guidelines and the regulation of the buying and selling of chlorate and perchlorate, with the support of related institutions to prevent the current situation of smuggling.

One other potential advantage of this Regulation is that it establishes workplace safety and hygiene norms for the use and handling of the dangerous substances required in the manufacturing of fireworks. Currently, the health center of San Raymundo is working, with project support, on a version of this regulation to be given to the fireworks manufacturers. Once this regulation is approved, it would be advisable to provide training for fireworks manufacturers in following the recommendations therein.

For: Ministry of Labor, Ministry of Defense, and the Guatemalan Institute of Social Security

4. Supervise adherence to national and international occupational safety norms in the communities in which the project is implemented through community organizations and local and national institutions.

This recommendation reinforces the previous one. It is essential to involve community organizations, the solidary groups formed to build the two model workshops, and the Municipalities of San Juan and San Raymundo in keeping watch over project sustainability by means of adherence to the abovementioned safety norms, thus preventing child labor and unhealthy, dangerous work conditions.

To do this, periodic inspections, both by the Ministry of Defense and the Guatemalan Institute of Social Security, are recommended, not so much to penalize, but rather in order to instruct in the use and handling to prevent the labor-related accidents which occur due to present working conditions.
For: Ministry of Labor, Guatemalan Institute of Social Security, and INTECAP

5. Through cooperation with local and national institutions, the project should offer educational and job options to the adolescents of San Juan and San Raymundo. For that it is necessary to have both greater involvement and commitment from the Ministry of Education, the Ministry of Labor, through DICAFORE and the employment office, and INTECAP.

At this time INTECAP and the Ministry of Labor have agreed to facilitate training alternatives to these adolescents, which means that during the time remaining for the project, it will be necessary to consolidate these alliances and initiate projects for adolescents which will continue functioning once this project ends.

For: IPEC and Implementing Agencies

6. Have a reliable, sustainable monitoring system for the eradication of child labor which involves both local and national public institutions and, through people in direct contact with the target population (professors, health agents, community leaders...), the private sector and agencies participating in the Project, so that it becomes a tool to improve its key orientation and implementation.

It is necessary to begin introducing the monitoring system being designed by IPEC into the communities where the project is taking place in order to keep watch over fulfillment of its objectives and sustainability.

The adapted version of the monitoring system for this project being designed in San José can be found in Annex III.

For: IPEC

7. Redirect CONMIGUAT’s goal in terms of the number of beneficiary families to 558, given the complexity of implementation of the model workshops because of the type of manufacturing, the initiation costs, and the business organization process. This reduction in the number of beneficiary families does not decrease the targeted children population.

The complexity of the fireworks sector and the added difficulties on site upon initiating these alternatives (dealings with intermediaries and necessary safety measures in the model workshops given the type of materials handled) have resulted in higher costs for these workshops than originally anticipated. Therefore, it is recommended that the adult target population in this section be reduced (without reducing the target child population), in accordance with the financial possibilities of the project, the geographical area as determined at present, and the solidary groups which have been constituted so far.

For: IPEC

8. Guarantee ownership by the beneficiary groups of the lands upon which the model workshops will be built. This could be accomplished by taking part of the funds destined for infrastructure construction, without it significantly affecting this area.
Ownership of the lands is key to guarantee the sustainability of the model workshops. Any formula which does not so guarantee ownership gives rise to high risk of conflicts over land tenancy which could jeopardize the entire experience.

9. Strengthen the design of the model workshops through the feasibility studies necessary to evaluate their proper functioning and sustainability. The feasibility study should encompass, at the very least, technical, organizational, financial, and marketing studies (with special emphasis on the market supplier of potassium perchlorates, which might require a separate study).

While there are many positive expectations for the success of the model workshops, because of the beneficiaries’ technological mastery, the national demand for fireworks products, and the interest created, there are still fundamental unknowns concerning how the workshops will operate and under what conditions within the fireworks industry they will have to evolve. The abovementioned studies are essential for making realistic predictions about the operational framework for the workshops and about which factors will be critical in determining successful performance and sustainability.

10. Foment institutional alliances with the municipalities and ministries (Labor, Defense) to strengthen the project against any opposition it might provoke from the intermediaries and fireworks entrepreneurs who operate in this sector.

Opposition from the intermediaries has so far been managed relatively successfully by project personnel. Nevertheless this opposition will probably become stronger when the model workshops consolidate and become real competition for the intermediaries. At that point, the project may not have the capacity to win. Vigorous support from the public institutions directly involved in the regulation and control of the fireworks industry could provide the project with the support necessary to overcome this vulnerability.

In this process, closer ties and dialogue with the group of intermediaries should be pursued, perhaps by identifying those who appear most open and who can exercise some degree of leadership in favor of the project. This task requires ability and a sense of timing, aspects which project personnel seem to be handling well up to the present time.

For: IPEC, Ministry of Labor, and Municipalities

11. Commit local and national authorities to endow beneficiary communities with improved infrastructure (communication, by means of paving roads in areas which are difficult to access, sewer systems, electricity and water), so that their inhabitants have greater opportunities for manufacturing or for the creation of businesses or small businesses which are more diversified than the present manufacturing of craft products.

The proximity of these communities to the capital city, which could be an advantage in terms of product marketing or access to high schools, is not playing a role at this time because of lack of infrastructure. If there were to be a second phase to the project, one of its objectives should be a commitment from the corresponding authorities.

For: IPEC and Implementing Agencies
12. Foment coordination and cooperation needed among government agencies, nongovernmental institutions, and civil society groups to complement their actions and guarantee sustainability of the results.

To achieve sustainability of project results, it is necessary to interact, as has been done up to the present time, with different public and private institutions to involve them in the ongoing process in these communities in ways that make them foster project sustainability, once it ends.

For: IPEC

13. Based on project results and according to the challenges detected in this evaluation, it is recommended that a second phase be proposed to the donor in order to expand and deepen the processes of change generated in the beneficiary communities and in other parts of the country.

The positive response which the personnel currently at work is getting from the communities (teachers, parents, community leaders, personnel from the health centers and the Municipality of San Raymundo), as well as the positive response on a national scale (Ministry of Labor, Ministry of Education, INTECAP, and Ministry of Defense) demonstrates that for the project to have an impact on the communities and generate long-term changes, that is, to consolidate the workshops, tightly bind the alliances with authorities, keep the children in school, and leave a functional rotating fund, a second phase of the project is important to assimilate all these processes and make possible expansion of the project to other villages and communities where fireworks are also produced.
Annex 1. Main Questions, Variables, and Indicators Used

**Design**

- How have the target group’s problems and needs been taken into account?
- Time tables: Are they adequate, realistic?
- How was the target population detected?
- How was it decided which communities should be included?
- Institutional framework: What are the capabilities and commitments of the public institutions related to the program?
- Which have been the main Implementing Agencies? Has there been coordination among them?
- What repercussions have there been from the manner in which the population participated in the project design?

**Implementation**

- What have been the causes and effects of the modification of the original Work Plan? Why has there been a change in the beneficiary communities and what are the effects of this change?
- What effects have the problems with interagency coordination and with the project coordinator had on the action program?
- What participation has the beneficiary community had in the implementation of the action program?
- In what ways have related institutions participated?

**Effectiveness**

- What has been accomplished in terms of maintaining and reinserting the program beneficiary population in the formal education system?
- What has been accomplished in terms of improved health?
- What has been accomplished in terms of awareness raising and mobilization?
- What advances have been made in the area of income generation?

**Sustainability**

- Eradication and prevention
- How sustainable are the actions taken in education?
- Sustainability of health actions
- Sustainability of manufacturing alternatives

**Unforeseen Effects**

- Effects produced because of changing the communities
- Effects which are the result of excessive school population
- Unforeseen gender-related effects
Problems and Needs of the Target Group

- Has the possibility of offering adolescents the option of higher education been considered?
- Female child labor among the fireworks families, both within and outside the process of the fireworks manufacturing process
- Design-related difference
- Completion of the time table
- Methodology employed
- Data discrepancies between the Baseline and official figures
- Institutional domains according to the legal framework
- Degree of commitment fulfilment
- Institutional capabilities
- Commitments made and resources and personnel assigned by the Ministry of Labor MINEDUC, Ministry of Health and IGSS
- Percentage of Scholarships for Peace granted to the target population versus the total number of scholarships in the zone covered by MINEDUC
- Percentage of adolescents from the program in the INTECAP compared to the total number for the zone

Overlapping or Conflicts among the Agencies

- Responsibility gaps
- Information sharing and exchange
- Information activities for the population
- Advisory activities
- Design activities
- Participating groups, degree of representation, gender, childhood and adolescence
- Percentage of communities informed
- Percentage of communities consulted
- Percentage of community organizations which worked on the design

Meeting the Time Table

- Number of unforeseen activities carried out
- Changes in the functions and domains of the implementing agencies team
- Criteria used for changes in the AP (Work Plan)
- Number of times the geographic area of the program has changed
- Population excluded by the changes and interrupted activities in the communities
- Pre-schools; school assistance; awareness-raising activities
- Credit
- Timely preparation of information (data base updated on time)
- Intercambio de información básica para el desempeño de las labores por parte de las agencias
- Established procedures and their fulfilment
- Coordination responsibilities to assure completion of these processes
- Coordination of activities
• Decision-making on the part of the coordination for project completion and response to the eventual conflicts among the agencies or delay in the implementation of the AP
• Invalid reports presented to IPEC and the donor?
• Responsabilidades y funciones de la coordinadora en la entrega de informes completos y a tiempo.
• Responsibilities and functions of the coordinator in the presentation of thorough and timely reports.

Activities with the Population

• Groups which have participated, degree of representation, gender, infancy and adolescence
• Percentage of communities which were informed and consulted
• Institutions which participated in relation to those anticipated
• Fulfilment of commitments
• Type of conventions or agreements made in relation to project responsibilities assigned and their fulfilment: INTECAP; MINEDUC; MITRAB; MINSAL; MINDEFEN; COPEDEGUA; IGSS
• Access to schools and work schedules
• Number of scholarships given: (Scholarships for Peace; school snacks, lunches)

Population under 6 Years of Age

• Percentage of the population less than 6 years old who attend pre-school
• Consistency of attendance of these children
• Parent participation in school activities and mothers’ perception of how schools function

Population between 7 and 14 Years Old

• Percentage of the population registered in and regularly attending school
• Decrease in desertion and grade repetition
• Academic performance
• Attention to over-age and school levelling
• Children’s perception of the functioning of the schools and the change of parental attitude towards child labor; needs and attitudes concerning work and school
• School capability to handle the population and the response of both IPEC and MINEDUC in the face of possible difficulties

Adolescents

• Percentage of adolescents receiving technical training, by gender
• Course adaptation geared toward getting job offers; labor demand for the specialties offered: Access to courses (distance, costs, materials...)
• School capability to handle the population and the response of both IPEC and MINEDUC in the face of possible difficulties
Atención psico bio social de salud a niños y niñas
Psycho-bio-social Care of the Children

- Percentage of children and families given care compared to the goal; entries in registry
- Number of health data cards for the target population.
- Improvements made in health conditions
- Decrease in the children’s illnesses

Health, Environmental Improvements, and Nutrition Safeguards

Percentage of children and families cared for compared to the goal
Improvements in health conditions, environment, and nutrition safeguards.
Continuity in health actions; Registration of the beneficiary population

Adult Work Safety

- Percentage of adults trained in comparison with the goal.
- PIROVAL’s recommendations incorporated into the AP
- Percentage of work-related accidents and work-related illnesses decreased
- National and local authorities’ and employers’ knowledge of CL problem
- Awareness-raising activities carried out
- Commitments by national and local authorities and employers to reduce child labor
- Fulfilment of those commitments
- Information disseminated through social communication networks: pamphlets, posters and awareness-raising materials produced by the program

Alternative Activities to the Fireworks

Solidarity Committees

- Number of committees started
- Number of participants in each committee
- Credit regulations written out
- Number of families benefiting from credit.
- Percentage of the portfolio granted; percentage behind payment; percentage of CL eradicated in the manufacturing units
- Number of manufacturing initiatives proposed to the program which were approved and put into motion
- Increase in the family incomes of credit beneficiaries and the use given to it
- Administration and manufacturing unit management skills acquired

Improvement of the Fireworks Industry (CONMIGUAT)

- Number of beneficiary families continuing to work in this sector who have initiated the process of withdrawing manufacturing from their homes.
- Current state of the workshops proposed in order to withdraw manufacturing from the home in each of the communities.
- Percentage of families who are involved/interested in getting these workshops started.
• Improved productivity:
• Increased income in the families benefiting from credit

**Institutional Capability for and Commitment to Continuing Action**

• MINEDUC: scholarship grants, school equipping, teacher hiring, expanded coverage
• Providing for pre-school centers.
• Work inspections (Ministry of Labor).
• Curriculum adaptation for dealing with working children's needs
• Awareness-raising and motivating parents to put their children back in school and keep them there.
Annex 2. Conclusions and Recommendations of the Midterm Evaluation Seminar with Stakeholders

Meeting in Antigua, Guatemala, the General Director of Social Prevision of the Ministry of Labor, representatives of the Ministries of Education, representatives of the Health Centers, representatives of the Labor Department of the U.S.A., donor country, implementing agencies, representatives of the beneficiary communities, and ILO IPEC personnel from the national and regional levels and headquarters.

Considering that the stakeholders in implementation of this Project met to analyze the present situation of the Project and the results of the midterm evaluation,

Considering the present situation of the Project and the potential and deficiencies of the communities where it is being implemented,

Considering both the advances and the obstacles experienced by the project from its beginnings to the present time,

We have arrived at the following conclusions to be taken into account in the reorientation and future implementation of the project:

- Concentrate the geographic area of project coverage to 9 villages (Patzanes I, Patzanes II, Cerro Alto, Los Ajuix, Sacsuy, Los Siney, El Ciprés, Pamocá, and Llano de la Virgen) in the municipalities of San Juan Sacatepéquez and San Raymundo, in order to optimize project resources and on the basis of operability and mobilization criteria.

- Take into consideration 100% of the children of the schools in these 9 villages where the project is being implemented as the beneficiaries of the Project scholarships, given the precarious situation of these villages and the fact that they are primarily involved in fireworks.

- Emphasize with respective authorities the problem which exists in the resale market of chlorate and perchlorate in order to regulate the situation through approval and fulfilment of the guidelines articulated in the new Regulation for the Importation, Storage, Transportation, Use and Marketing of Chlorate, Perchlorate, and Similar Substances.

- Safeguard adherence to national and international labor safety norms in the villages in which the Project is being implemented through community organizations and local and national institutions.

- Reaffirm that the education of both primary school children and adolescents is the main focus of the project as the only way to break the poverty cycle.

- Strengthen educational and job options for the adolescents of San Juan and San Raymundo through cooperation with local and national institutions. This requires greater commitment and involvement from the Ministry of Education, the Ministry of Labor, through DICAFORE and the employment office, and INTECAP.
• Establish a sustainable monitoring system which involves both local and national public institutions and by means of people in direct contact with the target population (professors, health agents, community leaders...) the private sector, and the agencies participating in the Project, to transform it into a tool to improve its main focus and implementation.

• Strengthen the technical and managerial capabilities of the implementing agencies to develop strategies and projects and to apply the monitoring system.

• Redirect the goal of CONMIGUAT in terms of the number of beneficiary families to 558, given the complexity of implementation of the model workshops because of the type of manufacturing, start-up costs, and the business organization process. This reduction in the number of beneficiary families does not reduce the target population of children.

• Foment coordination and cooperation among government agencies, nongovernmental institutions, and civil society groups so that their activities will be coordinated and will complement Project actions, thus ensuring sustainability of the results.

• Based on the results obtained by the Project and in view of the challenges, it is recommended that a second phase be implemented to expand and deepen the processes of change generated thus far in the beneficiary communities and in other parts of the country.

Antigua, Guatemala, November 30, 2001

(signed by) IPEC SUBREGIONAL COORDINATOR COSTA RICA
(signed by) IPEC NATIONAL COORDINATOR GUATEMALA
(signed by) GENERAL DIRECTOR FOR SOCIAL PREVISION
(signed by) ASI (signed by) CONMIGUAT

I. Background and Justification

1. In Central America and the Caribbean, IPEC’s first experience with implementing specially funded monitoring systems came with the subregional project to progressively eliminate child labor in coffee production, funded by USDOL in 1999. Each individual project of the subregional effort features a monitoring system that seeks to verify that:

- Child workers are prevented and progressively phased out from full-time and/or hazardous work in the coffee sector and other sectors where children are found to be working, and provided with viable alternatives.
- Children and families identified through the baseline surveys are benefiting from the social protection measures provided by the program.
- No new children are engaged in work on coffee plantations or other hazardous occupations. If children are found working on plantations or in other hazardous activities, they will be integrated in the program as beneficiaries.
- Children withdrawn from work do not return to work.
- Progress is being made towards the prevention and elimination of child labor in the rural sector, especially in the coffee industry.

2. In this system, IPEC hires professional monitors who visit homes of target children, their schools, and the work site. Their work is supervised by the program coordinator hired by IPEC, who also act as monitoring coordinator. Results of the monitoring visits are entered into a specially constructed database by a data typist. The system involves Ministry of Labor inspectors who accompany the monitors on their rounds.

3. A similar system was envisaged for the project “Combating Child Labor in the Fireworks Industry of Guatemala”. However, the monitoring system in the coffee industry projects was never fully implemented and is currently being redesigned. The original system was based on IPEC experience in projects in the soccer ball industry in Pakistan and garment stitching in Bangladesh, both legal, export industries. The fireworks industry differs in important ways from these industries, however. Much of the fireworks production occurs in home-based workshops that are illegal. The workshops, moreover, are not centralized as in the Asian projects but scattered throughout two target municipalities, San Juan Sacatepequez and San Raymundo. The monitoring system therefore must take into account these logistical and qualitative differences.

4. Furthermore, the monitoring system as originally conceived was expensive and absorbed funds that might be better used in the social protection and income generating components of the project. The system does not adequately promote sustainability because it builds capacity among a limited number of professional monitors who would have little incentive to continue monitoring activities at the project’s end.

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1 The savings resulting from a less expensive monitoring system will be used in part to extend the duration of the program by 11 months.
5. Therefore, certain modifications will be made to enable the monitoring system to reach its originally stated objectives while lowering the cost of the system and better promoting sustainability.

6. The community-based nature of the proposed system is important given that many of the targeted workshops are illegal and their owners are naturally suspicious of organizations interested in the work that they do. The community monitors will be more likely to earn the trust of target families than “outside” monitors and to be able to raise awareness among them.

7. By recruiting monitors from the communities, the system aims to build local capacity and enhance the credibility of the awareness raising messages of the project. By their participation in the project, the monitors will become local experts on child labor, capable of raising awareness and acting as a force for change long after the project’s end. The project will draw on its experience to date to recruit leaders of the communities whose opinions are widely respected. Through their participation in the program, teachers will learn to be vigilant for the signs that a child is working in fireworks production. For them too, the training and sensitization that they will receive should promote the elimination of child labor throughout their teaching careers.

II. Objectives of the Monitoring System

Development Objective

To contribute to the progressive eradication of child labor in the fireworks industry of Guatemala.

Immediate Objectives

- To verify that the target children are withdrawn from work and benefiting from the project’s services
- To verify that no new children enter work in fireworks production in the target area
- To measure the progress made in preventing and phasing out child labor
- To verify that target children do not return to work
- To provide information on the impact of the project

III. Structure of the Monitoring System

8. The monitoring system will be community-based and will recruit two sets of monitors. One will consist of 9 community leaders, who will visit the homes and (former) work sites of targeted children. The other will consist of 9 teachers, who will monitor the attendance and school performance of targeted children. The role of the monitors will not be to sanction families but instead to raise awareness among them regarding the hazards of child labor in fireworks production, and to report child labor or school attendance problems to project personnel for follow up action.²

² It is considered necessary to provide a monthly stipend to the monitors to ensure their sustained participation. The amount will be low in order to keep the system’s dependency on outside financing to a minimum.

Programa Internacional Para la Erradicación Del Trabajo Infantil
Organización Internacional del Trabajo
IPEC-OIT
9. A local monitoring coordinator will be recruited. He/she will assist in recruiting and training the monitors, arrange the timing and frequency of home and work site visits and act as a liaison with the project coordinator and other IPEC personnel. He/she will regularly meet with teachers involved in the system to receive their attendance reports and to learn more about the status of target children.

10. The local coordinator will channel the information generated by the home and school visits to the project coordinator and the implementing agencies. When a child is observed to be working, the monitoring coordinator will ensure that the implementing agencies are informed so that appropriate action can be taken in a timely manner. When a child suffers attendance problems at school, the coordinator will likewise inform the implementing agencies so that closer follow-up can be provided to the child. When a child not registered with the project is observed to be working, the implementing agencies will be notified so that they can speak to the child’s family and enroll him/her in the project.

11. The project coordinator will work with the project’s administrative assistant to enter the system’s records into a database maintained in the project’s office. The database will be regularly updated so that it can provide the implementing agencies and the project coordination with current information on a given target child at any time.

12. The Ministry of Labor will designate an occupational health and safety technician to support the monitoring system. The Ministry considers that given the extremely hazardous nature of home-based fireworks production, it falls within the mandate of its occupational safety unit to: a) make recommendations on decreasing the risks of home-based production (until such time as the production can be moved to a location outside the home) and b) contribute to the awareness raising efforts of the project, especially regarding the benefits of removing production from homes. At no time will the technician engage in any sanctioning activities or threaten to sanction target families.

13. At the national level, IPEC will recruit a monitoring coordinator. He/she will ensure coherence among IPEC’s monitoring activities in Guatemala, provide technical assistance to the various projects’ monitoring systems, and coordinate cooperation with local and national authorities.

IV. Sustainability

14. After holding consultations with community members and teachers, it is considered necessary to pay a nominal incentive to the monitors. Teachers’ salaries are low in the target area. After the four-hour school day, most must work other jobs to supplement their salary. In devoting after-school time to fulfill their reporting duties in this monitoring system, they will be sacrificing the opportunity to earn money in their second jobs.

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3 The system will use record keeping forms compatible with an internet-based information system that IPEC is currently developing. When that system is running, the records of this monitoring system will be transferred to it.

4 This position was created as a result of the redesigning of the monitoring system of the coffee and agriculture projects and will be funded by those projects.
Therefore to ensure their full participation and timely reporting, they will be compensated with a stipend.

15. The same situation applies to the community leaders selected to participate in the system. Some work long hours in informal occupations, others work full time in the household. They too will sacrifice time and energy that would otherwise be spent working in some capacity and must be provided an incentive to compensate them.

16. It is considered that the smaller the payments are, the less dependent the system is on outside financing, the more likely it is to be sustainable. If the system is relatively inexpensive to operate, the project will have a better chance of convincing local or national authorities to cover its costs when the project ends. In this sense the proposed system offers a much greater likelihood of sustainability than the originally proposed model.

17. Seeking to find a source of funding for the system at the project’s end will be an ongoing task of the project management. This effort should be helped if, as expected, fireworks production is identified as one of the worst forms of child labor under the recently ratified ILO Convention 182. That the Ministry of Labor will contribute to the system through its occupational safety and health unit (at no cost to the project) increases that likelihood that the Guatemalan government will assume the costs of the system at the project’s end.

18. If outside financing is not secured by the project’s end, the thorough sensitization to the problem of child labor in fireworks production that the monitors will receive must be relied upon. The bicycles, computer and other equipment will remain in the community if the monitors commit to continuing their activities, even if it is on a reduced scale (indeed the incidence of child labor in the industry is expected to be significantly diminished by the end of the project).

19. The revolving fund established by the project is a potential source of funding for the system after the project’s end. Half of the repaid capital will be used to support the continuing operations of the fund, and the other half is earmarked for investment in the community. Project management will explore ways to use these projected funds to support the monitoring system in the event that other financing is not secured.

20. Enlisting community members is considered to be more conducive to sustainability than subcontracting the system to an outside organization. Non-governmental organizations in the region typically rely entirely on funding from individual projects. When funding is available, staff is hired to implement a given project. Once the funding is terminated, those hired for the project no longer continue to work on project activities. Therefore it is quite unlikely that, with an NGO as an implementing agency, the system would continue after the project’s end. In addition, such organizations would require much higher salaries for their staff (the monitors) than this proposal envisions.