ELIMINATING CHILD LABOR IN THE PHILIPPINES

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I. INTRODUCTION

A. Background and Rationale

The ILO reports an increased commitment among governments and other social partners to take comprehensive action against child labor. As a first line of reasoning, it may be said that the elimination of child labor appeals to one's sense of right and wrong. Upon closer scrutiny, however, such an action does appear to yield economic benefits. There are of course corresponding costs, direct and indirect, involved in implementing programs and policies to eliminate child labor, although there is as yet little information on the resources required, nor are there studies analyzing the economic costs and benefits of such undertaking.

This Philippines country study is one of ten studies being undertaken on the subject. It adopts the methodology prescribed by the ILO-IPEC. The methodology specifies the program to be undertaken for the elimination of child labor inclusive of strategies and time frame. The method of estimation is also given. The country studies shall serve as inputs to a global study being undertaken by ILO. At the very least, these studies are meant to provide estimates of the resources that need to be mustered if there is to be global understanding of the need to eliminate child labor. It may very well be the case that eliminating child labor carries too high a cost in the short to medium term, but this is ultimately outweighed by the stream of benefits expected over the long term. There is thus room for multilateral agencies to assist particularly developing countries beset with short-term macro-adjustment problems to undertake such structural reforms.

B. Child Labor Defined

The most common definition of child labor is when a child participates in a variety of work situations, on a more or less regular basis, to earn a livelihood for himself or herself or for others. (Ateneo Human Rights Center, 1998). The layman's definition, however, does not reflect aspects of work situations that are considered offensive to society. This is where the distinction between child work and child labor is drawn.

The ILO-IPEC defines child labor as "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; where children are forced to lead prematurely adult lives."

In the Philippines, child labor is defined in Republic Act No.7658 as "illegal employment of children below the age of fifteen [years], where they are not directly under the sole responsibility of their parents or legal guardian, or the latter employs other workers apart from their children, who are not members of their families, or their work endangers their life, safety, health and morals or impairs their normal development including schooling. It also includes the situation of children below the age of eighteen [years] who are employed in hazardous occupations." The definition is consistent with the Philippine definition of the child (a person below eighteen years of age) and the internationally accepted definition of child labor.

II. METHODOLOGY

A. Description of Data Sources Used

The 1998 Annual Poverty Indicator Survey (APIS)

The basic data used in this study is the Annual Poverty Indicator Survey (APIS) conducted by the National Statistics Office in October 1998. The APIS contains information on minimum basic needs (MBN) pertaining to certain interest groups – pregnant and lactating mothers, women of reproductive age, infants, preschoolers, and family members aged five years and above.

The survey covered some 22 million children aged 5-17 years old (projected to the whole Philippine population from a sample of some 40,000 families). Of this, about two million worked at any time during the second and third quarters of 1998. The implied incidence of working children is 10%, significantly less than the estimate in the 1995 National Survey of Working Children (NSWC) of 16%.

Both surveys were conducted by the NSO and the employment questions used were phrased in the same way, following the quarterly Labor Force Survey. Thus, the disparity could not have been due to differences in the conduct of the survey nor in the design of the instrument.

There are several reasons that can be offered to explain the disparity observed between the 1995 and 1998 survey results.

• The first possible source of disparity is that the 1995 NSWC uses the household as the unit of analysis while the 1998 APIS uses the family. This means that child domestic workers may not have been included in the latter. In the 1995 survey, the incidence of child domestic work was about 7% of total working children. If the same proportion were maintained in the 1998 APIS, then the incidence of working children would go up, but to only 11%.

- The second source of disparity is the difference in time frame, where the 1995 survey asked for employment at any time between August 1994 and July 1995 (or 12 months in all) as opposed to the 1998 APIS which covered only two quarters (April to September 1998). The trend in the number of working children reveals seasonality that peaks during the second quarter (school vacation months are in April and May). But the seasonality factor would suggest a higher expected incidence from the 1995 APIS survey over the 1998 NSWC.
- The third source of disparity is the Asian financial crisis and the El Niño (severe drought) phenomenon that hit the country in 1998. Lim (2000) has shown that there was a substantial reduction in demand for labor (including child labor) because of these factors, despite the increased labor force participation among children.
- Of course the drop in the measured incidence of child labor between 1995 and 1998 could have been due to advocacy efforts already bearing some impact.

Esguerra (2002) also notes that when the 1995 NSWC data are compared with those from the 1995 series of the quarterly Labor Force Survey (which includes but does not officially report the labor force participation and employment experience of children 10-14 years old), the incidence of child work from the 1995 NSWC appears to be on the high side.

In any case, the decision to use the 1998 APIS for this study is based on the following considerations:

- It is the most recent set of data that contains information on working children.
- The incidence rates implied in 1998 are consistent with the trends observed using the longer time series of the Labor Force Survey.
- It contains information on number of hours worked and wages (i.e., if the child worker is paid a wage or not).
- It contains information on schooling.
- It contains better estimates of household income and expenditure than the 1995 NSWC where the household is asked only one question on income and the response given is in terms of an income range.

Data from Philippine IPEC Partners

A limited survey of IPEC partners in the Philippines was undertaken primarily to determine the intervention mix. Ideally, as the guidelines for the country studies suggest, the mix should include only the cost-effective strategies. Unfortunately,

there was limited time to conduct intensive cost-effectiveness studies of the IPEC programs that have been implemented in the Philippines since 1994. Quantitative information (especially on program output and outcomes as well as financial costs) was also very scarce. At best, this study had to rely on a few evaluation studies and consensus formulations.

B. Operational Definition of Child Labor

This study adopts the official, RA 7658 definition of child labor. Note that the definition implies three parameters to consider in determining if a child worker is a child laborer. These are hazards faced, age, and parental supervision.

- All working children engaged in occupations considered to be "worst form" are considered child laborers.
- For those in occupations considered not to be "worst form," the next consideration is age.
- If the child is at least 15 years old, then he or she is considered a child worker. If the child is below 15 years old and does not work under the supervision of the parents, then the child worker is a child laborer.

The matrix below illustrates how the definition has been operationalized to distinguish between child laborer and child worker.

Child laborer		Child	worker
Worst form	No		
Regardless of	5 – 14		15 – 18
Age	No parental With parental		
	supervision supervision		

Taking off from the operational definition, the parameters are then specified in detail using official definitions by the Department of Labor and Employment (DOLE) and the NSO.

Worst forms of Child Labor

The definition of the "worst forms of child labor" is based on Article 3 of ILO Convention 182 as comprising:

(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 performances;
- (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.

The enumeration of the specific occupations falling under the "worst forms" is left to the ratifying country. In the case of the Philippines, these occupation types are the ones mentioned in DOLE Order No. 4, Series of 1999.

- 1. Work and activities in the actual regular operation of the following mining, quarrying, logging, construction, manufacture or handling of pyrotechnics.
- 2. Work that may prejudice morals.
- 3. Work involving exposures to various substances or composites, which are toxic, corrosive, poisonous, noxious, etc..
- 4. Work on roofs or exposed heights.
- 5. Work involving operation of transport vehicles or other power- or explosiondriven machinery and gadgets.
- 6. Work involving exposure to ionizing radiation.
- 7. Work involving physical strain and transport of heavy loads.
- 8. Work involving exposure to extreme levels of noise, vibration, heat, cold and high or low pressure.
- 9. Work involving exposure to harmful biological agents (such as bacteria, viruses, and parasites).
- 10. All work and activities which are done from evening to early morning, or that require a person to be on call anytime to perform services, or that require one to be away from loved ones for long periods of time.
- 11. Work or situations that have been found to be highly stressful psychologically and where persons are prone to physical, sexual or verbal abuse.

Parental supervision

In the study, the child worker is considered to be working outside parental supervision if any of four conditions holds: (1) the child works for a private household other than his own, (2) the child works for a private establishment, (3) the child

works for the government or a government corporation, or (4) the child is selfemployed without any employee.

Incidence of Child Labor

The 1998 APIS gathered data on economic activities during the second and third quarters, for both primary and other occupation. In this study, the child is considered a child laborer if he or she has ever worked in situations described above at any time during the second and third quarters and in either his or her primary or other occupation.

C. Estimating the Earnings of the Child Laborer

The APIS contains information on earnings from economic activities during the second and third quarters for primary and other occupations. For the jobs held during the second quarter, the information is only on total earnings for the period while for jobs held during the third quarter, it is possible to estimate the hourly rate.

For child laborers engaged in unpaid work during the second quarter, the earnings are imputed either as the average wage of paid child laborers in the same occupation or as a proportion of the average wage of paid adult laborers in the same occupation, if there are no paid child laborers engaged in that occupation. The same procedure is followed for child laborers engaged in unpaid during the third quarter, but this time using hourly rates as approximation.

If one considers only the hourly rates of paid child laborers, then, on average, the child receives about 50% the hourly wage of his adult counterpart. In the estimation for this study, low, medium, and high estimates are imputed. The low estimate corresponds to the case where the imputed wage of the unpaid child laborer is one-third that of the adult counterpart, the medium corresponds to a 50% proportion, and the high corresponds to a proportion of two-thirds. The implied wage differential between the unpaid child laborer and the adult worker counterpart is assumed to reflect differences in productivity.

Only about 30% of child laborers get paid for their primary occupation and about 40% get paid for their other occupation. Among the unpaid child laborers, at least 90% have their wages imputed using as basis the wages of paid child laborers engaged in the same occupation, except for unpaid child laborers engaged in other occupations during the second quarter, where the proportion goes down to 81%.

D. Measurement of Poverty

There are some disagreements regarding the official methodology of defining and measuring poverty incidence in the Philippines (see, for instance, Balisacan, et al., 1999 for a discussion of these debates). To date, there have been several initiatives to improve the poverty measurement and monitoring system. This study

nevertheless utilizes the family expenditure-based approach recommended in the Balisacan et al. (1999) study, as there is growing consensus among poverty studies that expenditure is a better measure of welfare than income. The same poverty lines are used but they are inflated to 1998 prices using the regional Consumer Price Index (CPI) data series. The derived 1998 poverty lines are then compared against the per capita expenditure of the family.

Another variable (*poor 2*) is also computed in this study. This variable takes on the value unity if the family falls below the poverty line once the earnings (actual or imputed) of the child are taken out of the pool of resources; it takes on the value of zero, otherwise. The underlying assumption is that the imputed earnings of the unpaid family child worker measure the child's productivity in nonmarket work and correspond to what the family would pay if the same services were sourced out. The APIS, after all, imputes the value of home-based production such as the output of backyard gardens into family income.

III. SOME STATISTICS ON CHILD LABOR IN THE PHILIPPINES

Child *laborers* in 1998 numbered 1.5 million, roughly 7% of all children surveyed (as distinct from the two million child *workers* mentioned earlier). If the number of child domestic workers is imputed using figures from the 1995 NSWC, then the proportion goes up to 8%. More than 90% of child laborers are engaged in "worst forms" of child labor.

Location of Residence

Child labor is largely a rural phenomenon. About 85% of child laborers are in the rural areas (Table 1).

Table 1. Distribution of Child Laborers (CL) by Urbanity of Residence

Urbanity	All CL		CL not in w	orst forms
	Count	%	Count	%
Urban	228,634	15.4	195,149	14.0
Rural	1,258,162	84.6	1,193,580	86.0
Total	1,486,796	100.00	1,388,729	100.00

Table 2 shows the regional distribution of child laborers. The figures on the right are the statistics on child laborers in worst forms.

Table 2. Distribution of Child Laborers by Region

Region	All (CL	CL not in we	orst forms
	Count	%	Count	%
Ilocos Region	91,429	6.3	88,406	6.4
Cagayan Valley	104,269	7.2	102,685	7.4
Central Luzon	63,150	4.3	58,982	4.3
Southern Tagalog	100,353	6.7	93,192	6.7
Bicol Region	117,423	7.8	105,403	7.6
Western Visayas	149,417	9.8	132,735	9.6
Central Visayas	105,537	7.0	96,545	7.0
Eastern Visayas	81,688	5.4	72,243	5.2
Western Mindanao	107,304	7.4	105,058	7.6
Northern Mindanao	183,924	12.7	180,521	13.0
Southern Mindanao	135,619	9.2	127,902	9.2
Central Mindanao	90,639	6.2	87,612	6.3
National Capital				
Region	22,629	1.2	12,747	0.9
Cordillera				
Autonomous Region	34,857	2.4	34,473	2.5
Autonomous Region				
of Muslim Mindanao	39,725	2.6	33,992	2.5
CARAGA	58,833	4.0	56,233	4.1
TOTAL	1,486,796	100.0	1,388,729	100.0

The most number of child laborers is found in Northern Mindanao. In fact, this region also demonstrates the highest incidence where about 22% of children are child laborers.

The number of child laborers in Northern Mindanao taken together with those in Western Visayas and Southern Mindanao regions comes close to one-third of all child laborers in the country.

Demographic Characteristics

For every female child laborer there are three male child laborers. Moreover, at least 75% of child laborers are from the ages 13 to 17.

Table 3. Distribution of Child Laborers by Gender

Gender	All C	All CL		st forms
	Count	%	Count	%
Male	1,104,383	74.3	1,040,158	74.9
Female	382,413	25.7	348,571	25.1
Total	1,486,796	100.0	1,388,729	100.0

Table 4. Distribution of Child Laborers by Age

Age	All CL		CL in wo	rst forms
_	Count	%	Count	%
5	6,098	0.4	5,786	0.4
6	12,270	0.8	10,314	0.8
7	22,518	1.5	20,395	1.5
8	30,249	2.0	28,233	2.0
9	47,710	3.2	46,039	3.3
10	58,567	3.9	51,707	3.7
11	81,057	5.5	71,944	5.2
12	104,071	7.0	91,257	6.6
13	150,978	10.2	129,899	9.4
14	196,269	13.2	156,146	11.2
15	231,825	15.6	231,825	16.7
16	260,008	17.5	260,008	18.7
17	285,176	19.2	285,176	20.5
Total	1,486,796	100.0	1,388,729	100.0

Occupational Classification

Table 5 gives the distribution of child laborers according occupation engaged in during the second and third quarters, for both primary and other jobs.

Table 5. Distribution of Child Laborers According to Type of Occupation

Occupation	Primary Job (2Q)	Other Job (2Q)	Primary Job (3Q)	Other Job (3Q)
Professional, Technical &				
Related Workers	828	-	724	234
Administrative, Executive &				
Managerial Workers	-	-	-	-
Clerical & Related Workers	941	594	1,734	594
Sales Workers	19,573	794	19,847	5,043
Service Workers	26,288	268	32,825	525
Agricultural, Animal Husbandry &				
Forestry Workers, Fishermen,				
Hunters	1,239,814	168,536	1,241,628	174,054
Production and Related Workers,				
Transport, Equipment Operators,				
Laborers	103,251	8,735	107,911	6,809
Total	1,390,695	178,927	1,404,669	187,259

Almost all child laborers (about 90%, as many as 1.24 million) work primarily as agricultural and related workers, whether during the second or third quarters. A small percentage (7% or between 103,000 and 108,000 children) work as production related workers.

Even among child laborers working two jobs, majority (at least 93%) still works as agricultural and related workers. Production and related workers make up the second highest proportion (a far second at 4%). During the third quarter, however, there is a notable increase of child laborers engaged as sales workers for their other job – 800 during the second quarter to over 5,000 during the third quarter.

Approximately 13% of child laborers hold two jobs.

Table 6. Distribution of Child Laborers According to Industry

Industry	Primary Job (2Q)	Other Job (2Q)	Primary Job (3Q)	Other Job (3Q)
	(24)	(24)	(34)	(34)
Activities not adequately defined	253	-	253	-
Agriculture, Fishery, Forestry	1,235,880	167,690	1,238,489	173,643
Mining and Quarrying	3,680	367	3,680	532
Manufacturing	32,887	2,830	32,698	4,502
Electricity, Gas and Water	252		252	
Construction	21,066	1,751	23,749	348
Wholesale and Retail Trade	25,912	864	27,209	3,713
Transpiration, Storage, Communication	38,890	2,446	40,420	2,540
Financing, Insurance, Real				
Estate, Business Services	389		389	
Community, Social and Personal				
Services	31,486	2,979	37,530	2,350
Total	1,390,695	178,927	1,404,669	187,628

As expected, the majority of child laborers are employed in the agricultural sector (about 90%). The rest are spread across the manufacturing, construction, wholesale and retail trade and community, social and personal services.

A bit disturbing is the number of child laborers (3,680) engaged in the hazardous sector of mining and quarrying. Moreover, it seems as though they are employed on a full-time basis since more than 90% of them are unable to attend school.

Participation in School

More than half (53%) of child laborers do not attend school. The proportion is invariant even if those aged 5 and 6 are excluded.

School participation among child laborers aged 5 to 12 is about 80%. By age 13, school participation rate is only 60%. This rapidly drops to only 22% among child laborers aged 17.

Table 7. Distribution of Child Laborers by School Participation

	All CL Count %		CL not in w	orst forms
			Count	%
Attends school	691,919	46.7	648,083	46.9
Does not attend school	788,779	53.3	734,860	53.1
Total	1,480,698	100.0	1,382,943	100.0

Table 8. Child Laborers in Worst Forms by School Participation

Age	Attends S	School	Does not scho		Total
	Count	%	Count	%	Count
6	3,432	33.3	6,882	66.7	10,314
7	16,404	80.4	3,991	19.6	20,395
8	23,439	83.0	4,794	17.0	28,233
9	41,126	89.3	4,913	10.7	46,039
10	47,607	92.1	4,100	7.9	51,707
11	54,742	76.1	17,202	23.9	71,944
12	73,127	80.1	18,130	19.9	91,257
13	77,178	59.4	52,721	40.6	129,899
14	79,062	50.6	77,084	49.4	156,146
15	92,327	39.8	139,498	60.2	231,825
16	75,901	29.2	184,107	70.8	260,008
17	63,738	22.4	221,438	77.7	285,176
Total	648,083	46.9	734,860	53.1	1382,943

In fact, even among those who are able to attend school, about 70% are overage for the grade level they are in. Among the eight year-olds, 25% of child laborers in school are overage, which means that their entrance to first grade has been delayed. Among the child laborers aged 10-12 who are in school, 50% are overage. The situation is worse among the 17-year olds who are in school where 75% of them are overage.

Profile of the Household Head

The profiles of heads of families with child laborers according to age and gender do not seem differ from national trends. They are mostly in the productive age of 25 to 64 and are males.

Table 9. Distribution of Families with Child Laborers by Age of Head

Age group	Count	%
less than 20	3,459	0.52
20 - 24	2,013	0.30
25 - 44	266,022	39.87
45 - 54	233,428	34.98
55 - 64	109,716	16.44
65 and above	52,612	7.88
Total	667,250	100.00

Table 10. Distribution of Families with Child Laborers by Gender of Head

Gender	Count	%
Male Female	592,360 74,890	88.78 11.22
Total	667,250	100.00

Only about 10% of these heads of families have at least finished high school. In fact, more than 60% only finished at most elementary level of schooling.

Table 11. Distribution of Families with Child Laborers by Education of Head

Highest grade	Count	%
No grade	5,272	0.80
Less than elementary	260,927	39.65
Elementary graduate	155,832	23.68
Less than high school	170,410	25.89
High school graduate	58,227	8.85
Post secondary	2,226	0.34
Less than college	5,194	0.79
Total	658,088	100.00

Fifty percent of heads of families with child laborers hold permanent jobs. About 40% hold short-term, seasonal or casual jobs. The rest (11%) does odd jobs.

Table 12. Distribution of Families with Child Laborers by Job Status of Head

Job Status	Count	%
With permanent job	320,660	50.40
Short-term/seasonal/casual	246,385	38.73
Odd job workers	69,125	10.87
Total	636,170	100.00

Profile of Families

About 75% of these families with child laborers have five members or more. Poverty incidence among these families is 58%, much higher than the national poverty incidence recorded in 1997 at 32% (using official poverty lines). If the incidence is computed based on per capita expenditures and the number of individuals who are poor, then the corresponding statistics are 63% for those coming from families with child laborers as against the national incidence of 29%. Thus, poverty incidence among families with child laborers is easily twice the national incidence rate. The poverty gap among families with child laborers averages 29% of the poverty line.

If the earnings of the child laborer are deducted from the family's pool of resources, poverty incidence jumps to about 75%. Meanwhile, the poverty gap widens to 52%. Even the families considered nonpoor greatly depend on child labor to meet their daily needs. The policy implication is that strategies to eliminate child labor have to include elements that would cushion the loss of income from child labor.

IV. ELIMINATING CHILD LABOR – THE INTERVENTION MIX

A. A Conceptual Framework

Several underlying factors bear on the supply of and demand for child labor. On the supply side are factors that influence the decision of households to allow and even induce the child members to work. Foremost among these factors has to do with the capabilities existing within the household to secure a comfortable quality of life—ownership of assets (physical and/or financial) and labor. The quality of labor supply is important and this is manifested in employment status and the wage rate.

Macroeconomic conditions largely determine the market for labor. Increased demand for goods and services, if it cannot be met by the existing stock, will imply increased demand for labor. Certain employment and income measures, such as legislated wages, also affect labor market conditions.

Social values also influence the decision to allow children to work. These values can occupy the whole spectrum from the "negative" to the "positive." There is the value that defines a good child as one who helps his parents earn a living for the family. Sometimes, parents are told even to teach their child to work so that they would learn to value work.

The alternative to child labor is full time schooling. For some families, the choice does not come easily, especially if the cost of schooling is simply beyond their means. Sometimes, however, because schooling is valued highly, children are sent to school but at the cost of the family not being able to meet other basic needs.

On the demand side are factors that influence the decision of enterprises to hire child laborers. Some of the reasons advanced cite the physical characteristics of children. For instance, in the pyrotechnics industry, there are processes that require small, nimble fingers, such as rolling small pieces of paper and transferring into the final product small amounts of powder. In small-scale mining, there is also a preference for children to discharge explosives because they are naturally more agile than adults. Their small size also enables them to penetrate even the small openings or shafts of abandoned mines. In deep-sea fishing, children are preferred because they are light and take up only a small space in the fishing vessel, thus freeing up more space to load the fish catch. Other reasons have to do with the fact that children complain less and are more docile than adults. These industries are generally small-scale and informal. They are also illegal. That they are able to operate nonetheless simply implies that there is poor enforcement of the laws concerning child labor.

ILO (1995) reports a study undertaken on the use of child labor in the handwoven carpet and glass bracelet industries. In the carpet industry, the labor cost saving realized with the employment of children is captured by the loom owners who supervise the weaving. These loom owners are also poor small contractors who work for a very slim profit margin. On the other hand, the study estimates that a very small levy on the consumer purchase price would be sufficient to subsidize the cost of using exclusively adult labor if transfer payments could be targeted. In the case of the glass bracelet industries, children are hired on a piece-rate basis with no discernible cost savings. Such is also the practice in the garment factory in the Philippines (Albao and Tinio, 1998). Thus, it may even be the case that some employers feel that they "render a useful service by providing jobs to children from poor families."

There are a number of policy instruments that address each of these factors, either directly or indirectly. Advocacy and awareness efforts address the "wrong"

social values about child labor. Educational measures serve to reduce the cost of schooling and therefore make it a more viable alternative to full-time child labor. There is also a need to address poverty if one is to be effective in eliminating child labor. This takes the form of employment and income measures. Meanwhile, a more aggressive stance in enforcing anti-child labor laws is necessary to address the factors on the demand side. Advocacy and organizing of workers can also go a long way in raising the awareness of employers and adult employees about the rights of the child. It should be noted, though, that the biggest employers of child laborers are actually the parents themselves. In the Philippines, the proportion of child laborers working for their own family farm or business enterprise is 67%. Meanwhile, certain technology measures may also discourage the hiring of child laborers, e.g., if the production process requires big and delicate machines that cannot be operated by children.

B. Some Lessons Learned

The Philippines has been implementing a number of programs designed to address the child labor issue. These early efforts were supported by the UNICEF Country Program for Children (CPC), which is now on its fifth phase (CPC V). In 1994, ILO-IPEC forged a partnership among selected NGO partners and national government agencies that continues up to now. The following summarizes some of the insights and experiences of selected IPEC partners.

Kamalayan Development Foundation (KDF)

The KDF is an NGO established in the early 1990s. It initially catered only to child workers. Now, the scope expanded to include all children. KDF's involvement in child labor issues began with a study commissioned by UNICEF in 1992. The study was on child workers in factories—how many they were and what their working conditions were. KDF people stayed in Las Piñas for a year but did not find any. Reports, however, reached them that there were child laborers in the fishing ports of Navotas and Malabon. They then conducted orientation and organizing work. In the course of their work in Navotas, they received reports of child laborers working in a sardine factory. They did surveillance work and subsequently undertook the first major rescue mission.

The rescued children were provided temporary shelter by the Department of Social Welfare and Development (DSWD) and later repatriated to their parents. Cases were filed in court but, unfortunately, they were later dismissed for lack of witnesses.

Deciding that prevention is better than rescue, KDF then implemented a surveillance strategy in bus terminals and ports in the "sending" provinces. If a bus or ship carried an unusually large number of children, this was reported to KDF Manila and a rescue team was mobilized to intercept the transport at its port of destination. Later, KDF observed that children were no longer being transported by

public vehicles. Private vans were being used instead, making them even more difficult to track and intercept.

KDF then decided to go directly to the places of origin. There they would do advocacy and organizing work. At one time, they focused on children working in sugar plantations. In Ormoc, they formed some 30 organizations of child laborers. These children were informed of their rights as children. Through the efforts of KDF, the plight of child laborers in sugar plantations was exposed in the media. For instance, children were only paid P48 to P50 per day (about one-fourth to one-third of the legislated minimum wage) and were not given any social amelioration benefits.

One of KDF's projects with ILO-IPEC was in partnership with Educational Research and Development Associates (ERDA) and World Vision Foundation, Inc. The project provided educational assistance to selected child laborers. However, the assistance was not sustained; it ended with project termination.

At present, KDF is working in the provinces of Bulacan and Negros to advocate for the creation of the Barangay (Village) Council for the Protection of Children (BCPC). KDF is also helping to mobilize and train BCPC and communities in identifying cases of child trafficking and bonded child labor.

In implementing a nationwide strategy to eliminate child labor, KDF stresses the importance of advocacy and community organizing. It provides a basis for action, so to speak. For instance, the ratification of ILO Convention 182 and later by the Philippine government was made possible through popular action. Advocacy brings about public awareness of the issue and helps change attitude and behavior.

The approach must also be comprehensive. So far, it has been observed that nothing much has been done on the employers of child laborers. For such action, tremendous political will is needed to implement existing laws against child labor.

Philippine Rural Reconstruction Movement (PRRM)

PRRM is a non-government organization established in 1952. Its vision is to "help build a society of empowered communities with full citizen entitlements, where women and men have control over their lives and share equally in the benefits of development taking place within the carrying capacity of the environment." PRRM implements projects nationwide, ranging from environment protection, microfinance, health, institutional development, and prevention of child labor. Its project on child labor is focused on small-scale mining communities in Camarines Norte.

Much of PRRM's work has to do with advocacy, networking, and community organizing. They sponsor and produce a radio program, called "Tanggol Bata" (Defend the Child) which airs the various concerns of children, particularly child laborers.

Phase 1 of their ILO-IPEC project covered four barrios in Camarines Norte. It was mostly exploratory research and lasted six months. The project cost was P600 thousand.

Phase II began in August 1998 and ended in 2000. The project cost was P1.6 million. Phase II was implemented in partnership with ERDA, which provided educational assistance. Unfortunately, ERDA's assistance was co-terminus with the project. PRRM also began networking with a member of the Philippine Senate for educational assistance to an additional number of child laborers. Under the senator's program, assistance is provided until the child finishes secondary schooling. At present, PRRM is work for a total of 30 child laborers to be included as recipients of the senator's scholarship fund.

Phase III is being proposed to run for 17 months. It costs P 3.8 million and targets some 600 child laborers. It will primarily entail advocacy work. The strategy, however, is being expanded to include health, education and livelihood components.

PRRM suggests that the roots of the child labor problem be addressed in order to eliminate it effectively. However, a necessary prerequisite is a masterlisting of all child laborers in the country. There is a suggestion to enlist the assistance of the BCPCs in locating these child laborers. Even more important in implementing the strategy is the institutional mechanism. In the past, there has been some confusion as to which agency has responsibility over the child labor problem—DOLE or DSWD. Unfortunately, DOLE does not have authority over the informal sector. For instance, it cannot conduct monitoring and inspection of informal "places" of work.

Educational Research and Development Assistance, Inc. (ERDA)

ERDA is a child-focused non-governmental organization. Its main thrust is to bring back the dropouts to school. It was founded in 1974.

ERDA implements multi-stage targeting. It first examines the records of the central office of the Department of Education, Culture, and Sports (DECS) to determine the region with the highest dropout rates. Having identified the priority regions, it then examines the records of the DECS regional offices to determine the school with the highest dropout rates. A social worker then visits the community where the target school is located and subsequently identifies the dropouts and their families. These cases are evaluated to determine if they qualify for assistance. To be a beneficiary, the child must be a dropout or a potential dropout. He must be 6 to 14 years old and come from a family whose monthly per capita income is at most P800 (\$16 at the current exchange rate of P50/\$1).

Parents of ERDA scholars are also organized. Assistance is given for as long as the child deserves it. Usually, the community decides on the continuation of the assistance.

In 1998, ERDA became an IPEC partner. A project was undertaken in collaboration with the other IPEC partners (cited earlier). ERDA worked with 18 organizations nationwide and assisted 1,200 working children.

ERDA provides assistance amounting to P1,500 per school year per child in the primary level and P2,500 per school year per child in the secondary level. The assistance covers tuition and miscellaneous fees, school supplies and uniforms. Assistance to cover school projects is decided on a case-to-case basis. As part of the IPEC project, each child is provided health assistance amounting to P300 per school year. There are also capability-building activities costing P300 per child. A literacy program for the parents of the child-recipients is also implemented at a cost of P60,000 per community.

Volunteer teachers are mobilized to conduct tutorials. Sometimes, the dropouts, particularly the older ones, are made to undergo "remedial" classes and equivalency examinations so that they could skip the lower grade levels and not be too overage when they finally go back to formal school.

In some areas, microfinance projects have been implemented. ERDA's assistance came in the form of organizing and capability building (such as recording and management). These microfinance ventures extend loans from as little as P1,000 to as high as P50,000 per borrower or group of borrowers.

ERDA supports advocacy as a strategy to address the child labor problem. However, this has to be implemented with concrete interventions such as educational assistance in order to generate cooperation especially from the parents. There is also a need to secure the support of local government units, specially the local chief executives. In most cases, though, these local chief executives are major employers of child laborers. This is why advocacy has to be done at higher levels of government as well.

Visayan Forum (VF)

The Visayan Forum is a consortium of non-government organizations with Visayan roots (the Visayas are the group of islands in the middle of the Philippine archipelago). VF was formed in 1990, largely in response to the need to undertake rescue and rehabilitation operations brought about by the flooding tragedy in Ormoc City. It initially implemented livelihood programs for calamity victims. The scope was later expanded to include the urban poor who, as it turns out, are made up mostly of Visayan migrants.

In 1994, VF started implementing a program for children, providing them with medical and dental services. VF is among the pioneer partners of IPEC. Its focus is on child domestic workers. At first, its strategy was to put up a center in Cubao (a district in Metro Manila). Unfortunately, there were only a few who visited the center.

Later, it embarked on outreach activities in Luneta Park and Quezon City Memorial Center (major public parks in Metro Manila). It would distribute flyers informing domestic workers of their rights and encouraging them to join SUMAPI (*Samahan at Ugnayan ng mga Manggagawang Pantahanan sa Pilipinas*, or Organization and Association of Domestic Workers of the Philippines, whose Filipino acronym means "join"). Through referrals, they were able to reach out to child domestic workers.

VF's strategy includes advocacy and organizing. It founded the SUMAPI, for instance. As part of its advocacy effort, it works with several private schools to encourage the latter to offer alternative education programs, such as night schools and Sunday schools, where the schedules fit those of the domestic workers. It also provides emergency educational assistance. This assistance is supposed to be in the form of soft loans, but the repayment rate has so far been very low.

VF is instrumental in the drafting of the proposed Batas Kasambahay (a bill on the protection of domestic workers). The bill seeks to define the employer and employee relationship for domestic workers. While Congress has not yet passed the bill, a major progress is the popular use of the term *kasambahay* to refer to domestic workers instead of *katulong* (helper), *alila* (servant), or other similar derogatory names.

VF maintains a phone hotline, manned by two trained volunteers during the day and a licensed social worker at night. They receive 10 to 15 calls per day. The calls vary from mere social contact (*kumustahan*) to cries for help. If the latter, VF would immediately mobilize a "rescue" team. The rescued worker is then housed either at DSWD or at VF. It costs approximately P36 per day per person in meals alone. The intention is to provide temporary shelter for up to three days while arrangements for repatriation to the parents or home provinces are being made. More often, though, the stay is for five days up to three weeks.

Since it would be very costly to maintain an extensive hotline, VF simply teams up with *Bantay Bata 163* (Guard the Child hotline 163). Calls received by the latter involving child domestic workers are referred to VF.

VF is implementing another project sponsored by Caritas Switzerland. The project provides educational assistance to selected street children. The assistance amounts to P2,000 a year and is given in four tranches. Parents of street children are also given skills training in addition to requiring them to attend seminars on values formation. All scholars are required to report to the VF Center every Saturday. During this time, progress and problems in school are discussed. There are tutorial sessions. The social worker also conducts periodic home visits.

For VF, an issue compounding the problems of child domestic workers is their invisibility, particularly in official surveys. For instance, they are not included in the Family Income and Expenditure Survey or the Annual Poverty Indicator Survey as these surveys pertain only to the family. On the other hand, the Labor Force Survey

does not officially report statistics on children below 15 years of age (although, as mentioned earlier, information on labor force participation and employment is gathered for 10-14 year-olds).

A major component of the strategy to eliminate child labor is to "make the invisible visible", so to speak. There is also a need to firm up the institutional mechanisms that specifically deal with the problem of domestic workers. For instance, the assignment of responsibilities between DSWD and DOLE has to be clarified. There is also a need to enact laws to empower present institutions to deal with the problem of domestic workers.

World Vision Development Foundation, Inc. (WVDF)

WVDF is a 44 year-old non-government organization and is part of World Vision International. Prior to 2000, WVDF has not been systematically involved in child labor issues. However, it had always encountered problems of this sort while implementing area development programs. For instance, in Cavite, it had to include sessions orienting children and their parents on the rights of children.

In 2000, it implemented a project together with other NGOs that targets child laborers. The project was funded by USAID. WVDF implemented it in areas where it already has area development programs in place. These were in the provinces of Cavite, Palawan, Cebu, Negros Oriental, Leyte, and Southern Leyte.

These areas cater to different kinds of child laborers. In Palawan, the target group for WVDF is child laborers in deep-sea fishing. What usually happens is that the community first reports to WVDF or its partner NGOs or POs in the area any sighting of *muro-ami* operations (where the child dives deep into the sea). WVDF then mobilizes the *Sagip Batang Manggagawa* (Save the Child Worker) team together with DSWD. A rescue operation is undertaken. Rescued child workers are provided temporary shelter at either the local DSWD centers, the local churches or foster families in the community. Legal suits are filed with the help of the ELA Center (Environmental Legal Assistance). WVDF facilitates the filing of cases and monitors progress.

The main intervention of WVDF is in the provision of educational assistance, which amounts to P450 per child per month. The strategy, however, is to pool resources so that assistance is extended to the community and family as well. The child's tuition fee is covered and school supplies are given. WVDF also mobilizes a team of volunteer teachers to conduct tutorials and some to hold street classes.

Programs addressing the child labor problem have to recognize that strategies need to be sector-specific. For instance, in the case of children in *muroami*, the need for rescue and reintegration is immediate. For sugar plantation workers, the need is to provide alternative formats of education. Of course, there should be always be advocacy and organizing work, but the extent of these activities

depends on the level of awareness of the community and local government officials regarding the problem.

C. Elements of a Direct Action Program

The above success stories and lessons learned can be summarized into the following:

- Child laborers in different sectors have different needs that require different sets of interventions. In cases where the working conditions are really very harsh as in bonded labor, the response has to be rescue and rehabilitation. In other sectors, the main problem has to do with work schedules being incompatible with regular school hours. The strategy would therefore require special arrangements for schooling.
- The major push factor in child labor is poverty. Thus, the strategy should introduce other opportunities for livelihood.
- Advocacy and community organizing should always be included since these
 interventions address the non-economic reasons why children join the labor
 market prematurely. For instance, data show that about 30% of families
 where the child laborer comes from are not really poor even if the earnings of
 the child are deducted.
- Another offshoot of advocacy efforts is the mobilization of a large pool of volunteer advocates and workers for anti-child labor interventions.
- The local government and the community have to be involved in the program to ensure effectiveness and sustainability.
- Educational assistance has to include a tutorial component that can also double as a monitoring component. Dropouts can be given remedial classes so that they are better prepared for reintegration into formal schooling. In some cases, they can be asked to take qualifying examinations after attending remedial classes so that they can skip certain grade levels and not be too overage when they attend formal school.

This study builds on those experiences. Following is the outline of a sample program designed to: (a) reduce the incidence of the worst forms of child labor into half over a period of five years (Wave 1); (b) achieve a complete prevention of these worst forms in the next five years (Wave 2); (c) transfer children from work to education resulting in full primary school enrollment in years 11 to 15 (Wave 3); and (d) achieve universal participation of children in education up to lower secondary school, with no work that interferes with successful school performance at any level, as called for in ILO Convention 138 (Wave 4).

It should be kept in mind that the action program outlined below is merely indicative and illustrative; it is presented merely to arrive at a first-order, ballpark estimate of how much it would cost to launch an all-out program to eliminate the worst forms of child labor.

- 1. Program offices shall be set up nationwide, one per region and one per province and city. The capital cost of a program office may be placed at P500,000 each on the average, as it may be housed within an existing facility of the DSWD field office, or provincial or city LGU.
- 2. A project leader and two administrative support staff shall manage each of the 17 regional offices. The 78 provincial and some 15 major city offices shall have a staff complement of one community organizer (CO), two assistants and one administrative support staff. The project leader's compensation shall be P15,300 per month while each of the support staff shall get P9,500 per month. The community organizer shall receive P12,000 per month, the CO trainees P8,000 per month. Compensation shall be given for 12 months plus 13th month pay per year.
- 3. The national office shall be housed with the Bureau of Women and Young Workers of DOLE, as in the present setup. However, given the expected magnitude of the program, additional staff may have to be hired. There could be one national program director, a program manager, possibly three technical assistants—one for each of Luzon, Visayas, and Mindanao, and three administrative assistants. The detailed costing for the advocacy centers is given in Table 13.
- 4. All program and project staff shall undergo a capability building workshop (Table 14).
- 5. A masterlisting of child laborers shall be done nationwide. The estimated cost is P18,000 per barangay (village) for 40,000 barangays.
- 6. Rescue operations shall be undertaken to withdraw children from the worst forms of child labor. The proportion of child laborers that shall need rescuing is assumed to vary from a low of 25% to a high of 50%. The low estimate, incidentally, roughly corresponds to the proportion of child laborers working in private households and private establishments.
- 7. Rescued children shall be housed in offices of the local social worker. Since these efforts are within the purview of the social worker's job, then no additional compensation is necessary. There is a need, however, to provide for meals estimated to be P36 per person per day. It is assumed that they would be housed in the center for five days. They shall also be given medical assistance amounting to P300 per child. (These costs are based on the experience of IPEC partners mentioned earlier.)

Table 13. Base Program Cost, Advocacy Centers

	Table 13. Base Program Cost, Advocacy Centers ACTIVITY Unit cost Number of Total Base					
ACTIVITY	per year	units	Cost			
	per year	unts	0031			
Set up centers for CL advocates, one per re	gion and one	per province/c	ity.			
Total Cost			255,285,425			
National Center						
Personnel Services						
Project Director (P75,000/mo.)	975,000		975,000			
Project Manager (P50,000/mo.)	650,000		650,000			
Technical Assistants (3 at P25,000/mo.)	975,000		975,000			
Admin Support Staff (3 at P8000/mo.)	351,000		351,000			
Transportation Allowance (P 10,000/mo.	600,000		600,000			
per person)						
Supplies and Materials (15% of						
personnel)	198,900		198,900			
Overhead Costs (20% of personnel)	265,200		265,200			
Regional Centers			0.500.000			
Startup Cost	500,000	17	8,500,000			
Personnel Services						
Project Leader (P17,500/mo.)	227,500		3,867,500			
Admin Support Staff (2 at P8000/mo.)	234,000		3,978,000			
Transportation Allowance (P 1,500/mo.)	36,000		612,000			
Supplies and Materials (15% of						
personnel)	69,225		1,176,825			
Overhead Costs (20% of personnel)	92,300		1,569,100			
Building Maintenance (5% of construction	02,000		.,000,.00			
cost)	25,000		425,000			
			,			
Provincial/City Centers		178				
Startup Cost	500,000		89,000,000			
Personnel Services						
Community Organizer (P12,000/mo.)	156,000		27,768,000			
CO Trainees (2 at P10,000/mo.)	260,000		46,280,000			
Admin Support Staff (2 at P8,000/mo.)	117,000		20,826,000			
Transportation Allowance (P1,500/mo.)	54,000		9,612,000			
Supplies and Materials (15% of	34,000		3,012,000			
• •	70.050		1/ 221 100			
personnel)	79,950		14,231,100			
Overhead Costs (20% of personnel)	106,600		18,974,800			
Building Maintenance (5% of construction	25 000		4 450 000			
cost)	25,000		4,450,000			

Table 14. Program Cost, Training of CL Advocates

1 able 14. I Togram cost, Training of CL Advocates							
ACTIVITY	Unit cost	Number of	Total Base				
	per year	units	Cost				
Train CL Advocates	Train CL Advocates (Capability Building).						
Total Cost			2,635,600				
1 workshop per region		17					
3 days per workshop							
Participants: CL advocates in the							
Province, city, region		1,170					
Regional DSWD and DOLE personnel							
Transportation allowance	200	1,170	234,000				
Per diem	375	3,510	1,316,250				
Meals	150	3,510	526,500				
Venue	1,800	17	30,600				
Honoraria for resource speakers	15,500	17	263,500				
Supplies and materials	150	1,170	175,500				
Film reproduction	600	17	10,200				
Rental of equipment	550	51	28,050				
Streamers	3,000	17	51,000				
95 prov+83 cities+17 regions							
6 per region							
6 per province/city							

- 8. The rescued children shall then be repatriated to their parents or legal guardians. The repatriation cost is estimated at P1,000 per child.
- 9. Once repatriated, the rescued children shall undergo rehabilitation. This is largely in the form of tutorials or remedial classes. The objective is to be able to integrate them into the formal school system.
- 10. The cost of materials for the remedial class is assumed to be P12,000 per grade level. A full-time worker who is equivalent to a teacher will be hired to hold the classes per barangay. The tutorial sessions can be housed in the local barangay hall or other similar structure and can be attended by other child laborers as well.
- 11. Only children coming from really poor families shall be given educational assistance and family assistance. This means those families that depend on the child's income to meet their minimum basic needs.
- 12. The educational assistance is estimated to be P1,500 per person per year for the elementary level and P2,500 per person per year for the secondary

- level. The amount covers supplements for tuition and miscellaneous fees in public schools, school supplies, uniforms, and selected school projects.
- 13. To encourage school participation further, volunteer teachers and other civic groups can be mobilized to hold tutorial classes. They shall be provided meals and transportation allowance amounting to P1,200 per person per month. For the first two waves, it is estimated that two volunteer teachers per barangay are needed. The number can go down to one per barangay for the succeeding two waves.
- 14. Family assistance is pegged as a proportion of the mean value of the opportunity cost of child labor, which is estimated from the APIS survey data to be P9,866 per year. At 80% of opportunity cost, the assistance amounts to P7,893 per child laborer per year. At 60% of opportunity cost, the assistance comes up to P5,920.
- 15. Adequate supply of education facilities shall be ascertained by maintaining a teacher-pupil ratio of 1:40 even after the target children shall have been reintegrated into formal schooling. The classroom to pupil ratio is to be maintained at 1:40, the textbook to pupil ratio at 8:1.
- 16. Meanwhile, advocacy efforts shall continue. An awareness-building seminar shall have to be scheduled every three years, coinciding with the timing of local elections (Table 15).

Table 15. Program Cost: Community Level Advocacy Campaigns

ACTIVITY Unit cost Number of Total					
7.6	per year	units	Cost		
Conduct advocacy and com	munity orga	nizing activities	S.		
Total Cost			67,635,100		
Participants: CL advocates, other officials	in the munic	cipality/baranga	ıy		
Transportation allowance	100	133,036	13,303,600		
Per diem	50	133,036	6,651,800		
Meals	100	133,036	13,303,600		
Venue	1,800	1,526	2,746,800		
Honoraria for resource speakers	3,500	1,526	5,341,000		
Supplies and materials	150	133,036	19,955,400		
Film reproduction	600	1,526	915,600		
Rental of equipment	550	1,526	839,300		
Streamers (@P600 x 5 per municipality)	3,000	1,526	4,578,000		

17. Communities, child laborers and their families shall also be organized and there shall be an organizational meeting every quarter. The second and subsequent meetings shall also serve as monitoring activities (Table 16).

Table 16. Program Cost: Community Level Quarterly Meetings

ACTIVITY	Unit cost per year	Number of units	Total Base Cost	
Organize/Strengthen BCPCs, one/barangay/quarter, 25 participants/meeting				
Total Cost			1,045,050,000	
Meals	200	1,045,050	209,010,000	
Allowances	200	1,045,050	209,010,000	
Supplies and materials	600	1,045,050	627,030,000	

D. Estimating the Program's Cost

Population Projections

- The latest available population projection that runs up to year 2020 is based on the 1995 Census of Population; the 2000 Census figures are considered as still preliminary.
- The age group 5 to 17 years old is expected to grow by an average of 0.34% between 2000 and 2020. For the first five years, the growth rate is estimated to be 1.02%, gradually tapering off to 0.06% per annum from 2010 to 2015 and turning negative (an average of -0.20%) by 2020. This is consistent with the expectation of the aging of the population.

Incidence of Child Labor in Worst Forms without the Program¹

- Assuming the same incidence of child labor disaggregated by single age as observed in 1998, then the incidence of child labor shall increase by an average of 0.62% per annum over the next 20 years (beginning 2000). This almost twice the rate of population growth estimated for the age group because the incidence of child labor increases with age.
- It is estimated that there are about 1.44 million child laborers in worst forms as of 2002. By 2012, with everything remaining the same, the number is expected to increase to 1.58 million. Almost 60% of these child laborers are unpaid family workers in agriculture who are included in the count because of their exposure to chemicals (fertilizer and pesticides) in farming.

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¹ The following estimation does not include child domestic workers who work in houses other than their own or their relatives'. Several imputation procedures, however, are being tried and the results are expected to be finalized soon.

Incidence of Child Labor in Worst Forms with the Program

- At the beginning of Wave 1, about 700,000 child laborers in worst forms shall be given assistance. Each year thereafter, the program shall cover an additional 150,000 to 160,000 child laborers. This brings the total number of child laborers in worst forms provided assistance to about 1.35 million.
- During Wave 2, it is expected that intensive advocacy efforts and the success stories of Wave 1 shall have made a positive impact such that the incidence of child laborers in worst forms is reduced by half. The remainder shall be the beneficiaries for the second wave. Each year, the number of new program beneficiaries is estimated to be around 160,000.
- The total number of child laborers in worst forms provided assistance is 2.16 million over a 10-year period.

Incidence of Child Labor not in Worst Forms, Without the Program

 Without the program, the child laborers not in worst forms are estimated to number 112,158 in 2002 and increasing to 119,062 in 2022.

Incidence of Child Labor not in Worst Forms, With the Program

- With the program, the goal is for the complete withdrawal of children from work situations that do not allow them to go to school, at least with ages up to lower secondary level.
- After Wave 1, it is assumed that one-third of elementary school-age child laborers are enrolled. They include the child laborers in worst forms after they have been rescued and provided remedial classes, estimated to last one year.
- Assistance in the form of scholarship and transfers shall be provided only to those families that have become poor as a result of withdrawal from child labor. The proportion of children engaged in the worst forms of child labor is reduced by half. The assumed proportion is 76% for families of child laborers in worst forms and 73% for families of child laborers not in worst forms.
- The number of families to be given assistance is estimated to be 10,000 during the first year and increasing to 114,000 on year 5.
- After Wave 1, it is assumed that those provided assistance are completely
 withdrawn from child labor. Assistance shall continue until they no longer
 qualify because of age. Also, the effects of advocacy work and success
 stories of the first wave are expected to reduce the incidence of child laborers
 not in worst forms.

- For Wave 2, an additional one-third of elementary school age and one-third of lower secondary school-age child laborers are enrolled. The numbers to be given assistance for year 6 are 63,000 in the elementary level and 35,000 in the lower secondary level. These numbers are expected to rise to 146,000 and 127,000 in the elementary and lower secondary levels, respectively, at the end of wave 2.
- At the beginning of Wave 3, the number of child laborers given educational assistance drops to 51,000 for those in the elementary level and 69,000 for those in the lower secondary level. At the beginning of Wave 4, the expected number of beneficiaries is 8,500 and 27,500 in the elementary and lower secondary levels, respectively. However, towards the latter years, the number of beneficiaries in the lower secondary levels is expected to increase to around 60,000 due to the aging of the cohort of beneficiaries coming from the previous waves.
- The total number of child laborers provided educational assistance for at least one year during the entire program life is 501,000 broken down into 274,000 in the elementary level and 227,000 in the lower secondary level.

Total Program Cost

- The program cost is estimated assuming three scenarios. The low-cost scenario is one where only 25% of child laborers in worst forms require rescue and rehabilitation and the assistance given to the "selected" family of the child is equal to 60% of the average earnings of child laborers. The medium-cost scenario assumes that 50% of child laborers in worst forms would require rescue and rehabilitation operations. Assistance given to the selected families is 80% of the average earnings of child laborers. The high-cost scenario, meanwhile, assumes that 75% of child laborers in worst forms require rescue and rehabilitation operations. Assistance is imputed at 100% the average earnings of child laborers.
- Under the *low-cost scenario*, and over a 20-year period, the program is estimated to cost P157.7 billion pesos expressed in 2002 prices and still undiscounted. The amount is further broken down into P1.21 billion in capital cost and P153.5 billion in recurrent cost.
- At a 6% social discount rate, the total program cost is estimated to be P108.5 billion. At a 4% social discount rate, the cost rises to P120.8 billion pesos. The cost goes up further to P135.9 billion at a 2% social discount rate.
- Under the *medium-cost scenario*, the undiscounted program cost is P161 billion. Discounted at 6%, the cost amounts to P113 billion, going up to P141 billion when the 2% social discount rate is used.

- Under the *high-cost scenario*, the undiscounted program cost is P167 billion pesos. Using different discount rates, the cost is valued at P117 billion at 6%, P131 billion at 4%, and P147 billion at 2%.
- It may be observed that the differences among the low-, medium-, and high-cost scenarios are not very wide.

The summary of Total Program Cost for years 1, 6, 11, and 16 (the benchmark years for the start of each wave) is given in Table 17. It should be noted that the annual flow of program cost is not constant, even within a wave. Figure 1 gives the chart depicting the flow over 20 years.

Table 17. Summary of Total Program Cost, Selected Years

Table 17. Sammary of Total Trogram Sost, Science Tears							
ACTIVITY	Year 1	Year 6	Year 11	Year 16			
Set up centers for CL							
advocates.	255,285,425	157,785,425	157,785,425	157,785,425			
Train CL advocates.	2,635,600	2,635,600	2,635,600	2,635,600			
Conduct master listing of CL							
per barangay.	752,436,000	752,436,000	752,436,000	752,436,000			
Undertake rescue of CL in							
worst forms.	628,507,592	124,705,493					
Conduct advocacy and CO							
activities.	67,635,100	67,635,100					
Organize/Strengthen							
Barangay assocs.	1,045,050,000	1,045,050,000	1,045,050,000	1,045,050,000			
Organize team of volunteer							
Teachers for tutorials.	1,003,248,000	1,003,248,000	501,624,000	501,624,000			
Hold remedial classes for							
rescued CL in worst forms.	9,641,464,092	9,641,464,092					
Provide direct assistance to							
CL in need.	16,075,934	187,272,916	252,678,014	81,957,593			
Provide education assistance							
to CL families in need.	63,442,413	599,621,607	724,766,525	215,074,094			
Ensure adequate supply of							
Educational materials.	5,307,610	14,457,818,212	-	17,809,802			
TOTAL PROGRAM COST	13,481,087,766	28,039,672,445	3,436,975,564	2,774,372,514			

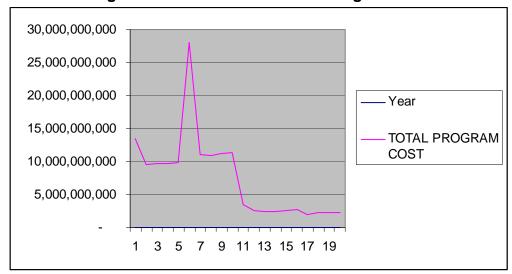


Figure 1. Annual Flow of Total Program Cost

V. BENEFITS FROM SCHOOLING

A. The Value of Education and Learning

The value placed on education by most societies transcends monetary considerations. Learning is an end in itself, inasmuch as it is in the very nature of man to comprehend the world about him. Education is also viewed by many as a means towards the achievement of other ends. Its role in preparing people for the world of work has been the focus of many studies over the past few decades. Education, especially basic, is both consumption and human capital formation.

Even when measured crudely in years of formal schooling completed, education correlates highly with incomes. The strong relationship remains with more direct measures of productivity. It has been observed, for example, that even across different levels of development, education contributes significantly to increases in farm output for the rural populations of many countries. The more educated farmer is more efficient not only in the choice of inputs but also in the use of given amounts of the same inputs.

Education's contribution to productivity outside the marketplace (particularly at home), while less heavily documented by empirical studies, is certainly at least equally important. This increased efficiency in "household production" brought about by education is particularly pronounced in childcare, as more educated parents are observed to raise healthier and better-educated children. The effects of education on fertility, infant and child mortality, and nutrition are by now well recognized. Indirectly, the schooling of children also frees the parents' time for a wider range of market and

non-market activities, including time devoted to leisure and other forms of self-enrichment.

In addition, it is widely accepted, though not as "scientifically" documented, that the benefits of education are not confined to its direct recipients and their immediate families, but may extend as well to the community and to society-at-large. With the gaining of independence by many countries in the postwar period, emerging nation-states looked to education as a means towards achieving political stability and national solidarity. Such "externalities," while often left unmeasured in the cost-benefit calculus, may actually be a major underlying reason behind the direct governmental provision of educational services found in practically all countries around the world.

In most societies, formal schooling constitutes the main vehicle through which minimum learning needs such as literacy, numeracy, and life skills are imparted. The primary level in particular serves as the venue for such instruction, although primary schooling may mean different things to different countries. Among those in the Asia-Pacific region, it ranges from five to seven years; age of entry also varies from five to seven years. In the Philippines, public schools have only up to the sixth grade, while entry has been advanced in the mid-1990s to age six from the previous age seven. Secondary schooling, meanwhile, takes four years to complete.

The 1987 Philippine Constitution considers both the primary and secondary levels as basic education, which is a responsibility of the State. The Constitution also mandates that education should get the biggest share in the annual government budget. Nevertheless, while public schools account from some 90% of primary enrollments, only 60% of secondary students are in public institutions.

For its level of development (measured for example by per capita GDP), the Philippines is an outlier, with its educational performance exceeding its economic performance. The participation rate at the primary level is nearly universal. Girls have the same access to basic education as boys; as a matter of fact, girls have been outstripping boys in enrollment and achievement tests at all levels of schooling.

Nevertheless, deficiencies remain. The inequitable pattern of performance across regions with respect to literacy and completion of primary schooling is so obvious from the statistics that identifying the critical areas, at least at the regional level, should not be a problem at all. Reaching out to the marginalized segments deprived of minimum learning needs can of course be relatively costly, and it boils down to a test of the strength of government's commitment to basic education for all.

The statistics on transition rates from grade to grade suggest that the first year of schooling is the most crucial year for the child's continuation to higher levels. The transition rate from grade one to grade two has been moving around an average of 85 percent over the past two decades. But once the child gets to second grade, the continuation rate increases from then on to about 95 percent per grade level.

Important differences in quality of schooling are also observed across regions, as measured by average achievement scores. These regional averages do not even reveal the wide disparities among individual student scores and among average scores for educational institutions within each region.

With the significant role that the government is assuming in the provision of basic and tertiary education, the main rationale seems to be the perception that education is a worthwhile investment at all levels, but poverty and low incomes bar many families from sending their children to school. The pressure of poverty cuts at both ends: the direct cost of schooling could be a heavy burden, and the opportunity cost of the child could be high enough to outweigh the benefits as perceived by the parents.

B. Private and Social Returns to Basic Education

The approach taken in this study is to see whether it pays to complete basic education, both for the family and for society at large. If it can be shown that investment in basic education yields internal rates of return higher than the opportunity cost of capital, then moving children out of the workplace into schools would indeed be a very worthy undertaking. This section uses results from a 1996 study, discussed below, that examines male-female earnings differentials.

Productivity and Earnings by Age and Education

Age-education-earnings data for the Philippines are hard to come by. The NSO has stopped publishing earnings data in its quarterly Labor Force Surveys. Meanwhile, its Family Income and Expenditures Survey reports income for the family as a whole. Fortunately, a 1996 article had access to earnings data on individual workers from the October round of the 1988 NSO Labor Force Survey (Alonzo, Horton, and Nayar 1996). Although the 1988 database appears old, it is the age-specific earnings differentials by education that count in the estimation of benefits from schooling. Moreover, with the current global knowledge and information revolution, it is likely that earnings differentials across education levels may even be widening.

The article reports regression results for log of earnings of women and men separately as a function of region of residence, age (and age squared to allow for the depreciation of human capital), and highest educational attainment (in seven categories). The Ordinary Least Squares (OLS) results are reproduced in Table 18. The omitted categories for the classificatory variables are the Metro Manila for region of residence and no schooling together with incomplete elementary for highest educational attainment.

Table 18. Earnings Functions for Women and Men, OLS Results (With natural logarithm of earnings as dependent variable)

,	WOMEN			оронион	MEN	
Variables	В	t	MEAN	В	T	MEAN
REGIONS 3.4	-0.089	-2.618	0.241	-0.081	-3.682	0.240
REGIONS 1,5	-0.402	-8.204	0.087	-0.324	-10.125	0.086
REGIONS 6,7,8	-0.411	-10.538	0.159	-0.385	-14.259	0.147
REGIONS 9,12	-0.438	-6.083	0.036	-0.239	-4.979	0.035
REGIONS 10,11	-0.308	-6.417	0.091	-0.117	-3.900	0.105
AGE	0.058	3.631	35.400	0.083	8.280	36.400
AGE SQ.	-0.677	-3.239	1.320	-0.896	-6.788	1.394
ED 6	0.191	3.131	0.126	0.227	6.135	0.148
ED 7-9	0.561	8.130	0.074	0.332	8.737	0.118
ED 10	0.649	10.817	0.149	0.447	13.147	0.272
ED 11-12	1.049	16.391	0.102	0.569	14.590	0.120
ED 13+	1.084	12.044	0.475	0.757	16.457	0.258
DEGREE	0.428	5.487	0.445	0.265	6.625	0.199
CONST	6.233	21.493	8.208	6.264	32.796	8.421
R SQ.	0.419			0.277		
# OBS.	2,692			4,907		

Source: R.P. Alonzo, S. Horton, and R. Nayar, "Women in the Labor Market in the Philippines," Chapter 7 in *Women and Industrialization in Asia*, edited by S. Horton, London: Routledge, 1996.

From these results, this study constructs predicted age-education-earnings streams and inflates the 1988 quarterly earnings to annual earnings expressed in 2001 prices. The quarterly earnings predicted from the regressions are multiplied by a factor of 4.0 for the four quarters of the year and multiplied further by a factor of 3.64 to account for price level changes and secular movements in the legislated wage rates over the period.

The samples for the regressions in Table 18 include only those between the ages of 25 and 54. Extrapolations to younger ages using the regression equations are therefore done, with deflation factors applied to reflect lower market work opportunities and lower productivity of nonmarket and unpaid market work, the situation descriptive of people at this stage of their life cycle. Children of elementary school-going age (up to age 12) are assumed to have minimal productive contribution yet. When they reach ages 13 to 16, females are assumed to contribute 50 percent of the predicted earnings from the OLS equations, while males contribute only 25 percent. At ages 17 to 20, the deflation factor rises to 75 percent for both males and females.

Direct Costs of Schooling

A recent study on education costs and financing in the Philippines estimates the direct social costs of schooling reported in Table 19:

Table 19. Private and Public Unit Costs, School Year 1997/1998 (In current pesos per student)

Education Level	Enrollment	Operating	Direct Social	Total Unit
	Share (%)	Cost	Cost	Cost
Public				
Primary	92.3	5,322	1,258	6,580
Secondary	72.0	4,827	1,997	6,824
Tertiary	20.1	24,777	5,025	29,802
Private				
Primary	8.7	4,700	4,918	9,618
Secondary	28.0	4,295	3,961	8,256
Tertiary	79.9	8,067	6,450	14,517
Public & Private				
Primary	100.0	5,274	1,539	6,812
Secondary	100.0	4,678	2,547	7,226
Tertiary	100.0	11,426	6,164	17,589

Source: Asian Development Bank and World Bank, *The 1998 Philippines Education Study*. Manila: 1999 (Technical Background Paper No. 2).

Operating cost includes all expenses borne by the schools, whether public or private. Tuition and other school fees paid by the students are included in this item. Direct social cost includes privately financed school inputs like books, school supplies, and transportation. For the cost-benefit study, these costs are inflated to 2001 pesos using the Consumer Price Index (by a factor of 1.8).

Forgone Productivity and Earnings

Education entails not only direct outlays but also indirect costs to the student and her family by way of forgone earnings and productivity from home or nonmarket work. In this study, the lost opportunity with schooling is assumed to be only 25 percent of the predicted contributions of the person if he or she were not in school. This valuation may initially look low, but it reflects part-time work at home or in the marketplace even while in school; it also factors in the higher unemployment rates observed in these age groups and the chances that being out of school can lead to problems of juvenile delinquency. (A noted Filipino educator once said that schools serve as "nurseries" for adolescents, keeping them out of trouble.)

Returns to Schooling

With the above results taking into account adjustment factors to reflect conditions more descriptive of Philippine realities, incremental net present values (NPVs) and internal rates of return (IRRs) to different levels of schooling may be computed, as presented in Table 20. The estimates are from the *social* (economic)

and *private* (financial) viewpoints. For the latter, it is assumed that the students in public schools pay only 15% of the operating cost reported in Table 19.

Table 20
Net Present Values and Internal Rates of Return to Schooling
(In 2001 pesos and percent)

		(III ZUUT PESU	s and percent,		
		Net P	resent Value at		IRR
	6%	4%	2%	This Study	T & P
Social, Primar	y over Some or	No Schooling			
Women	14,561	34,021	73,865	9.6%	4.4.007
Men	44,534	91,755	189,405	12.1%	11.9%
	Private	, Primary over	Some or No Sc	hooling	
Women	25,614	46,170	87,248	18.2%	40.00/
Men	59,698	108,424	207,767	20.6%	18.2%
		Social Soconda	ary over Primar		
10.7		,			
Women	80,216	149,786	278,381	12.2%	40.00/
Men	61,730	122,267	236,243	11.1%	12.9%
	Р	rivate, Second	ary over Primar	у	
Women	92,298	162,443	291,659	14.4%	42.00/
Men	73,812	134,924	249,520	13.4%	13.8%

Sources: This study's estimates; Tan and Paqueo (1988).

Private internal rates of return to the child and the family are seen to be higher than social internal rates of return, as government subsidies are netted out in the private cost-benefit calculus. The estimates show that the payoff to completing elementary schooling is slightly higher for men than for women, while the reverse is true for completion of high school. The NPVs are reported for reference discount rates of 6%, 4%, and 2%, representing high, medium, and low scenarios. It can be seen that the NPVs are very sensitive to the discount rate.

The last column of Table 15 shows the estimates of Tan and Paqueo (1988) for the Philippines, which are very close to the numbers generated by this study. The Philippine government officially adopts a 15% social discount rate, higher than most of the financial and economic IRRs. The official 15% hurdle rate, however, appears to be on the high side and may be a nominal rather than real rate. The multilateral lending agencies like the World Bank and the Asian Development Bank use 10% to 12%, while the Japan Bank for International Cooperation uses a much lower hurdle rate in evaluating Philippine projects.

In any case, the estimated social IRRs should be viewed as lower bounds for the true social IRRs to basic education, as they do not yet incorporate externalities of the type discussed earlier. An increase in school participation would help reduce the number of out-of-school youth and the incidence of juvenile delinquency and vagrancy; peace and order in the community will improve. Higher education levels among the population are also perceived to confer positive spillovers associated with a more enlightened citizenry, such as increased political participation.

The social NPVs at different discount rates may be interpreted to represent the "breakeven" levels of expenditure per child that government could spend to have the child finish a certain level of schooling. From a fiscal perspective, however, the discount rates in Table 15 are on the low side, even if they are in real terms. The governments of most developing countries face much higher borrowing rates than 6% per year. But the social internal rates of return show that even with a 10% social opportunity cost of capital, there would be room for additional public spending on basic education.

The private internal rates of return to primary and secondary schooling are indicative of why there is such a huge "social demand" for basic education in the Philippines. These rates are way above what the typical family could earn from its savings deposits or even from alternative assets, although they may be below what the typical family would pay for its loans, especially with the informal sector. The poor family in particular may have a discount rate that is higher than any of the numbers listed above. Again, this leaves scope for government intervention in the education of the poor family.

There is also the problem of information asymmetry: the poor family may be underestimating the returns to schooling for its children. But lack of information does not on its own justify direct public intervention. The textbook solution is for the government to provide the information, although IEC (information, education, and communication) activities alone, however, are often found to be insufficient to modify adverse behavior.

In summary, the goal of achieving education for all in the Philippine context is not only an end in itself, but is also contributory to national development efforts. Investment in the elimination of child labor, to the extent that it is in harmony with the achievement of universal basic education, is a worthwhile investment. The private returns to basic education, while appearing high on the average, may be lower than the opportunity cost of capital for certain population groups, especially the poor families. Public intervention should target these groups for whom it still pays to pull children out of school to have them work.