

A CURSORY ASSESSMENT STUDY ON THE
SITUATION OF CHILD LABOR
IN THE PYROTECHNICS INDUSTRY
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1.0 INTRODUCTION

In general terms, “Child labor refers to work situations: where children are compelled to work on a regular basis to earn a living for themselves and their families and as a result, are disadvantaged educationally and socially; where children work in conditions that are exploitative and damaging to their health and to their physical and mental development: where children are separated from their families often deprived of educational and training opportunities; and where children are forced to lead prematurely adult lives.” (ILO-IPEC)

The Philippine National Report on Follow-up to the World Summit for Children (Revised January 2001) cited the 1995 National Statistics Survey commissioned by the International Labour Organization-International Programme for the Elimination of Child Labour (ILO-IPEC), estimating that three out of twenty children aged 5-17 years old are working children. Specifically, out of 22.4 million Filipino children aged 5-17 years old, 3.7 million are working children. The report further stated that sixty per cent of those working children surveyed (2.2 million), claimed exposure to hazardous working environments consisting of physical difficulties and chemical hazards.

Philippine legislation has already provided the broad framework for handling the child labor issue since after 1946. The laws established minimum ages for employment, stipulated working conditions, and specified prohibitions and sanctions. It has also created bodies or agencies to implement national and local laws against child labor. The ratification of international standards has also given the victims of child labor another layer of protection. Out of the seventeen international conventions related to child labor, the Philippines has ratified five. The most recent one was when the Philippines ratified in 2000 ILO Convention 182: Eliminating All Worst Forms of Child Labor.

For the purposes of Convention No. 182, the worst forms of child labor comprise: (a) all forms of slavery or practices similar to slavery, such as the sale and trafficking of children,

debt bondage and serfdom and forced or compulsory labor, including forced or compulsory recruitment of children for use in armed conflict; (b) the use, procuring or offering of a child for prostitution, for the production of pornography or for pornographic performance; (c) the use, procuring or offering of a child for illicit activities, in particular for the production and trafficking of drugs as defined in the relevant international treaties; and (d) work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children.

For the latter category, hazardous work was defined by the Department of Labor and Employment (DOLE), as: (a) work which exposes children to physical, psychological or sexual abuse; (b) work underground, under water, at dangerous heights or in confined spaces; (c) work with dangerous machinery, equipment and tools, or which involves the manual handling or transport of heavy loads; (d) work in an unhealthy environment which may, for example, expose children to hazardous substances, agents or processes, or to temperatures, noise levels, or vibrations damaging to their health; (e) work under particularly difficult conditions such work for long hours or during the night or work where the child is unreasonably confined to the premises of the employer.

Following the recommendations of the National Planning Conference conducted in July 1994, the Philippine-ILO Indicative Framework for Action identified and established the priority target groups of children, namely: children victims of trafficking, children in mining and quarrying, children in home-based enterprises, especially under sub-contracting arrangements, children trapped in prostitution, children in domestic service, children in commercial plantation agriculture including sugar and vegetable production, children in fireworks production, and children in deep-sea diving and fishing.

2.0 OBJECTIVES OF THE STUDY

Upon ratification of ILO Convention 182, a national interagency team was tasked to

implement a Time-Bound Programme (TBP) assisted by ILO-IPEC. The conduct of assessment studies forms part of the preparatory activities leading to an initial assessment of the appropriateness and feasibility of including three priority child labor groups for the TBP.

Six priority groups of children were identified for the conduct of assessment studies, namely: domestic service, prostitution, pyrotechnics, deep sea fishing, agricultural plantations, and quarrying. The selection of the three out of the six priority groups will be based on the following criteria: 1) strong presence/support of major stakeholders; 2) presence of critical mass; 3) existing programs/good practices in the area; and 4) initial efforts in the policy and legal environment.

This study is specifically focused on the situation of child labor in the pyrotechnics industry. The manufacture or handling of pyrotechnics has been identified under hazardous work due to an unhealthy environment. Children involved are in the immediate danger from the hazardous work processes, which may cause disabling injury, illness, death or physical harm.

The Terms of Reference for the study listed down the following coverage requirements:

- 1) an estimate of the incidence under study in the area where is known to be prevalent;
- 2) an understanding of the nature and types of activities engaged in and why children engage in such activities, their families and the communities concerned (to include general profiles, migration and work histories, and the influences that resulted in their working);
- 3) characteristics of the usual employers, including identification of advantages/disadvantages encountered by them in engaging child laborers;
- 4) working conditions of the children including work processes and their physical effects, hours of work, place of work, rates of pay, work relations with the employer, etc.;

- 5) occupational safety and health conditions, bio-psychosocial conditions of child laborers;
- 6) the nature and extent of hazardous, unhealthy or illicit conditions prevailing in the sector, the chances for improvement or removal of the children from those conditions, the desire for rehabilitation, etc.;
- 7) the relation between school and work, the attitudes toward education of children and parents, the forces, pressures and attitudes that push children in one direction or the other, availability or accessibility of schools in the area;
- 8) identification and general assessment of past and existing programs in the sector to possibly include specific practices worth sustaining and lessons learned; and
- 9) determination of suitable bases for initiating programs and interventions by government agencies, non-government organizations, civil society, etc., including a general appraisal of existing resources and institutions that can help address the problem.

3.0 SCOPE AND METHODOLOGY

The study covered two full months from October to December 2001. Only sample project sites were covered for the conduct of Focus Group Discussions (FGDs) and rapid assessment procedures to validate the data from existing research studies done on the area. These selected sites where pyrotechnics production is already known to be prevalent were from the provinces of Bulacan, Cebu and Negros Occidental. From the earlier submitted proposal for the conduct of the study, there was the intention of covering sites that were not previously identified in existing studies to be able to gain more information on the magnitude of children's involvement in this sector. However, based on consultations with DOLE offices and NGOs involved in child labor interventions, it is difficult to extract information where the problem is not openly recognized.

Considering the limited time available to complete the study, it would be impossible to do a

more in-depth analysis of the situation as observed in a longer timeframe. Given the limitations, a combination of quantitative and qualitative methods was applied in the study.

Review of the Literature

There were already several studies done on the subject of child labor in the country that describes the phenomena in general and is applicable to all types of child labor. It is documented that starting in 1986, several research studies were initiated on the child labor case in the Philippines. The first 1986 study was done by Virginia del Rosario entitled “Child Labor Phenomenon in the Philippines, Problems and Policy Thrusts” and published in the Philippine Journal of Industrial Relations. This was then followed by an ILO-sponsored study “Child Labor: The Philippine Case” by a team from the University of the Philippines (U.P.) focusing on working children in garments and wood-based production and street trades, in selected areas of Metro Manila, Taytay, Rizal, Laguna and Batangas. Then the Council of Welfare Agencies Foundation of the Philippines, with UNICEF funding, commissioned a study of child labor “The Faces of Child Labor in the Philippines” by a team of faculty also from the U.P. This same year, the phenomenon of muro-ami fishing was given media attention based on an article published by Henk Van Oosterhout of ILO-Manila. The year 1986 ended with the first advocacy primer on child labor prepared by another U.P. team and used later as basis for the UNICEF-project Breaking Ground for Community Action on Child Labor (BGCACL).

Several research studies were completed in different regions of the country. The previous research studies were not specific to the child labor situation in the pyrotechnics industry, but there were two particular studies during the period between 1990-1992 by academic and research individuals who conducted surveys as part of BGCACL implementation. Dr. Violeta Gonzaga of the University of St. La Salle, Bacolod City wrote “Tender Hands that Toil: A Survey of the Phenomenon of Child Labor in Negros Occidental” (1991) which covered the situation of child labor in the pyrotechnics industry in Hinigaran, Negros

Occidental. Likewise, Elizabeth Remidio of the University of San Carlos wrote “Breaking Ground for Community Action on Child Labor in Cebu” (1991) which included the situation of pyrotechnics production in Lapulapu City.

The Kaunlarang Ugnayan ng mga Mananaliksik Panlipunan, Inc. of Angeles City submitted a report by Antonieta B. Tiotuico and Ma. Lourdes Umali in December 1994 on “The Child Laborers in Small Scale Pyrotechnics Factories in Bocaue, Bulacan”. This was supplemented by the study of the Occupational Safety and Health Center (OSHC) in 1995 entitled “Assessing the Occupational Safety and Health Conditions of Child Labor in the Pyrotechnics Industry” covering research sites in Barangay Sto. Niño, Municipality of Baliuag and Barangay Pulong Buhangin, Municipality of Sta. Maria, (both areas situated in the province of Bulacan).

The latest unpublished study in 2000 by PATAMABA on subcontracting and home-based industries covered the situation of child labor in pyrotechnics manufacture also in Barangay Pulong Buhangin, Municipality of Sta. Maria, Province of Bulacan.

Since 1988, capacities of regional and provincial offices from different concerned agencies were strengthened especially in database and information on child labor. However, reports and documentation available from the DOLE regional offices, as well as from other concerned agencies in the provinces covered by the study, were not adequate as experienced during the conduct of the study. Sustained data generation and monitoring was not undertaken due to several reasons related to budgetary issues, coordination problems, and unclear mandates among concerned government agencies.

With regards the required output on estimation of incidence of child labor, there was an attempt to do so using the approaches resorted to by previous researches. A review done on the issues raised by previous researches concerning representative sampling, outlined the limitations of all attempts to measure the incidence of child labor. In this study, then, the

estimation will only be limited to those covered by the research studies and actual data gathered at the field during the course of the study.

Ocular Inspection

Familiarity with the area as well as the potential respondents to any of the chosen research approaches was the most important preparatory activity. Refusal of the community and/or children to participate in the study will pose difficulty if not animosity to the researcher. An appreciation of the community, home and work environments where the child laborers are exposed to helped put into context the analysis for the study.

Actual observation of the production process was also critical to understanding the nature of the activities and working conditions. The entire production cycle was documented in detail in order to help explain where the children are most exposed to hazardous situations (if any) and why children are preferred over adults for some selected production operations.

The choice of areas covered by the study then was limited to areas where there is already a presence of NGOs operating in the area or where a government program has been undertaken. The ongoing activities presuppose that there is a general acceptance of the child labor situation in the area and that children are visible enough to be accounted for.

Key Informant Interviews

There were several categories of interviewees for the study in each of the three study sites, as follows: community leaders, barangay officials, employers, and service providers. Guide questions were formulated in such a way that varying opinions to a common concern can be gathered (Please see Annex 1). Their views provided the inputs as to how and why such a situation prevails in the area. These groups of people also provided insights into how community-based programs and projects can be effectively undertaken. Due to limited time, however, the key interviews were quite few.

Focus Group Discussions (FGD)

This approach was used with the parents of the working children and with the child laborers themselves. The group interviews were coordinated with NGOs having existing project implementation in the area. This facilitated the gathering of potential groups considering their work schedules. Prior arrangements on when and where the groups can be gathered were made depending on the most convenient schedule and not necessarily using a scientific sampling frame ensuring proper representation. Summaries of previous FGDs undertaken in the area were also included in the study.

4.0 TIMEFRAME AND SPECIFIC OUTPUTS

The table below outlines the activities undertaken for the study:

ACTIVITY	OUTPUT	PERIOD COVERED
a. Preparation of detailed workplan and research framework including outline of final report	-Workplan -Framework for Analysis -Outline of Report	October 22, 2001
b. Coordination and information on the research with local authorities and agencies	-Regional and local support -Identification of specific research sites (at least one barangay per province per subject area) -Schedule of actual conduct of research	October 24-31, 2001
c. Preparation of research study instruments	-FGD guide questions -KII guide questions -Direct observation “key indicators”	October 27-28, 2001
d. Conduct of documentary review	-Review parameters -Initial analysis of macroeconomic environment (affecting industry structure) -Profile of study area	October 28-31, 2001

Table.....Continued:

e. Conduct of field visit and actual research	-Narrative report of FGD results and KII -Integration on findings from the field and documentary review (per study area) -Process documentation	November 19-23, 2001 December 3-7, 2001 December 10-14, 2001
Region III – Bulacan (pyrotechnics) Region VI – Negros Occidental (pyrotechnics) Region VII – Cebu (pyrotechnics)		
f. Write-up of first draft report	-First Draft	December 17-20, 2001
g. Submission of first draft comments		December 21, 2001
h. Presentation of report in workshop		Third week of January 2002
h. Revision of report	-Final Report	
i. Submission of final report		End of January 2002

5.0 ANALYTICAL FRAMEWORK

The Institute for Labor Studies did a monograph in November 1994 entitled “Comprehensive Study on Child Labor in the Philippines”. The monograph which hoped to pave the way for the formulation and implementation of action programs under the ILO-IPEC Program 1994-1995, defined comprehensively the nature and extent of the child labor problem in the Philippines. The study discussed the microscopic factors involving the decision factors in the household and the community, as well as the macroscopic factors traced to global conditions, state policies, the national economic conditions and socio-cultural conditions.

The microscopic factors looked at children who are engaged in labor coming from poor families and with the perceived need to augment income within the family. Also, work in the Philippines had always been a family affair with its members comprising the work unit. In fact, children at work are looked at by the community at large as a privilege to be able to help provide for the family’s needs. In most cases, the children stated that they learned their tasks from their parents or older siblings. Other factors include the availability of opportunities

within the community for child labor. Children often work at home or in areas close to their homes.

The macroscopic factors cited that throughout history in the country, it had been the children of lower classes who are forced into paid labor. The idea of teaching children the value of work actually applies only to better-off households, while children of poorer households learn to work through paid labor. The development indicators also show the relatively wide disparity across geographic areas and income class in the country. The study cited that the case of child labor is a consequence of inequity, poverty and high unemployment in the country. Related to this, the rise of the informal sector is a main feature in many places in the country. Ballestas (1987) in the ILS monograph defined the informal sector to include family-owned small-scale operations, which depend heavily on indigenous resources, simple technologies and cheap labor. The above-cited factors combined produces child labor. The high social costs of education in the country add to the prevailing predisposing economic factors in the sense that basic education is not really free. Although public education for elementary and secondary levels is tuition-free, the school-going children still need to buy their own school supplies, books and other school materials. On top of the direct school expenses, the transportation costs, meal costs, uniforms are also expensive. Unlike other societies where the unavailability of schools encouraged child labor, in the Philippines, children work because they need to meet school expenses if they would like to go to school.

This particular cursory assessment adopted an analytical framework emanating from the industry point of view. The issue of child labor is viewed here in the context of demand and supply conditions, wherein labor is an input to production. The child labor market is defined as the intersection of the supply and demand for child labor in the ILO-IPEC document on “Eliminating the Worst Forms of Child Labour: An Integrated and Time-Bound Approach A Guide for Governments, Workers, Donors and other Stakeholders” (April 2001).

As pursued in this study, the closer look into the industry from an area development

perspective will show the interaction of political/legal, economic, geographical, ecological, and cultural factors that affect the industry within the area where it operates. The hypothesis applied here is that the characteristics of the industry influence the child labor market. A diagram is presented to illustrate the framework in Annex 2.

6.0 GENERAL DEFINITION OF PYROTECHNICS

The World Book encyclopedia defines pyrotechnics as also referred to as fireworks and firecrackers. According to this reference book, fireworks are combinations of gunpowder and other ingredients that explode with loud noises and colorful sparks and flames when they burn, while fireworks that only make a loud noise are called firecrackers. Fireworks are dangerous because they contain gunpowder, thus they should be handled only by experts. If not handled improperly, fireworks can explode and cause serious injury to the untrained user. In the Philippines, fireworks and firecrackers are used interchangeably.

Most fireworks are made by packing gunpowder in hollow paper tubes. A coarse gunpowder tightly packed is used to propel rockets into the air. Another type of gunpowder that is finer and more loosely packed explodes to break up the rocket once it is in the air. The manufacturers add small amounts of special chemicals to the gunpowder to create colors. These are sodium compounds to produce yellow, strontium compounds for red, and copper and barium compounds for blue and green. Charcoal is another substance that can be added to give the rocket a sparkling, flaming tail.

Fireworks rockers, also called skyrockets, operate on a principle close to that used in large military rockets. A fuse ignites the coarse gunpowder charge, which forms gases that stream out of the end of the paper tube and which propels the rocket into the air. When the rocket is near its highest point of flight, the coarse gunpowder ignites the finer charge, and the finer charge explodes. The explosion breaks up the rocker and ignites many small firecrackers in the nose (forward section) of the rocket. Roman candles have gunpowder charges separated

by inactive material so they shoot out separate groups of sparks and colored flames with series of booming noises. Pinwheels have a gunpowder charge packed in a long, flexible tube. The tube is attached to the outside edge of a cardboard disk that has a hole in its center. A stick is placed in the hole. As the charge ignites and burns, it makes the disk whirl around the stick, throwing off sparks and flames. There are other local names for many other products in the Philippines, but most of them apply the same principles of operation as described above.

There are also serious purposes for fireworks. A device called a fusee burns with a bright red flame and is used as a danger signal on highways and railroads. Railroads use giant firecrackers called torpedoes. The torpedoes explode while the train is passing over them to warn the engineer of danger ahead. People can signal for help by using a Very pistol. The pistol shoots a flare into the air that can be seen far away. Parachute flares are used to light up landing areas. A kind of fireworks rocket can be used to shoot lifelines to shipwrecks. Star shells are used in wartime to light up battlefields. These life-saving gadgets are not seriously thought of as potential pyrotechnics products that can be developed in the country.

7.0 PROFILE OF THE PHILIPPINE PYROTECHNICS INDUSTRY

The National Statistical Coordination Board (NSCB) Philippine Standard Industrial Classification (PSIC) defines pyrotechnic manufacture under the “Manufacture of other chemical products, n.e.c.” (2429). This group includes the manufacture of explosives, pyrotechnic products (torches, fire lighters and the like), propellant powders, other prepared explosives, detonating or safety fuses, caps, fireworks, signaling flares and the like. Specifically, under PSIC Code No. 24291, there is a classification of the “manufacture of explosives and fireworks”.

The sale, manufacture, distribution and use of firecrackers and other pyrotechnic devices are regulated under Republic Act No. 7183 (1991) or An Act Regulating the Sale, Manufacture, Distribution and Use of Firecrackers and other Pyrotechnic Devices. Under Section 2 of the

Act, the common types of firecrackers and pyrotechnic devices that may be manufactured, sold, distributed and used are the following:

- A. Firecrackers (such as Baby Rocket, “Bawang”, Small Triangulo, Pulling of Strings, Paper Caps, El Diablo, Watusi, Judah’s Belt, Sky Rocket (Kwitis), other types equivalent in explosive content)
- B. Pyrotechnic devices (such as Sparklers, Luces, Fountain, Jumbo Regular and Special, Mabuhay, Roman Candles, Trompillo, Airwolf, Whistle Device, Butterfly, all kinds of pyrotechnic devices (Pailaw), other types of equivalent devices)

A license or permit to manufacture, sell and distribute firecrackers and other pyrotechnic devices is granted by the Philippine National Police (PNP), through the provincial director of the province where the business is located. The PNP listed down 69 renewed pyrotechnic manufacturers as of September 30, 2001. Fifty three of the total 69 manufacturers or about 77 per cent are located in the province of Bulacan.

In 1995, the OSHC cited from PNP data a total number of 314 pyrotechnics manufacturers in the country. This meant a significant decline in number of licensed manufacturers compared to the current data in 2001. Whether this is an indication of the natural decline in consumer demand (wherein the general economic downturn supposedly shifted away the purchase of firecrackers during the holidays in order to prioritize food), there are no studies directly supporting this supposition. In both reference years, however, Bulacan remained the top province in the number of manufacturers, followed by Cebu.

The list of manufacturers do not necessarily indicate where the incidence of child labor in the industry, but it provides an idea of the potential child labor demand that can be generated. It is only in Bulacan, Negros Occidental and Cebu where the existing studies have identified child labor issues that have reflected licensed establishments in the list.

**List of Renewed Pyrotechnics Manufacturers
As of September 30, 2001**

Region/Province	City/Municipality	Name of Company	Expiry Date	
Region I Pangasinan	Dagupan City	AS Fireworks Center	07/30/02	
		Malasiqui	Centro Fireworks	12/05/01
		Triplets Fireworks Manufacturing	12/17/01	
	La Union	San Carlos City	Parayno's Fireworks Manufacturer	10/17/02
		Bacnotan	Magic Star Fireworks Corporation	12/11/01
Region III Bulacan	Baliuag	3 PLE K Fireworks Dealer	12/04/01	
		Alba Mendoza General Merchandise	12/11/01	
		B & F Fireworks	10/04/01	
		Bolanos Fireworks Makers	12/21/01	
		Con-Bon Fireworks	12/25/01	
		Emil Fireworks	12/22/01	
		ER Bautista Fireworks	12/19/01	
		Florante Baltazar Fireworks	12/20/01	
		Jun Del Fireworks	10/21/01	
		NTR Fireworks	12/19/01	
		New Hope 2000 Fireworks	12/11/01	
		Bocaue	Alex Pyrotechnics	12/11/01
			Auring Fireworks	12/30/01
			Eagle's Fireworks	12/26/01
	Evol Fireworks		12/17/01	
	J & J Fireworks		12/11/01	
	Lito-Nits Fireworks		12/17/01	
	Norma's Fireworks		12/27/01	
	Olly's Fireworks		12/11/01	
	P & R Fireworks		01/18/02	
	Salonga Enterprises		12/11/01	
	Suzette Fireworks		12/19/01	
	Tita Ventura F/W & General Merchandise		06/19/02	
			12/26/01	
	Triple J Fireworks		12/11/01	
	W. Fireworks	12/11/01		

List.....Continued:

Region/Province	City/Municipality	Name of Company	Expiry Date
	Sta. Maria	Blue Star Fireworks	12/14/01
		Extacy Fireworks	11/23/01
		King Light Fireworks	11/09/01
		Golden Dragon Fireworks	11/14/01
		M. Garcia Fireworks	08/01/02
		Mack's Fireworks	12/07/01
		Marilyn Fireworks	12/26/01
		Megalight Fireworks	12/14/01
		Mildred Catanes Fireworks	11/09/01
		Neptune MX Fireworks	09/20/02
		New Alba Mendoza Fireworks & Chemical Dealer	12/11/01
	Balagtas	Putol Fireworks	12/17/01
	San Rafael	Queen's Fireworks	11/14/01
	San Ildefonso	Serlit's Fireworks	12/01/01
	Norzagaray	Seven Star Fireworks	06/24/02
		Six J Fireworks	12/11/01
		Teresita N. Reyes Fireworks	12/04/01
	Marilao	William's Firecrackers	07/22/02
	Meycauayan	Yolanda Casimiro Fireworks	12/20/01
		Sure Fireworks	11/09/01
		Double L Fireworks Store	12/30/01
		Dragon Fireworks	04/15/02
		Ercy's Fireworks Manufacturing & Dealer	12/25/01
		Evelyn Reyes Fireworks	12/07/01
		Fernel Fireworks	12/19/01
		T & J Fireworks	12/27/01
		Lucky Dragon Fireworks	11/08/01
		St. Michael Fireworks Dealer	11/22/01
Region IV			
Batangas	Balayan	Oro Fireworks	12/28/01
Cavite	Trece MartirezCity	Starmaker Inc.	08/05/02
Region V			
Camarines Norte	Vinzons	Zenarosa Fireworks Factory	06/06/02
Region VI			
Negros Occ. Aklan	Hinigaran Tangalan	Artgrace Firecrackers & Pyro Manufacturer	12/11/01
		Thunder Firecrackers & Pyro Mfg.	11/05/01

List.....Continued:

Region/Province	City/Municipality	Name of Company	Expiry Date
Region VII Cebu	Lapulapu City	Avila Pyro Firecrackers Manufacturer Lapulapu Pyro Multipurpose Cooperative Manlosa's Fireworks	12/19/01 09/25/02 12/11/01
Region IX	Zamboanga City	Mindanao Pyrotechnic Manufacturer Inc.	12/27/01
Region XII South Cotabato	Cotabato City Polomolok	Bulacan Pyro Factory Cyril Super Fireworks & Pyro Devices	06/05/02 12/11/01

Source of Data: Philippine National Police (PNP)

The pyrotechnics industry in the Philippines started as a non-formal, micro-enterprise and family-based business to supply the recreational and traditional practice of celebrating fiestas, Christmas and the New Year. For the past several years, it had become a very profitable venture where profits earned during the holiday season can already support families engaged in it for the rest of the year. Some people say that this is a traditional industry that residents were born into and the technology was passed on from one generation to the next.

Pyrotechnics production follows a sub-contracting chain. There is a buyer/distributor who orders from a small producer with a workshop employing around 20 permanent workers. It is said that some of these small producers share the cost of licensing from registered establishments or operate without a license. There can also be independent buyers coming from other provinces of the country or the licensed establishments themselves just buy the products from small producers. The small producers considered having big workshops also share the orders to groups of families with smaller workshops who sometimes buys from neighboring households if they cannot meet the orders themselves. There are also those that only provide labor when the need arises. This web of producers and buyers in the chain are illustrated in Annex 3.

8.0 INCIDENCE AND NATURE OF CHILD LABOR

It is difficult to extract from the 1995 NSO survey of working children the number of children involved in pyrotechnics production. It is presumed that their number is integrated under the item classified as non-food manufacturing sector. The number of children aged 5-17 years old who worked in non-food manufacturing reached 53,000 in 1995 for Regions III, VI and VII. These three regions cover the selected project sites under study in this report.

In 1999, the Department of Labor and Employment (DOLE) Regional Offices identified existing cases of children working in pyrotechnics manufacturing in specific areas of the country. These were in the province of Bulacan and in Lapulapu City. There were, however, other areas identified earlier in some studies, which were not reflected in the DOLE data, like the case of Hinigaran, Negros Occidental.

Production Process –

The production process consists of four major steps, namely: fuse preparation, folding the paper, mixing and putting in the chemicals, and packaging.

In fuse preparation, the thread or cord materials are soaked in a mixture of starch, coal, colorato and salitre for about three hours usually by women. They are then dried for about a day. The fuse materials are cut with a single, smooth stroke, usually by skilled men. This part of the process is dangerous because a mistake will cause the materials to explode. This is usually done in the backyard. The cut fuse materials are covered with paper, done by women and children at home or in the workshops.

Meanwhile, the cut up pieces of paper are folded into small, triangular containers by women and children. The men considers this job are too tiresome and low paying. This activity is usually done at home.

The men and sometimes the women, put in the chemicals in the triangular containers. Under the law, those below 18 years old are not allowed to do this. Putting in the chemicals is done only in the workshops at least 5 meters away from the nearest residence. Finally, packaging is done by women and children.

A sample cost of production and pricing for 5-star firecrackers (15,000 pieces) are shown below:

Raw materials (including chemicals and paper)	P1,978.00	
Fuse preparation materials	214.00	
Labor cost (for 3 workers completing the process in 2 days)	255.00	
Packaging materials	<u>90.00</u>	
Total cost of production		P2,647.00
Selling price		<u>6,000.00</u>
Net profit		P3,263.00

The following areas have been known to have cases of child labor in the pyrotechnics industry. Since the 1990s, these three areas have figured prominently as the main pyrotechnics manufacturing sites in the country, at the same time, employers of child labor. Pyrotechnics manufacture in these places is considered a traditional industry and where a majority of those in the community participate in one form or another.

The total number of children involved in the pyrotechnics industry has not been determined up to this time. There are different sources of information depending on the available documents in specific areas covered by existing studies. A summary of the estimated incidence of child labor is presented in the table from sources of data used in this study:

Source of Data (Year and Author)	Location	Number of Households	Number of Child Laborers
1991 Gonzaga	Negros Occidental	20 (out of 123 respondents)	26
1991 ISRAD	Barangay 1, Municipality of Hinigaran, Negros Occidental	600 (90% of total number of households in barangay)	100
1991 Remidio	Barangay Babag, Lapulapu City		50% of total barangay population of 3-14 year olds
1995 OSHC	Municipalities of Baliuag and Sta. Maria, Bulacan		100
1996 UNICEF			6,693
2000 PATAMABA	Barangay Pulong Buhangin, Municipality of Sta. Maria, Bulacan	50	
2001 CO-Multiversity	Barangay Igulot, Bocaue, Bulacan	300	
2001 CO-Multiversity	Bulacan		155 (full-time/part time)

Negros Occidental:

Municipality of Hinigaran -

Among those earlier documented cases of child labor in pyrotechnics manufacturing was in Negros Occidental. According to the study done by Dr. Gonzaga, some 20 households interviewed (out of the 123 respondents in southern Negros Occidental), were involved in pyrotechnics. About 26 from the 20 households were children. She described more children workers in the manufacture of fireworks than older workers.

The major production center is in the Municipality of Hinigaran, particularly in its urban barangays. During the period of study, in Barangay 1, close to 90 per cent of all households, including children, were engaged in pyrotechnic production. At that time, this industry was already 10 years old but the high profitability encouraged more persons to engage in the activity in the community.

It was described that pyrotechnic manufacturing is done the whole year with peak production nearing the month of December. During the peak months, children are more prone to participate in the production activity. The children are assigned various tasks including: rolling cardboard strips into the pyrotechnic containers, gluing “triangulos”, and pouring explosive powder (pulbura) into the containers. The children’s working implements are gunpowder, crepe paper, paste and chemicals (colorato, celetre, sulphur). These working materials are considered highly combustible or can burn the persons handling them.

The Philippine Center for Investigative Journalism (PCIJ) presented a video documentary with ABS-CBN in 1994. The child laborers in pyrotechnics factories in the Negros province were observed to be without protective equipment at work and were paid an average of P50 per day.

At present, there is an existing ordinance (Ordinance No.6) “Prescribing rules and regulations in the employment of children from 15 to 18 years old in the manufacture of pyrotechnics and firecrackers within the territorial jurisdiction of the Municipality of Hinigaran, Province of Negros Occidental, and providing penalty for violation thereof”. It was said that the municipality has complied with the legal requirement of designating a special zone where the activity has to be conducted. However, it was not clear whether child workers were still involved in the activity. A validation visit conducted by the Child Labor Coordinator of the DOLE Region VI based in Bacolod City, showed that the industry still flourishes as of to date.

Bulacan:

Municipality of Bocaue -

In 1994, the study done by Tiotuico and Umali covered the small-scale factories in Bocaue, Bulacan. The study described the respondents of the study as child laborers, their parents and selected number of owners of small-scale pyrotechnics factories.

These factories were characterized with a capitalization that ranges from P3,000 to P300,000 and with 2 to 9 employees. In general, these types of factories were also located in different municipalities of Bulacan like Marilao, Meycauayan, Sta. Maria, Balagtas and Pulilan.

It was not clear in the study how many were actually interviewed for the study. The findings only cited that the ages of the children working in the factories ranged from 7-17 years old, mostly males, and dropped out of school in favor of work. Both parents and factory owners claimed that children only helped as apprentices and were not formally employed because they know that children are not allowed to work in the factories.

The children's specific tasks in this industry were in repetitive work and simple tasks. Since they are paid low wages on a per piece basis, they perform one type of work in a day. Although some children perceive these tasks as part of their regular routine, those aged 12-15 years old are serious about being able to contribute to family income.

The simple manual tasks include wrapping of finished products into individual packages or carton boxes, pasting work, counting of hollow tubes and containers, segregation of rejects, cutting of paper, transporting materials, fuse and wick pasting, sand filling, and placing of wicks/fuses.

For preparing 1,000 pieces of paper containers for baby rockets (about one sack), which could be finished in one day, a child could earn P20-P50. For one kilo of paper containers for five-star firecrackers which could be finished in half a day, a child is paid about P20-P30. Those who get a fixed pay, the amounts ranged from P20 per day to P100 per day depending on the skill and the number of years with the factory. More than 30 per cent of those children interviewed have been working in the factories from one to two years.

No specified working hours are given to children. Child laborers can start work anytime from 6:00 a.m. to 6:00 p.m. or even later depending on the requirements of the work. Those who are studying at the same time working, start work after their classes until they are finished with the tasks assigned to them. About 62 per cent of the child laborers covered by Tiotuico and Umali's report have stopped studying and those studying, work after school. Seventy five of those who stopped studying reportedly dropped out during the elementary grades.

Interviews done CO-Multiversity in Barangay Igulot this year described the physical condition of the community with households involved in pyrotechnics production. The place is located in ricefields and the houses are situated along an old railroad track (thus the name of the sitio is Sitio Riles). Most of the households are migrant families from other provinces. The manufacturing activities are mostly illegal because of expensive licensing fees.

According to one interview, the local government tolerates the situation because they earn from the business permits and the manufacture of firecrackers provides temporary livelihood for the people. The work is seasonal, only before the Christmas holidays, and stops after that. The local government often raids the workshops that employ children, puts them to jail and asks the families to bail them out.

According to one family interviewed, there are about 300 families in Sitio Riles who are involved in one way or another with pyrotechnics manufacture. Even if the earnings are relatively small, it can buy the family their food requirements.

Municipality of Baliuag and Sta. Maria -

In 1995, the OSHC study in Bulacan reported that the pyrotechnic enterprises in the province have formed an association of dealers and manufacturers called the Philippine Pyrotechnics Dealers and Manufacturers Association. The group

reportedly has a total membership of 403, of which 254 are dealers and 149 direct manufacturers. In the study, the establishments interviewed claimed that children were not engaged in dangerous processes. However, OSHC declared that there are still significant health risks, though, in the handling of chemical powders without any respiratory protection devices.

A total of 100 working children were examined as part of the OSHC study (which comprised the exposed group). The control group (unexposed) was composed of 83 elementary grade school children and adult workers numbering 32. Some of the exposed children were found to be migrant workers coming from Bicol and the Visayas. These children were said to be recruited from their hometowns by the pyrotechnics manufacturers to work full time in Bulacan. They were given free board and lodging.

There were also other local organizations such as the Pambansang Tagapag-Ugnay ng mga Manggagawa Sa Bahay (PATAMABA) and the Bulacan Pyrotechnics Association, working closely with the residents of Barangay Pulong Buhangin of the Municipality of Sta. Maria and Barangay Sto. Niño of the Municipality of Baliuag. The Bulacan Pyrotechnics Regulatory Board have been undertaking consultations, trainings, information campaigns, standardization and labeling, etc. with the DOST, DTI, TESDA, and industry associations. The industry associations worked for the legalization of firecracker production. The PNP also inspects the production sites.

Municipality of Sta. Maria -

Some women members of PATAMABA were covered in a study in Barangay Pulong Buhangin on the sub-contracting process in pyrotechnics production. As cited in the study, there is already a division of labor between the men and women where men are engaged in more dangerous tasks such as mixing of chemicals, placing the chemicals into the containers, and cutting the fuse (mitsa) bundles.

Many of the women used to be sewers and embroiderers in the area, but shifted to work in pyrotechnics due to decline of the business and use of machines in garment factories. They say there is hardly any employment in pyrotechnics in January and only those with enough capital to sustain a year-round production can still hire workers. The women prefer home-based work because they can earn while taking care of the children. The female children are likewise involved in home-based work. In the same study, the children could earn as much as P200 per day (P0.50 for gluing X 400 pieces).

In general, the women workers said that the manufacture of pyrotechnics is a difficult occupation but claimed that employers pay for medical costs in case of accidents. In case of death due to explosions, funeral expenses were shouldered by the employers. When profits are good especially during the holiday seasons, they also get a bonus.

The FGD done by PATAMABA in Barangay Pulong Buhangin showed the age range of child laborers from 8 to 17 years old. The children work after school and up to the evening (completing about 2,000-3,000 pieces folded and paid a piece rate for P5 per 1,000 pieces, and 500-1,000 pieces of fuse covered). The children work full time during Saturdays and Sundays. It was observed that migrant children are worse off because they don't go to school. The children can play less than two hours a week. They receive P5-P10 a day to spend for snacks or to save for school supplies. During Christmas season, they can get from P50-P100.

Cebu:

City of Lapulapu -

In the barangays of the city of Lapulapu, children participate in family-based enterprises in the manufacture of firecrackers and fireworks for holiday funmaking. It was noted that the whole family is involved in the activity. In Lapulapu City, there are twice as many children than older workers. In Barangay Babag, the Remedio study

cited that 49.55 per cent of children aged 3 to 14 years old are involved in pyrotechnics manufacturing over the total number of working children aged 3 to 14 years old.

Remedio covered in her study children aged 3 to 14 years old, where the average age of male children is 9.13 years old and the female children 9.78. The male children in pyrotechnics production were slightly younger than their female counterparts. The children involved in fireworks production in Cebu were exposed daily to the explosion-prone raw materials like celetre, black aluminum, sulphur and charcoal.

In Lapulapu City, an ordinance for the protection of children in pyrotechnics production has already been passed. Since 1990, continuing advocacy and close coordination with the local government were undertaken. A Memorandum of Agreement (MOA) between DOLE Region VII and the city government was signed to implement the child labor program in the city. It is not known whether those activities undertaken until 1994 (as reported) were sustained.

9.0 OCCUPATIONAL AND HEALTH HAZARDS

Undoubtedly, the work processes involved in pyrotechnics are extremely hazardous. Most of the substances are highly flammable and combustible and the consequence of loss of life or injury is high. Even if more and more, children are kept away from the hazardous part of the manufacturing process, the environment where everyone work subjects all to the same imminent danger of explosion and fire and chemical exposure. As the CO-Multiversity community workers cited in the case of Bulacan, “ on the average every year, 3 children die, 7 injured and P2.7 million lost due to pagsabog (explosion).....”

During the year in 1991, Gonzaga’s study cited that 4 children have died in accidental blasts and family members were provided assistance in Negros Occidental.

It was in 1994 that a fatal explosion occurred at a pyrotechnics factory in Barangay Catmon, Municipality of Sta. Maria, Bulacan. The number of respondents to Tiotuico and Umali's study was affected as a result of the accident.

This year 2001, another firecracker explosion injured five persons in Barangay Igulot, Bocaue, Bulacan. The injured included a sixteen-year old girl involved in the production of kwitis (skyrockets). According to the investigation, one of the workers accidentally dropped a chemical mixture which sparked the explosion. The so-called factory is actually a shanty in a rice field. Within the same period, a sixteen-year old girl was injured together with four other victims (one died) while working in a shed-like structure used as a firecracker factory with at least 15 workers. The explosion occurred in Sitio Naga Lawis, Barangay Babag II, Lapulapu City. The explosion which then burned some houses in the area was caused by one of the injured loading powder into a casing for a kwitis when it ignited.

The profits gained from the industry carry with it the associated risk. From 1990 to 1995, the PNP recorded more than P13 million worth of damage in the province of Bulacan from accidents, injuries and property damages due to pyrotechnics-related explosions. These were mostly due to incorrect handling of materials and negligence.

An Institute of Labor Studies (ILS) study in 1994 cited how the work exposes children to particular health risks. In pyrotechnics manufacturing, the child laborers face the risk of injury and death when the products accidentally explode. The workers also expressed fears of accidental explosions from handling gunpowder or accidents resulting from muscle strain and physical fatigue. Some reported negative health effects from handling the gunpowder such as weight loss, dizziness, asthma and constant colds.

From the FGDs conducted by PATAMABA, the child laborers complained about headache, dizziness, painful eyes, aching back, difficulty in breathing which was also noticed among the adults who prepared the fuse.

The physical examination done by OSHC showed primary tuberculosis infection in 43 per cent of the exposed children compared to around 41 per cent of the unexposed. Intestinal parasitism was also high among children from the exposed group (63 %). In terms of iron-deficiency anemia, both exposed and unexposed groups have comparable conditions. Cardiac abnormalities were not very significant among all the groups. The average dust exposure concentration levels were generally within the recommended levels. However, the workers engaged in gunpowder mixing and sieving exceeded the threshold limit value. Illumination problems happen when the work is extended until the evening. The work stations, located near animal pens where there is also indiscriminate waste disposal, are dirty.

All the enterprises visited by OSHC lacked safety policies and procedures. It was also observed that the workers lacked sufficient knowledge or were indifferent to the risks involved, particularly the risk of explosion or the hazard from chemical substances. Because parents who work side by side with their children are not adequately informed or do not care about these hazards, the children are in worst situation as they are.

Aside from the lack of safety and protective gears, some of the work stations are not properly designed to provide a comfortable and healthy work environment. Work spaces are sometimes narrow with not enough room for emergency exits. Majority of the work areas have no sanitary facilities. Very few establishments have separate storage rooms for raw materials and finished products, which are combustible.

In addition to the hazards offered by the industry to children and adults engaged in its manufacture, those who buy the products are exposed to the same risks. Every year, the health department warns the public of the danger from firecracker use, especially among children, who are easily exposed to accidental blasts and “watusi” poisoning. However, the last New Year celebration for 2001 showed the seriousness of some local government officials (e.g. Davao City) in banning the use of firecrackers.

10.0 GENERAL FINDINGS

Across all the three study sites, the same conditions apply to the child laborers and their families. The industry has been patronized in these areas for the past decade or more. In fact, these places have established the reputation of being the major sources of pyrotechnics products in the country. Since the time the industry flourished, the methods and processes for manufacture have not improved. The same labor-intensive and simple technological requirements continue to allow easy participation in the work processes by anyone interested to earn an income in the community.

The hypothesis adopted in this study points to the industry characteristics that perpetuate the situation of child labor in the industry. The big manufacturers rely on the informal and subcontracting arrangements for production in order to reduce cost and keep high profits. The large incomes generated from the industry in the past years encouraged more community members to engage in the trade. As a result, no other viable enterprises have flourished in these areas to serve as alternative livelihood sources for the community.

However, business has been declining in recent years due to economic reasons. In addition, the aggressive campaign by government against the use of firecrackers during holiday celebrations in order to avoid accidents, have been increasingly a serious program. The deteriorating peace and order problems against terrorist bombings in the metropolis and especially the armed conflict in Mindanao, made government authorities vigilant about any potential explosive materials (including pyrotechnics).

With the industry's declining market and no technological improvements in manufacturing, there is a continued need to keep costs down in order to maintain profits. These conditions keep the attraction for employment of poor households (including the children) in the manufacturing process. On the other hand, the poor households in the communities where these industries thrived are easy sources of labor for lack of better opportunities and

alternative sources of income. The only motivation for work in such a hazardous situation is economic survival. In this situation, the child is considered only as an additional work hand and not necessarily hired for any specialized skill advantage that the child possesses.

Industry

- Pyrotechnics is a regulated industry and entry is constrained by stiff licensing costs. This has resulted in the licensed establishments to resort to sub-contractors or to finance small-scale production. The production processes done in households are increasingly difficult to monitor for the involvement of child laborers. The industry contribute to local governments income from payment of business permits, thus the industry becomes an important economic activity in the area where it is located.
- There is an increase in small-scale manufacturing with the number of licensed manufacturers decreasing. This situation will make it difficult to recommend a general shift in the industry unless a comprehensive approach to alternative livelihood opportunities is in place.
- The industry is visible and site-specific. The local government units are supposed to have jurisdiction over these activities in their areas. It would have been an advantage in terms of effective monitoring, but some local officials are also involved in the industry.
- The manufacture of pyrotechnics do not require specialized skills and anyone can easily learn the trade from someone else. Those involved in the industry do not consider the activity as a livelihood, but only as a coping mechanism to survive. The demand for the product is generally seasonal and households involved in the activity find other informal jobs to augment their income.
- Sub-contracting requires a relatively small capital and anyone with the finances can organize household producers immediately when there is a demand. The supply of labor from household producers is large, therefore, there is no option for existing household producers to demand for wage increases because it is easy for a buyer to look for other producers.

- Sub-contractors are often caught between the concerns of the household producers and that of the buyers or licensed establishments (those who placed the orders). Sometimes they have to advance payments to the household producers even if the buyers delay or decrease the prices of the products. Many are indebted to the buyers from cash advances made in return for the finished products whose prices the buyers dictate.
- There is a declining trend in the demand for pyrotechnics brought about by general economic conditions in the country. Some claim that the ban of firecrackers in Mindanao had affected the volume of sales. Also, there is competition from better-designed fireworks and firecrackers from abroad.
- In case of accidents or even death, the workers are content that the owners of the establishments provide financial support. The owners are not held accountable if the affected workshops are just suppliers of finished products or of labor to them, or even if there are children involved in the production.
- Local agencies monitor regulation by conducting raids. The labor inspectors have not been effective in the case of small-scale activities.

Community

- The communities involved in pyrotechnics production have been in the business for more than a decade. The transfer of skills had become a tradition among the residents of the area and had attracted migrant families and workers to seek job opportunities in these areas. Since the industry is a main economic activity, almost everyone participates in one way or another in the industry.
- There is no genuine effort to look for alternative sources of livelihood other than pyrotechnics manufacture. Since most families are involved in the industry, naturally, the children join their parents to augment incomes.
- Since the entire community somehow participates in the industry in one way or another, the interventions to eliminate child labor need to address everyone.

Household

- The household profiles of those engaged in pyrotechnics manufacture are common to poor, unskilled, and increasingly migrant families. The industry is just one among many informal sources of income for the family. Since most of these families do not own farm lands, there is no alternative work in agriculture. The earnings from the activity are not even enough to sustain the food requirements of the family, much more, the children's educational needs.
- The engagement of children is a family decision. Most of the children interviewed said that they were not forced to work by their parents, but they want to help their parents and to have little pocket money.
- Some parents are still misinformed or unaware of the hazards of pyrotechnics manufacture. Because of this, their children are subjected to the hazardous situation. In one FGD with older child laborers (12-17 years old), they expressed concern for younger children who are engaged in this type of work.

Child Laborer

- The children work with their family either at home or in workshops. At present, it is increasingly practice to disallow children from handling the hazardous operations in pyrotechnics manufacture (especially the mixing of chemicals).
- There is pressure among children to prioritize education over work. If the children don't work, there is no money for other school expenses anyway. For those who are able to combine schooling and work, there is no special consideration given in schools about their situation (e.g. slow learners, drowsiness, no time for homework).
- Educational assistance provided is minimal and limited. However, the pre-condition set by some NGOs to continue educational assistance only if the children stop working, is sometimes difficult to sustain.
- Children's work in pyrotechnics is repetitive. They are assigned one type of work a day and paid on a per piece basis. The children enjoy doing the work together with other children. Some tasks may be considered simple but there is still health risk accompanying the exposure to chemicals and other hazardous materials.

- It is accepted that all child workers are basically at risk in any kind of work. It is also true that children from poor families even if not involved in pyrotechnics production are equally deprived of a healthy life. However, it is doubly hazardous for children involved in pyrotechnics production because of the imminent danger from injury and loss of life.

11.0 PAST AND EXISTING INTERVENTIONS

The National Program Against Child Labor (NPACL) is a concerted effort of the government, trade unions and employers with international institutions and NGOs, to eliminate exploitative and worst forms of child labor. In 1988, initial efforts leading to the government program was supported by UNICEF, particularly in understanding the phenomenon of child labor in the country.. It was during this period that several research studies were initiated on the different situations of child labor, including those studies used as reference for this study.

Launched in 1994, the IPEC has worked for the elimination of child labor, especially its most exploitative forms. For the past seven years, the IPEC has funded over 60 action programs with over 50 partners. Its major partner is the DOLE, together with other partners in government, media, workers' organizations, universities, and NGOs.

Improved Data –

In 1988, BGCACL conducted a situation analysis jointly by BWYW, BNFE and U.P.-ORC. The situation analysis resulted into pilot initiatives, which included Bulacan for pyrotechnics. The research studies undertaken on the nature of child labor in the pyrotechnics industry contributed to the greater understanding and appreciation to the hazards of the activity. These studies have also been useful in child labor programming at national and sub-national levels. Masterlisting activities , on the other hand, was done since 1994 and helped identify the number of working children in several regions of the country.

In 1992, participatory action research was conducted by DSWD in Barangay Babag in Lapulapu City. This methodology tried to update the household information collected from the situation analysis in 1990.

The NSO survey is a positive step towards institutionalizing information on child labor in the country. However, in the case of pyrotechnics, the survey do not have specific figures. Since the survey is conducted only every five years (parallel to the census years), monitoring of the incidence of child labor needs to be undertaken by the concerned government agency or by the local government units.

Monitoring and maintenance of data base depended on cooperative local government units because the DOLE has no municipal offices. The experience from the conduct of this study showed that the DOLE Regional Offices have not regularly been updated on the situation of child labor in their areas.

Advocacy –

There have been several initiatives at national and regional levels to promote the issue and prevent the increased incidence of child labor. Most of the interventions were either not sustained or unsustainable. Advocacy activities have generally increased the awareness of the public, on the situation of child labor in the pyrotechnics industry, especially at the national level. In fact, the first videos produced on child labor included the pyrotechnics factories in Negros Occidental. However, these have not prevented the proliferation of child labor in this industry especially at the local level where they are located.

In 2001, several consultations workshops, advocacy campaigns and stakeholder orientations were conducted in Bulacan. Particularly in the Municipality of Sta. Maria, members of the Sangguniang Bayan were involved in discussions on child labor. In Barangay Pulong Buhangin, the child labor campaign was participated in by 1,000 child laborers, child and youth advocates, parents, representatives from the barangay and the provincial government.

Most of the parents and child laborers interviewed were aware of the laws prohibiting children from working in hazardous activities, as well as the rights of the children to education. A significant number of parents recognize child labor as a cause of their children's stunted growth and poor health.

Institutional Strengthening and Capacity Building –

The capacity building activities covered by the government's program increased the capacities of national and regional level service providers. Since the increased decentralization of program implementation to local government units, there has been minimal capacity building activities directed to them. The responsibility over child labor concerns have not been clearly defined at the local government level. It is reported that in the case of the three areas included in this study, the local governments have implemented programs and projects to address the issue. However, there is a conflict of interest in serious implementation of the laws especially that the local governments generate income from the business permit fees paid by pyrotechnics establishments.

Capability building activities were directed to the parents of child laborers in terms of organizational development. The child laborers were also trained in advocacy, leadership, and increased participation in the community activities.

Multi-sectoral Approach –

The child labor program has been closely coordinated at all levels as part of the implementation of BGCACL. The program implementation at the community level was coordinated by the provincial implementation committees. However, the devolution of most service agencies to the local government units affected the inter-agency collaboration. The experiences in the areas covered by the study have been positive in terms of team effort among concerned agencies. The only problem, at that time, was the participating agencies' budgetary constraints and not able to commit full-time to the activities at the community level.

Law Enforcement –

There is poor enforcement of laws especially in cases of child laborers in the informal sector. Coordination with local government officials posed some problems when they are owners or partners of establishments (as in one case in Bulacan where the establishment was owned a barangay official).

It was reported in the 1996 Mid-Term Report of CPC III that a total of 62 labor inspectors were conducted in Region VI, mostly of pyrotechnics manufacturers. In 1995, the scope of labor inspection was already expanded to include child labor concerns. DOLE trained labor inspectors to further improve workplace monitoring for child labor incidence in the formal sector.

Educational Opportunities –

Some people argue that compulsory education is the answer to preventing children from engaging in hazardous work. However, even if public elementary and secondary education is supposedly free, there are other social costs related to education, such as the cost of transportation, school supplies, food, etc. The DECS has tried to develop innovative programs for children involved in pyrotechnics production in Lapulapu City, but was stopped in 1998.

Some 63 child laborers were already provided educational assistance through ERDA and 31 child laborers assisted by the Barangay Captain. The masterlisting of child laborers have been started and identified 155 full time and part-time child laborers. The children participated in weekly workshops on theater and visual arts and other psychosocial activities.

While child labor is recognized as a means to meet the children's schooling needs, it is also acknowledged as the hindrance to their access to proper education. Both parents and children aspire for a better future especially the opportunity to finished school and eventually get better jobs.

Community Organizing/Community Development –

Most of the direct services are implemented by NGOs, but these have been funded through programs assisted by donor agencies and the government. The CO-Multiversity has just started advocacy activities and community organizing in Bulacan through IPEC assistance. The Kamalayan Development Foundation (KDF) has also recently been doing work in Hinigaran, Negros Occidental. For a certain period, a local NGO, NORFIL Foundation had community workers in Babag, Lapulapu City delivering family and child welfare and community development.

Community-based action programs have been most effective in dealing with the child labor issues as shown in the activities undertaken related to community organizing and organizing parents and child laborers. There have been no evaluation, however, of the impact of these programs in the areas covered by this study. Although, in Bulacan, there are quite a number of community organizations involved in trainings, awareness campaigns, safety trainings, and the like. These organizations are limited among more organized establishments and not among small-scale producers and household manufacturers.

Beginning in 1995, the IPEC contributed additional funds to the program including the assistance provided to CO-Multiversity for a “provincial advocacy and community organizing campaign against child labor in the fireworks industry in Bulacan”. The program aims to withdraw about 300 children from work and provided social services in education, occupational health and safety, and alternative incomes for their families.

People’s organizations were formed in the Municipality of Bocaue and in Barangay Pulong Buhanging, Municipality of Sta. Maria. There were four parents’ organizations formed, two children’s organizations and one youth organization. In Barangay Pulong Buhangin, the Barangay Council for the Protection of Children (BCPC) was established composed of 35 members coming from various sectors of the community. Other institutional structures being addressed are the Municipal Committee on Child Labor, the Provincial Sub-Committee on the Welfare of Children, and networking with the Pyro Regulatory Board.

Alternative Livelihood –

There is inadequate funding for livelihood activities covering child labor families. Even UNICEF who initially funded loan assistance for micro-enterprises, changed their policies about granting income-generating project assistance. Only a few local government units have allocated funds for livelihood.

The CO-Multiversity facilitated negotiations for access to funds for land acquisition through savings mobilization, livelihood assistance from the Sanggunian Bayan, and other programs from the provincial government. Training on doormat making was started with 25 members of the Samahan ng mga Magkakapitbahay sa Boacue (SMB) which will eventually fund a multi-purpose cooperative.

12.0 IMPLICATIONS TO PROGRAM IMPLEMENTATION

In the book published by the Institute of Philippine Culture (IPC) through ILO-IPEC assistance entitled “For Children Who Toil A Report on Sustainable Action against Child Labor in the Philippines” (1998), it was not entirely optimistic about having sustainable action to eliminate child labor practices based on past experiences. The persistence of child labor practices, especially the use of children in hazardous work, indicates that the conventions, laws, and policies regarding child labor have yet to be fully implemented and their implementation carefully monitored.

The book, however, identified some of the “best practice” elements based on the Philippine experiences in its campaign to eliminate child labor. These practices are the following:

- a) multisectoral action especially with the involvement of local governments, NGOs, and people’s organizations which are critical for effective and sustainable community-based initiatives;

- b) multimedia approach for addressing different audiences (particularly the use of documentaries);
- c) advocacy at all levels especially the formation of a core of child advocates; and
- d) capability building activities that promote the creation of institutional mechanisms.

There have been positive changes experienced through the years in the pyrotechnics industry that could be pursued further to be able to eliminate child labor in this industry. For instance, the passing of local legislations (Hinigaran/Lapulapu City), the organization of household producers (Bulacan/Lapulapu City), the involvement of civic groups in promoting the issue of child labor (Bulacan), participatory community development (Lapulapu City/Bulacan), are among the many locally-initiated efforts aimed at addressing the issues.

Community-based initiatives have been found to be the most effective approach to address the problem in specific areas. In all the three sites covered by the study, positive responses gained from the children and their families, as well as with the local government units, were a result of an integrated approach to addressing the issue. The interventions were localized in the affected areas and with a combination of advocacy at all levels, direct services (especially on educational assistance and livelihood), networking, and strengthening of local organization capacity, both with government and the community groups.

The TBP prescribes that the interventions should capitalize on the synergies between sectors and stakeholders for sustainability. The strong social foundation for the program comes from awareness and support, and active participation of the children, their families, the community, employers, NGOs, government and the media.

The heightened interest in the situation of child laborers in the pyrotechnics industry and on the industry itself are indications of the positive atmosphere needed for pursuing the TBP in this sector. The industry already has the legal foundations for regulation, the manufacturers are organized, the parents are aware of the issues against child labor and are open to

alternative sources of livelihood. The three study sites are suitable for further interventions focused on elimination of child labor in their areas. The TBP can be pursued in the three sites by considering the following aspects:

The need for an area-based approach

The fight to eliminate child labor in pyrotechnics production has to be won in the specific areas where they are located. A top-down approach to program implementation will not work especially with the increasing authority that local government units play at present. Since the practice is not nationwide, it is easier to design a program suited to the particular situation. Developing a program at the community level also allows the community to assume the responsibility of what is happening in their community. This would also mean that the community is working together with the concerned households and child laborers to find solutions to the issue. The term “area-based” refers to the tailoring the package of interventions specific to the site of implementation and its requirements.

The need to review the policy instruments regulating the industry

The enforcement of the existing law should not be seen only in terms of conduct of raids. The children and women desks of the PNP should be involved in terms of monitoring activities with the intention of preventive interventions. The law should also take more accountability from establishments that tolerate the use of child laborers in pyrotechnics manufacture. There is also a need to review the role of labor inspectors in monitoring cases of child labor in small-scale enterprises, like the pyrotechnics manufacture.

The need to build capacities of different agencies and groups at local level

The building of a core group at local level should be strengthened involving all concerned government agencies including more civil society groups. This also means representation from organized groups of households involved in the industry as well as from the organization of child laborers themselves. Existing experiences from other NGO implementation in child labor projects in the country show successful implementation with the active involvement of

the children themselves. The experience gained in building the institutional structures to address child labor in the locality should be pursued and supported. Localizing implementation has been recognized as more effective and relevant.

The need for alternative educational strategies

The needs of child laborers should be taken seriously by the formal education system in order to keep these children in school. Distance education may be explored as well as other vocational trainings. Literacy classes aimed at livelihood should also be directed to parents of child laborers to increase their access to available opportunities within the locality. There should also be deliberate interventions in making adjustments for the needs of child laborers who are interested in going to school, for instance, in terms of work hours, remedial classes, home visits, and the like. The local government unit should also develop programs to support the educational needs of disadvantaged children, particularly of child laborers.

The need for community organizing/community development

The work with marginalized communities needs persons working full time with the communities. This task can not be done by government service providers considering their workload. The NGOs and other civic groups play an important role as intermediaries or facilitators to assist the communities and families improve their living conditions and eventually able to eliminate child labor from the hazardous work. Livelihood projects are found more sustainable if community group and value formation are properly implemented.

The need to study the evolution of the industry into serious uses

The manufacture of pyrotechnics is considered a tradition in the areas where they have thrived for more than a decade. However, the technology and use of the product have remained simple and unchanged. There are other serious products that emanate from pyrotechnics manufacture that have not been explored. Technical assistance should be provided to the industry to encourage sophistication in products, improve production efficiency and raise the standards of the industry. The change may mean the loss of livelihood for many households

dependent on the current production processes, but it will prevent the practice of sub-contracting and thus the informal sector where children gets caught in a no-win situation. Meanwhile, CO-Multiversity is proposing the formation of cooperatives that will help improve the workplace and contribute to following safety standards in manufacture. Eventually, it is hoped that children will totally be eliminated from the industry. Contrasting opinions cite that the industry is better left at household level and the interventions should be intensified at that level. Whatever alternative livelihood will replace pyrotechnics production in the future will definitely undergo a process of consultations with the communities involved.

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LIST OF ANNEXES

- ANNEX 1 Research Instruments
- ANNEX 2 Conceptual Framework
- ANNEX 3 Sub-contracting Chain

COMMUNITY PROFILE

(Generated from documentary review, ocular inspection and key informant interviews)

About the Study Area:

- 1.Name of Municipality-**
- 2.Name of Barangay-**
- 3.Name of Sitio-**
- 4.Land Area of Sitio, Barangay, Municipality-**
- 5.Land Area of Activity Site (where pyrotechnics production is conducted)-**
- 6.General Description of the Physical Characteristics of the Host Barangay (e.g. agricultural planted to what type of crops, forested, barren and grassy, flood prone, etc.)**
- 7.General Physical Description of Settlement in the Barangay and around the Activity Site (e.g. very rural with houses made of nipa huts, dispersed location of houses, clustered neighborhoods, etc.)**
- 8.In a barangay map, please locate the following sites: health and education facilities, institutional facilities, recreational facilities, market or trading centers, residential areas, roads and waterways, quarrying or pyrotechnics manufacturing, and other pertinent data.**

About the Local Economy:

- 9.What is the major economic activity in the host Barangay?**
- 10.Are those households involved in pyrotechnics production also engaged in other economic activity? How?**
- 11.In relation to No. 8, please probe the relationship between the main economic activity of the barangay and pyrotechnics production, whether pyrotechnics production developed only as an alternative after the main economic activity was no longer viable.**
- 12.Can pyrotechnics production be considered a community activity in this area where the majority of the residents are somehow involved in any way?**
- 13.Do the local government benefit from pyrotechnics manufacturing? How?**

About the People:

- 14.Population data of the Sitio, Barangay, and Municipality-**
- 15.Trend of population data (increasing or decreasing)-**
- 16.Are those households engaged in pyrotechnics production indigenous to the area? If not, where is their original place of residence and reasons for migration?**
- 17.How many children are identified to be working in pyrotechnics production?**

About the Activity:

- 18.When did pyrotechnics production start in the area (if possible, indicate year)?**
- 19.Did pyrotechnics production start legally (with licenses to operate and with the knowledge of local officials) or not?**
- 20.Did the local officials and general public in the area welcome the activity? Why?**

21. Did these activities increase the income of many people? How do you measure this increase?

22. Do you know of incidents (like injuries or accidents) resulting from pyrotechnics production in your area? Please narrate. How many were affected?

23. Do you know how pyrotechnics production is being done? Are the products sold outside the barangay or outside the municipality/province? How?

About Child Labor:

24. Do you know that children (18 and below) are involved in pyrotechnics production?

25. Do you think it is okay for children to work in these types of activities?

26. Do you know that it is generally illegal for children to work, especially in pyrotechnics production?

27. What are the local officials doing about this situation in your area?

28. Are the children working in these activities still able to go to school?

29. Are there government agencies and NGOs helping the children and/or their families? Who and how are they helped?

FOCUS GROUP DISCUSSION GUIDE QUESTIONS

(Questions can be adjusted accordingly for child laborers and their parents if interviewed together or in separate groups)

PARENTS OF CHILD LABORERS:

Characteristics of the Affected Households:

- 1.How many members are there in the household?**
- 2.What is the major source of income in the family?**
- 3.Who in the family are involved in pyrotechnics production? (With particular reference to the ages of the children involved)**
- 4.How were they involved in these activities?**
- 5.Where did you learn to make pyrotechnics?**
- 6.How long have you been involved in the activity?**
- 7.How many families do you know are engaged in pyrotechnics production within your neighborhood? Within the sitio/barangay?**

Awareness of the Child Labor Issue:

- 8.Do you know that children are not allowed to work especially in pyrotechnics production?**
- 9.Do you know that there is danger in these activities?**
- 10.Do you think it is reasonable to allow the children to help in the family's source of income? Even if the work is considered dangerous?**
- 11.Are the local officials or other groups advising you about what child labor is?**
- 12.Are their government agencies and/or NGOs discussing about child labor?**
- 13.Are you contented with your present work in pyrotechnics production? Why?**
- 14.If given a choice, do you want other types of work? What other work?**
- 15.Do you have other skills to do other work?**

Knowledge About Children's Rights:

- 16.Do you agree that it is against children's rights to allow them to work in hazardous conditions?**
- 17.Are your children able to go to school? If not, is it because they are working?**
- 18.Which is more important to you: the children help in family income or they are able to go to school?**
- 19.Do you see to it that the children still have time to rest and to play?**
- 20.Are your children's health and nutrition affected by their work? How?**

Working Condition of Child Laborers:

- 21.How long does you and your children work in pyrotechnics production?**
- 22.Do the children work with the parents or separately? How?**
- 23.How much are the parents and/or the children paid? Who pays you?**
- 24.Do you enjoy your work? Why?**
- 25.Are your employers concerned about your working conditions?**
- 26.Do your children feel pressured to do the work or they want to help the family?**

Knowledge About Interventions:

27. What are your local officials doing to help you with your needs in general?
28. Are there existing programs/projects being implemented to help you find other sources of income? Please describe.
29. What are your plans for your children? Who do you think can help you realize these plans?
30. Will you support any activity that will not allow your children to work in pyrotechnics production?
31. How can you help government and other institutions solve the problem of child labor?

CHILD LABORERS:

Characteristics of Children-

1. How many children are involved in pyrotechnics production? What are their ages?
2. Are they working in pyrotechnics production with their parents or on their own?
3. How were they recruited into the activity?
4. How did they learn to work in pyrotechnics production?
5. Do they go to school? If not, why not?
6. Do they know of other children working in pyrotechnics production?

Awareness of the Child Labor Issue:

7. Do you know that children are not allowed to work especially in pyrotechnics production?
8. Do you know that there is danger in these activities?
9. Do you consider your work dangerous? How?
10. Do you think it is okay for you to help in the family income?
11. Are their persons or groups advising you about what child labor is?
12. Are you contented with your present work in pyrotechnics production? Why?

Working Condition of Child Laborers:

13. Describe what you do in pyrotechnics production?
14. How long do you work in pyrotechnics production?
15. How much are the children paid? Who pays you?
16. Do you enjoy your work? Why?
17. Are your employers concerned about your working conditions?
18. Do the children feel pressured to do the work or they want to help the family?
19. Did you get sick or have you had an accident while working? Please describe.

Attitude Towards Future:

20. What are the children's own view about their future?
21. What are the children's major problems?
22. What are the children's recommended solutions to these problems?
23. What are the children's view about improvement of their lives at home? At the workplace? In the community?

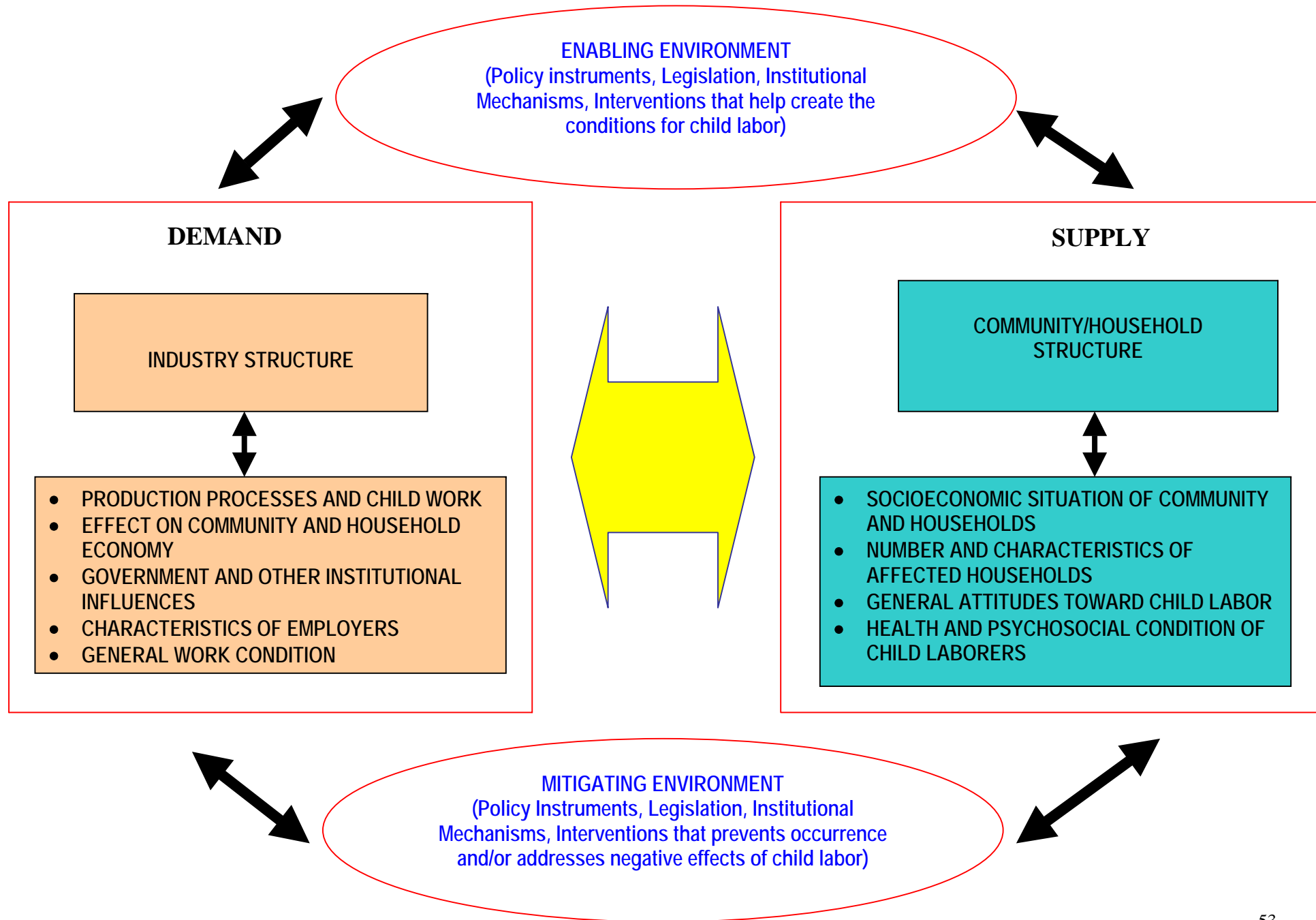
GENERAL SECTOR PROFILE

(Can be generated from key informant interviews of those involved in the industry and not necessarily having child laborers)

Pyrotechnics Manufacturing –

- 1. Main Products**
- 2. Production Site (specific location: sitio, barangay, municipality, province)**
- 3. Market destination: Export and/or Local**
- 4. Duration of activity in the area**
- 5. When and how technology was acquired by households**
- 6. Describe the production process and total production per day**
- 7. Description of those involved in production chain: suppliers of raw materials, main manufacturers, sub-contractors, buyers (wholesalers/retailers), importers, exporters**
- 8. Description of sub-contracting process especially up to the households**
- 9. Number of persons employed for which type of production process**
- 10. How labor is recruited and how work is paid (wages or piece rates)**
- 11. Cost of production**
- 12. Pricing of products**
- 13. Competitors**
- 14. Industry problems**
- 15. Role of government (national and local)**
- 16. Describe existing industry organizations (including type and number of members)**
- 17. Prospects of industry**
- 18. General attitude towards child labor**

CONCEPTUAL FRAMEWORK



SUB-CONTRACTING CHAIN

