

ILO/IPEC Working Paper

**The Unit Costs of Programmes to Prevent or End Child Labour
- A Review of Selected ILO/IPEC Programme Interventions -**

**Consultancy assignment in conjunction with
the ILO/IPEC Study on
the Costs and Benefits of the Elimination of Child Labour.**

by

Misaki Akasaka Ueda

**International Labour Office
International Programme on the Elimination of Child Labour**

August 2002

The views and interpretations in this report are those of the author and do not necessarily reflect those of the ILO.

Table of contents

I. Introduction.....	3
II. Main Findings.....	3
1. Cost Effectiveness by Country and Region	4
2. Cost Effectiveness by Nature of Child Labour	5
3. Cost Effectiveness by Programme Intervention	7
4. Cost Effectiveness by Demographic Profile of Target Group	8
III. Indicators and Variables.....	9
1. Indicator for Effectiveness - Assessment of the Programme Outcomes	9
2. Programme Interventions (Programme Activities).....	9
3. Nature of Child Labour	9
4. Programme Costs	10
5. Sources of Programme Inputs	10
IV. Methodology.....	11
1. Review of Programmes Database and Documentation.....	11
2. Questionnaires and Representation of Data.....	11
3. Selection Criteria.....	12
4. Adjustment of Costs Data.....	13
5. Constraints and Limitations of Data	13
5.1 Estimation of Programme Outcomes	13
5.2 Underestimation Related to Indirect Activities	14
5.3 Mix of Interventions and Strategies.....	14
5.4 Multiple Types of Child Labour.....	14
5.5 Segregation of Costs per Age Group and Gender	14
5.6 In-kind Contributions from Donors and Communities	15
5.7 Best-case Scenario.....	15
V. Conclusion.....	15
Annex 1: Overview of Descriptive Analysis of Data	17
1. Demographic Profile of Target Group	17
2. Nature of Child Labour	19
3. Cost Projections and Profiles of Action Programme	21
4. Financial Sustainability	22
5. Non-Adjusted Unit Costs	23
Annex 2: Model Questionnaire	25

I. Introduction

This paper is a summary of work conducted in conjunction with a broad ILO/IPEC study on the Costs and Benefits of the Elimination of Child Labour. It is intended to provide information on the unit costs of a wide range of selected programme interventions undertaken by ILO/IPEC in the past ten years in order to construct, at the later stage of the project, global estimates of the cost of programmes to prevent or withdraw children from work.

This report focuses on cost-effectiveness analysis in the form of the cost of withdrawing and preventing children from working. A wide range of programme interventions have been developed and applied by ILO/IPEC to achieve the long-term objective of the elimination of child labour, yet little is known as to which interventions are more cost-effective and in what circumstances. Upon the review of programme data on the costs and effectiveness of IPEC interventions, it was decided to collect the data directly from the IPEC field offices through questionnaires to ensure the accuracy and comprehensiveness of data on the selected Action Programmes or sub-projects.¹ ILO/IPEC has typically supported local institutions implementing small scale, localised mini-projects as demonstration projects or as part of a broader project. These Action Programmes have typically covered both “direct action” with immediate impact on a small selected number of target groups as well as indirect impact through capacity building action. In the following the terms project and programme is used interchangeable for these Action Programmes unless otherwise stated.

The cost-effectiveness analysis used here employs one type of unit for inputs and another for outputs, which are expressed in quantitative terms. In this exercise, the inputs are all financial inputs made by ILO/IPEC, implementing agencies and other donors. The direct outputs are the numbers of children withdrawn or prevented. The cost effectiveness of the selected IPEC Action Programmes was measured by calculating the cost per child who was withdrawn or prevented from work by the programme interventions.²

The unit costs of withdrawing and preventing child work were analysed by country and region, type of child labour and programme interventions. To compare the unit costs between the countries and regions of the different levels of economic development, the capital and recurrent costs of the Action Programmes were adjusted by Purchasing Power Parity (PPP). The demographic profiles of children, the distribution of the nature of work that children were engaged in, and the cost profiles of all Action Programmes surveyed are also available in the annex of this report.

II. Main Findings

In the following, the cost effectiveness of interventions will be presented by country and region (1.), by nature of child labour (2.), by type of intervention (3.) and by demographic profile (4.).

¹ One of the criteria for selecting a particular AP was the availability of complete data on number of children withdrawn or prevented. Other criteria will be discussed later.

² This of course does not account for other types of outputs from ILO/IPEC supported interventions to create an enabling environment through capacity building, social mobilisation, influencing and changing policies and legislation and other actions that do not create an immediate, measurable output within the duration of the project in terms of children withdrawn or prevented. Evaluations at the level of the broader project of which the Action Programmes are part of address these issues. Ongoing work in ILO/IPEC on impact assessment, tracer studies and tracking systems is developing and applying methodologies for determining this more indirect longer term impact on children

1. Cost Effectiveness by Country and Region

Table 1 shows the mean and median of unit costs by country and region. It appeared that Turkey and India had the lowest unit costs even after the unit costs were adjusted for the Purchasing Power Parity.³ The differences of average unit costs are very small between Asia and Africa, while the average unit cost, PPP in Latin America is twice as high in Asia and in Africa. The difference between Latin America and the other two regions is even larger for the median of unit costs, PPP (6.5 and 8.5 times respectively).

Table 1: Unit Costs of Withdrawal from or Prevention of Child Labour

Region/ Country	Unit Costs					Unit Costs, PPP ⁴		(in US\$, per child)
	n=AP	Mean	Median	High	Low	Mean	Median	Expenditure per pupil ⁵ (1995)
Asia		131	80			533	367	
Turkey	8	40	86	508	4	89	192	433
Bangladesh	9	119	135	408	33	488	557	10
Cambodia	3	44	60	180	16	208	285	14
India	7	28	24	93	12	6	120	38
Nepal	9	73	66	285	42	421	381	19
Pakistan	7	37	110	307	3	156	467	48
Philippines	4	70	224	560	30	267	853	115
Latin America		956	1,085			1,153	2,354	
Brazil	3	1,457	1,420	1579	978	2,287	2,229	519
Bolivia	1	562	562	-	-	1,292	1,292	101
Colombia	2	413	676	1192	161	1,135	1,859	180
Costa Rica	1	1,789	1,789	-	-	3,756	3,756	508
El Salvador ⁶	1	-	-	-	-	-	-	101
Guatemala ⁷	1	-	-	-	-	-	-	70
Nicaragua	1	1,549	1,549	-	-	7,650	7,650	53
Paraguay	1	475	475	-	-	1,430	1,430	211
Peru	3	1,163	1,276	1723	686	2,629	2,885	183
Africa		211	94			601	277	

³ It should be noted that the mean unit costs of India could be skewed due to the limitation of data. Please refer to Chapter III, section on Constraints and Limitation of Data.

⁴ The following rates of Purchasing Power Parity of 1999 were applied:

Turkey: 2.25, Bangladesh: 4.12, Cambodia: 4.76, India: 5.02, Nepal: 5.78, Pakistan: 4.25, Philippines: 3.81, Brazil: 1.57, Bolivia: 2.30, Colombia: 2.75, Costa Rica: 2.10, Nicaragua: 4.94, Paraguay: 3.01, Peru: 2.26, Kenya: 2.87, Senegal: 2.77, and Madagascar: 3.23. (Source: Key Indicators of the Labour Market 2001-2002)

⁵ This indicator is given for comparison. It gives the unit cost of primary schooling, i.e. the unit cost of intervention in formal education. Sources: UNESCO Institute for Statistics, Financing Primary Education for All: Yesterday, Today and Tomorrow, Draft (data is preliminary and subject to revision).

⁶ The cost information was not available for El Salvador, hence the unit cost was not calculated.

⁷ The cost information was not available for Guatemala, hence the unit cost was not calculated.

Kenya	7	84	141	402	42	240	406	64
Senegal	3	133	113	947	69	368	312	57
Madagascar ⁸	2	69	70	65	75	224	226	10
All		310	107			906	442	

2. Cost Effectiveness by Nature of Child Labour

The cost effectiveness of interventions was also examined by the nature of work in which children were engaged. Whereas many Action Programmes work with multiple types of child workers, only the Action Programmes targeting one specific type of child workers were analysed for this study. However, even when only one type of child workers were targeted, the interventions often applied a holistic approach mixing direct action and capacity building. This is important to keep in mind when looking at the data presented below.

Action Programmes targeting children in domestic work, bonded labour and hazardous work conditions have the lowest median unit costs on a global scale. The unit costs for prevention and withdrawal from prostitution and sexual exploitation appeared to be highest in all regions. However, this could be due to the fact that most of the programmes were from Latin America, where unit costs were highest in each of the categories.

In Asia, programmes targeting exclusively children in sale and trafficking are the least cost-effective; in Africa, the same is true for children in scavenging and sanitation. Due to the small sample size of the Action Programmes for children working in scavenging and on the streets (three and two programmes respectively), it is difficult to conclude with certainty that the programmes for these groups are cost-ineffective. Further review and analysis of such programmes would be needed.

⁸ For Madagascar, the projected expenditure and programme outcome were used, as the programmes are still on-going.

Table 2: Unit Costs (PPP)⁹ by Nature of Child Labour

(In US\$ per child)

Nature of Child Labour	n=AP	Asia	Latin America	Africa	All	
		Mean	Mean	Mean	Mean	Median
Armed conflict/ military service	0	-	-	-	-	-
Domestic work in other household	4	283	-	643	463	333
Forced/ bonded labour	3	438	-	-	438	376
Hazardous work conditions	27	510	2,168	518	613	381
Drug trafficking or illegal activities	0	-	-	-	-	-
Prostitution and sexual exploitation	5	856	4,392	-	3,685	3,277
Sale and trafficking	1	1,066	-	-	1,066	1,066
Scavenging/ sanitation	3	990	-	2,622	1,534	1,493
Street life/ vending/ begging	2	759	-	-	759	759
Household work in own house	0	-	-	-	-	-
Wage employment	4	810	-	-	810	793

⁹ For non-PPP-adjusted unit costs, see table 13 in Annex 1.

3. Cost Effectiveness by Programme Intervention

After adjusting for PPP, the global mean and median units costs presented in Table 3 do not suggest very clearly which types of interventions are more cost-effective. The training of inspectors appears to be very cost-effective, but this trend is only relevant in Asia, as other regions lack data. The unit costs are also relatively low for those programmes that had teachers' training as a component in Asia and Latin America. The unit costs for programmes with basic services, rehabilitation and counselling are low in Asia and Africa, but high in Latin America. Programmes with a vocational training component rank first among unit costs in Asia and second in Latin America and Africa.

Caution needs to be taken in the interpretation of these results, because, as stated above, the interventions were not independently deployed; most Action Programmes consisted of a mix of interventions. Therefore, it was not possible to compute the exact intervention-specific unit costs (see IV.5.5.).

Table 3: Unit Costs (PPP)¹⁰ by Programme Interventions

Interventions *	n=AP					(In US\$ per child)	
		Asia Mean	Latin America Mean	Africa Mean	All Mean	Median	
Education							
Non-formal education	52	502	2,702	402	996	424	
Formal education							
Early childhood care							
Training of teachers	9	370	1,475	-	861	442	
Vocational training							
Skills training	24	626	2,799	730	923	538	
Pre-vocational training							
Job placement							
Basic services and counselling							
Health, nutrition, shelter, legal aid	33	367	3,018	291	1,076	442	
Training of inspectors/enforcement	4	79	-	-	79	53	
Training of other adults							
Parents, youth groups, community leaders, self-help groups	15	562	1,795	119	861	673	
Income generation, credit/revolving fund	29	574	2,326	829	1,110	373	

* The Action Programme was selected for this analysis if it implemented at least one of interventions selected.

¹⁰ For non-PPP-adjusted unit costs, see table 14 in Annex 1.

4. Cost Effectiveness by Demographic Profile of Target Group

Tables 2 and 3 show the unit costs broken down by gender and age groups, based on the analysis of those Action Programmes that targeted specifically either boys or girls and children below 12 years or 12 and over. Although the sample size is not very large, a certain trend can be observed: The mean unit costs of Action Programmes that target only children over 12 years are two times higher than those for children below 12.

As for the gender differences, the cost effectiveness appears to be lower for the programmes targeting girls in all regions. However, this result needs to be treated with caution, as the target group of those programmes were girls in domestic services and sexual exploitation, the most invisible and inaccessible groups of children. Furthermore, after excluding four programmes in Latin America, which have higher unit costs in general, the difference in the mean of unit costs between boys and girls in Asia and Africa become negligible.

Table 4: Unit Costs (PPP) by Age Group

Age Group	n =AP	Mean	(in US\$ per child)
			Median
below 12*	6	454	207
12 and over	14	1083	943
12 and over (excluding 3 programmes in Latin America)	11	778	856

* Only the programmes in Asia were applicable for this group.

Table 5: Unit Costs (PPP) by Gender

Target Group	n =AP	Mean	(in US\$ per child)
			Median
Boys	4	580	493
Girls	9	2211	1066
Girls (excluding 4 programmes in Latin America)	5	676	856

III. Indicators and Variables

1. Indicator for Effectiveness - Assessment of the Programme Outcomes

In this study, the number of children withdrawn or prevented from the worst or other forms of child labour as a result of programme interventions was selected as the effectiveness indicator of the cost-effectiveness analysis. Throughout the programme cycle, this information was used to monitor the progress and achievement of the Action Programme. Therefore, this indicator was most likely to be available for most Action Programmes. No distinction was made between the numbers of children withdrawn and prevented, as these indicators were not monitored separately in most Action Programmes.¹¹

The number of children withdrawn or prevented for each selected Action Programme was disaggregated by gender, age groups (below 12, 12 - 14 and over 14) and enrolment ages (primary education below 12 and secondary education over 12).

2. Programme Interventions (Programme Activities)

Most of the IPEC Action Programmes deploy multiple interventions under a mix of strategies. While the majority of reviewed Action Programmes implemented four to five activities, in some cases as many as seven to ten interventions were carried out. In this exercise, however, the number of programme interventions was limited to six major interventions to simplify the stratification of data.

For the purpose of this study, the activities were grouped into nineteen interventions: awareness raising; training of inspectors; training of other adults (community leaders, youth groups etc.); training of teachers and principals; training of parents; vocational training; basic services (health, nutrition, shelter, water and etc.) and counselling for rehabilitation; non-formal education; formal education; early childhood development and day care; income-generating activities; credit and saving schemes/revolving funds; capacity building; action research; networking and coordination; survey, monitoring and placement in school; stipends; improvement of working conditions; and community reintegration and job placement.

3. Nature of Child Labour

Eleven categories of child work, which include both the worst forms and other forms of child labour, were used in this study. These categories were selected for consistency with the revised categories of the IPEC programme database, first implemented in 2001 and based on earlier version of a programme database. The categories are:

Worst Forms of Child Labour

1. Armed Conflict and military service
2. Domestic work in other household
3. Forced and bonded labour
4. Hazardous working conditions, long hours (not including 1-3 and 5-9)
5. Drug trafficking or illegal activities
6. Prostitution and sexual exploitation
7. Sale and trafficking of children
8. Scavenging or sanitation work

¹¹ Other indicators were used by the programmes to measure progress on other outcomes such as capacity building and other non-direct action interventions.

9. Street life, vending and begging

Other Forms of Child Labour

10. Household work in own house (not including 1-9)
11. Wage employment (not including 1-9)

4. Programme Costs

This study looked at the direct costs that were directly attributable to the services and activities for the targeted groups.

The cost of programme were broken down into two groups:

- Capital/start-up costs - all non-recurring costs of a programme, including the initial purchases of buildings and equipment, one-time training of personnel, and the costs of organizing or setting up the programme. It includes the resources that have a life expectancy of one year or more and also the costs for training and social mobilization, if they are non-recurrent.
- Operating costs - all recurrent costs required to maintain the programme. These are resources that are purchased or used (or replaced) within one year's time. It includes items such as personnel salaries, supplies, fuel, electricity and food.

The costs data was based on the actual expenditure of the completed Action Programmes. However, for Madagascar, the projected expenditure and programme outcome were used, as the programmes were still on going at the time of the study.

Using actual expenditures does not account for other costs incurred such as technical support and advice from ILO/IPEC staff working on these Action Programmes either in the field or at headquarters.

5. Sources of Programme Inputs

In order to base the calculation of the unit costs on the overall costs of the programme, the inputs from the implementing agencies and other donors were also collected, to the extent possible.

IV. Methodology

1. Review of Programmes Database and Documentation

At the onset of the study, IPEC Programme Database data and IPEC documents were reviewed in the light of the comprehensiveness of data for the selected indicators and variables. IPEC collects the programme data at the start, at the various review periods and at the end of each Action Programme, and while the number of child workers prevented or withdrawn has been periodically monitored and reported to IPEC headquarters, the data has only been compiled and comprehensively stored since early 2001.

In fact, most implementing agencies monitored and kept a record of the number of children who were affected by the programme activities and reported them as programme outputs in the Final Report (self-evaluation reports). It is not, however, always explicit in these Final Reports whether those children were actually withdrawn or prevented from work after their participation and involvement in the activities.

In some cases, the costs for the entire Action Programme can be considered as capital costs if the Action Programme aims to establish the capacity of overall project. It was difficult to discern on the basis of the Final Report whether the given costs are capital costs or recurrent costs for some activities, because the report of the Action Programmes does not always refer to the state of the Action Programme in the longer term of the overall project plan. The Final Reports cannot serve as a complete source of accurate data for the types of costs and the outcome indicators.

2. Questionnaires and Representation of Data

Based on the initial review, a questionnaire was developed and distributed to the IPEC Field Offices for the selected Action Programmes. The questionnaire was comprised of three parts¹²:

Part I: General Facts on the Action Programmes

Title, implementing agencies, implementation period, major interventions, and IPEC approved budget

Part II: Information on the Target Group

Age, gender, nature of work

Part III: Cost Information

Start-up costs and operating costs broken down by sources of fund (IPEC, implementing agency and other donors)

Allocation of total costs by major interventions

Grand total of costs

Based on the IPEC Programme Database and Financial Database, the number of Action Programmes according to regions and countries were determined.

All programmes considered for this exercise were Action Programmes that implemented

¹² The questionnaire form is available in Annex 2.

direct interventions with children and that have been financially closed to date. From the creation of IPEC until the end of 2001, around 795 Action Programmes (under the sub-contracts code 21) were assisted by IPEC and final financial reports accounted for. Among them, 463 programmes were registered in the programme database with direct action for children and communities. Of these, 117 Action Programmes in 22 countries were selected according to the criteria specified below. Hence, 109 questionnaires were sent out, 78 of which were completed and returned from 19 countries, representing a response rate of 72 %.

Table 6 : Representation of Action Programmes

	Financially Closed AP (sub-contract 21)	Programme Database with direct action	Questionnaire Sent	Questionnaire Returned
Asia	497	306	70	52
Turkey	54	30	8	8
Bangladesh	66	42	10	10
Cambodia	5	4	2	3
India	129	113	14	10
Indonesia	57	34	8	0
Nepal	46	32	9	9
Sri Lanka	-	2	-	-
Pakistan	42	20	8	8
Philippines	56	13	5	4
Thailand	42	16	6	0
South America	92	54	16	10
Brazil	66	33	10	3
Argentina	)	2	-	-
Columbia	)	4	2	2
Peru	) 26 (in regional project)	7	2	3
Bolivia	)	5	1	1
Venezuela	)	1	-	-
Paraguay	)	2	1	1
Central America	7 (regional project)	15	4	4
Guatemala		3	1	1*
Costa Rica		4	1	1
Honduras		2	-	-
Nicaragua		3	1	1
Dominican Republic		2	-	-
El Salvador		1	1	1*
Africa	124	87	19	12
Egypt	6	2	-	-
Benin	7	6	-	-
Bukina Faso	7	-	-	-
Kenya	53	40	7	7
Madagascar	7	8	2	2
Senegal	-	8	3	3
Tanzania	43	22	7	0
Zambia	1	1	-	-
Total	713	462	109	78

* The questionnaires for Guatemala and El Salvador did not include cost information.

3. Selection Criteria

The Action Programmes surveyed were selected based on the following criteria, in order to ensure comprehensive and high-quality data for each Action Programme.

Quality of Work

The Action Programmes were selected according to a high probability of quality data on the programme outputs. The probability was calculated based on the assessments of desk officers and IPEC technical teams, available data in the Final Reports of each programme (final report of the programme submitted to IPEC by the implementing agencies), and thematic evaluations and project evaluations. In this sense, well-implemented programmes were selected in terms of achievement of programme objectives and high institutional capacity.

Diversity in Interventions and Implementing Agencies

Furthermore, the programmes were selected in order to cover a wide range of activities and interventions. In total, 19 different types of interventions had been implemented in the selected programmes. However, Action Programmes with a focus on policy-making or research were excluded, as the direct impact on children withdrawn or prevented could not be documented within the Action Programme period.

The inclusion of many different implementing agencies was also pursued as much as possible.

4. Adjustment of Costs Data

The costs data were adjusted by applying Purchasing Power Parity (PPP) to make a comparison between countries of different levels of economic development more relevant.

Most Action Programmes (except a few Action Programmes in Brazil and the Philippines) were concluded in recent years, wherefore the effect of inflation was considered insignificant.

5. Constraints and Limitations of Data

5.1 Estimation of Programme Outcomes

Action Programme of Trade Unions and Employers' Organizations

A significant number of Action Programmes were implemented by Trade Unions and Employers' Organizations. Most of these programmes support raising awareness of child labour among the organizations' members to prevent children from falling into child labour. The attempt was made to estimate the outcomes attributed to the sensitization and mobilization on the issue of child labour. As for the Action Programmes surveyed, however, it was not possible for the implementing agencies to give estimates on the number of children prevented.

Inspectors' Training

The outcome of activities related to the training of inspectors varies in the accuracy of data. In Turkey, for example, the exact number of children who were detected and removed by the inspectors who were trained under the IPEC programme were monitored. In many other countries, the degree of accuracy is much lower, because the number of children withdrawn as a result of inspection was not recorded. Instead, the unit costs were estimated according to an assumed "efficiency rate" of an inspector, based on previous experience in the respective country.

5.2 Underestimation Related to Indirect Activities

There are a number of programme interventions related to capacity building and policy making for instance, for which children are indirect beneficiaries, yet which form a crucial part of the Action Programme. The outcome and contribution of such activities are difficult to express in terms of the number of children withdrawn within the duration of the Action Programme. We can assume that the outcomes of Action Programmes could have been underestimated, as it was not possible to capture all children withdrawn or prevented as a result of “indirect” actions, such as:

Awareness Raising

Almost all Action Programmes had a component of raising awareness. Although there are costs for these activities, measuring in quantitative terms their effects and outcomes, such as changes in knowledge, attitudes and behavior, was not possible within the duration of each Action Programme.

Training of Communities Leaders, Parents and Teachers

There are many interventions that provide training to parents, community leaders and schoolteachers and build up the capacity of community-based self-help organizations. These activities affect children indirectly, yet they are vital preventive measures in reducing the incidence of child labour. The children that benefited from such activities, however, may not have been counted or included in reported number of children withdrawn or prevented.

Income Generating Activities and Credit Schemes

A substantial amount of costs were related to income-generating activities and credit schemes. Where access to the participation in those schemes was not limited to the families of children who participated in other activities, the effect on those families could not be captured and accounted for.

5.3 Mix of Interventions and Strategies

The majority of IPEC programmes employ a mix of interventions and strategies as they are designed to create synergy effects. As a result, it was difficult to stratify the interventions and analyse the cost effectiveness for each specific type of activity for comparison. Even though the percentage of the capital and recurrent cost devoted to a given intervention was specified in the questionnaires, the number of children withdrawn or prevented was not linked exclusively to one activity. Thus, the unit costs for the types of activities, as seen in Tables 3 and 4, give the unit costs of those Action Programmes that included the specified activity as one of its components.

5.4 Multiple Types of Child Labour

Many Action Programmes worked with more than one type of child labour. For the sake of determining the unit cost specific to each type of child labour, less than 50 Action Programmes (representing 60% of all Action Programmes surveyed) that target only one type of child labour were analyzed.

5.5 Segregation of Costs per Age Group and Gender

As the costs of interventions were never monitored according to demographic characteristics,

it was difficult to segregate costs in terms of age group or gender. Consequently, the analyzed sample size was rather small.

5.6 In-kind Contributions from Donors and Communities

The Action Programmes received not only cash, but also in-kind contribution from various sources. For example, in Cambodia, the programmes benefited from the textbooks for their non-formal education programme provided by the Ministry of Education and UNICEF. Although the attempt was made, it was found impossible to estimate the monetary value of those contributions. Similarly, it is likely that not all contributions from parents and communities were captured in the costs data collected.

5.7 Best-Case Scenario

It should be noted that the data was collected from well-implemented programmes in terms of higher probability of quality data, achievement of programme objectives and institutional capacity. Hence, the cost-effectiveness of the Action Programmes incorporated into this analysis could be higher than those of the Action Programmes of average quality.

V. Conclusion

Regardless of a number of limitations in capturing all the outcomes of the surveyed Action Programmes, the unit costs presented above indicate certain trends. The results suggest that the programme approach that includes teachers' training and educational activities (non-formal education, formal education and early childhood programmes) appeared to be more cost-effective than those without such activities. On the contrary, the programmes with vocational training appeared to be less cost-effective than those with other measures.

Among the Action Programmes targeting the single type of child labour, the unit costs in Asia appeared to show a significant trend. The programmes that target exclusively children in domestic work in other household as well as those targeting forced/bonded labour, are more cost-effective than those that target the children engaged in scavenging and vending/begging on the streets. However, due to the small sample size of the Action Programmes (in some groups only two or three programmes were applicable), it is difficult to conclude simply that the programmes for some target groups are less cost-effective. Rather, these results suggest a need for further review of the current programme approaches to develop a more effective and efficient mix of programme strategies.

Cost-effectiveness analysis may be used for comparing alternative approaches to delivering the same social output in order to choose the most cost-effective one. It is an analytical tool, and it is used judiciously, as it can be used for decision-making. However, as with other analytical techniques, it has its limitations that require caution in interpreting the results. Particularly, the complexity of most IPEC programmes and the multiplicity of effects that are created by a mix of interventions did not make the programme alternatives very comparable.

To assess more precisely the cost-effectiveness, one needs to be conscious of capturing the outcomes of indirect measures during the process of planning, implementation, monitoring and evaluation. These costs should also be taken into account and calculated per child at the outset of the programme planning. Evaluations that delve into costs are extremely useful as

resource material at the subsequent planning stage. Results can also be useful for other projects and countries where conditions are similar. The cost-effectiveness indicator used in this study, the cost per child withdrawn or prevented, can be built into every programme evaluation. Such an indicator can be a useful tool not only for global estimates of the resources needed but also for assessing the effectiveness of the programme, ensuring equity among the regions within the country and achieving sustainability of the programme outcomes.

Annex 1

Overview of Descriptive Analysis of Data

1. Demographic Profile of Target Group

The gender proportion of the target group is well balanced throughout the regions, except in Turkey where boys form the majority of the target group. The Action Programmes in Bolivia and Paraguay had a gender imbalance. However there was only one Action Programme surveyed for each of those two countries.

As for the age groups, in India, children below 12 were a prime focus of the programmes, accounting for 95 percent. Except in Turkey and the Philippines, the programmes in Asia targeted the age group of 12-14 years. The programmes in Latin America worked with a larger number of older children (above 14) than those in other regions.

Table 7: Demographic Profile of Target Group by Gender and Age

Region/Country	Gender Ratio				Age Ratio						
	boy		girl		<12		12-14		>14		No Total
	no.	%	no.	%	no.	%	no.	%	no.	%	
Asia	28,660	56	22,559	44	24,281	47	23,188	45	3,850	8		51,319
Turkey	11,225	82	2,519	18	449	3	11,827	86	1,468	11	13,744
Bangladesh	1,088	47	1,216	53	820	36	919	40	565	25	2,304
Cambodia	890	59	681	41	855	51	392	23	324	19	1,680
India	4,918	49	5,031	51	9,446	95	503	5	0	0	9,949
Nepal	1,921	55	1,559	45	2,002	57	1,306	38	272	5	3,480
Pakistan	8,296	45	10,136	55	10,411	56	7,717	42	304	2	18,432
Philippines	322	19	1,417	81	298	17	524	30	917	53	1,739
Latin America	1,231	47	1,376	53	604	30	977	49	415	2	1996
Brazil	287	62	175	38	223	48	239	52	0	0	462
Bolivia	111	71	47	29	-	-	-	-	-	-	158*
Colombia	282	47	308	53	0	0	453	79	124	21	577
Cost Rica	0	0	200	100	50	25	55	28	95	47	200
El Salvador	93	53	82	47	123	70	24	14	28	16	175
Guatemala	118	49	122	51	-	-	-	-	-	-	240*
Nicaragua	0	0	127	100	18	14	86	68	23	18	127
Paraguay	140	70	60	30	-	-	-	-	-	-	200*
Peru	200	44	255	56	190	42	120	26	145	32	455
Africa	3,103	55	2,521	45	2,449	44	2,173	39	1002	18	5,624
Kenya	2,673	59	1,831	41	2,184	48	1,781	40	539	12	4,504
Senegal	230	29	570	71	27	3	310	39	463	58	800
Madagascar**	200	62	120	38	238	74	82	26	0	0	320

* grand total of boy and girl

** only the projected numbers are available for Madagascar.

Table 8 presents the same children regrouped by the type of school (primary or secondary) that a child of the respective age should attend. The Latin American countries worked with more children of secondary school enrolment age (70 %) than those in Africa (56 %) and Asia (61%).

Table 8: Target Group by School Enrollment Age

Region/Country	Primary School Enrollment Age		Secondary School Enrollment Age	
	(>12)		(12 and above)	
	No.	%	No.	%
Asia	29,382	39	46,841	61
Turkey	449	3	13,295	97
Bangladesh	820	36	1,484	64
Cambodia	855	50	855	50
India	9,446	95	503	5
Nepal	2,002	58	1,478	42
Pakistan	10,411	56	8,021	44
Philippines	298	17	1,441	83
Latin America	604	30	1,392	70
Brazil	223	48	239	52
Bolivia	-	-	-	-
Colombia	0	0	577	100
Cost Rica	50	25	150	75
El Salvador	123	70	52	30
Guatemala	-	-	-	-
Nicaragua	18	14	109	86
Paraguay	-	-	-	-
Peru	190	42	265	58
Africa	2,449	44	3,175	56
Kenya	2,184	48	2,320	52
Senegal	27	3	773	97
Madagascar	238	74	82	26
Total	32,435	39	51,408	6

2. Nature of Child Labour

Tables 9 and 10 describe the nature of work from which children were withdrawn or prevented by the programmes. Except in Asia, all children withdrawn or prevented were those in the worst forms of child labour as described in the ILO Convention No.182.

Table 9: The Number of Children Withdrawn or Prevented - Worst Forms and Other Forms of Child Labour

Region/Country	Worst Forms of Child Labour		Non Worst Forms of Child Labour	
	No.	%	No.	%
Asia				
Turkey	13,744	100	0	0
Bangladesh	1,586	69	718	31
Cambodia	1,680	100	0	0
India	286,618	99	4,376	1
Nepal	3,193	93	257	7
Pakistan	18,247	99	185	1
Philippines	1,841	37	3,069	63
Latin America				
Brazil	462	100	-	-
Bolivia	158	100	-	-
Colombia	577	100	-	-
Cost Rica	200	100	-	-
El Salvador	175	100	-	-
Guatemala	240	100	-	-
Nicaragua	127	100	-	-
Paraguay	200	100	-	-
Peru	450	100	-	-
Africa				
Kenya	4,504	100	-	-
Senegal	800	100	-	-
Madagascar	320	100	-	-
Total	67,867	66%	34,253	34%

Table 10: The Number of Children Withdrawn or Prevented by Nature of Child Labour

Region/ Country	armed conflict	domestic work	forced/ bonded	hazardous working	drug/illegal activities	prostitution sexual exploit.	sales/ trafficking	scavenging sanitation	street life/ vending	household work	wage employment
Asia	0	3,490	3,201	34,814	1	247	231	971	2,931	3,262	5,351
Turkey	0	383	0	10,897	0	0	0	0	2,464	0	0
Bangladesh	0	65	0	1,214	0	138	9	90	70	8	710
Cambodia	0	0	0	1,571	0	109	0	0	0	0	0
India	0	1,477	1,903	2,210	0	0	0	45	28	0	4,376
Nepal	0	135	1,298	1,245	0	0	120	425	0	0	257
Pakistan	0	57	0	17,684	1	0	0	151	354	185	0
Philippines	0	1,373	0	83	0	0	102	260	15	3,069	8
Latin America	0	43	173	1,422	0	583	0	178	195	0	0
Brazil	0	31	173	80	0	0	0	178	0	0	0
Bolivia	0	12	0	33	0	0	0	0	113	0	0
Colombia	0	0	0	436	0	141	0	0	0	0	0
Cost Rica	0	0	0	0	0	200	0	0	0	0	0
El Salvador	0	0	0	175	0	0	0	0	0	0	0
Guatemala	0	0	0	240	0	0	0	0	0	0	0
Nicaragua	0	0	0	0	0	127	0	0	0	0	0
Paraguay	0	0	0	118	0	0	0	0	82	0	0
Peru	0	0	0	340	0	115	0	0	0	0	0
Africa	0	1,631	0	2,956	50	202	0	30	660	0	0
Kenya	0	1,061	0	2,436	50	0	0	0	660	0	0
Senegal	0	570	0	200	0	0	0	30	0	0	0
Madagascar	0	0	0	320	0	0	0	0	0	0	0

3. Cost Projections and Profiles of Action Programme

Knowing what was spent on previous programmes can be very important in projecting the future costs. Expenditures from one year to the next are dependent on each other. In particular, expenditure on capital goods generally implies the necessity of continued funding of associated recurrent costs to ensure that this item is used properly.¹³ Table 11 indicates that Latin America had a higher proportion of operating costs than the other regions.

Table 11: Costs Profile - Projecting the Future Costs

Region/Country	Average Start-up Costs		Average Operating Costs	
	US \$	%	US \$	%
Asia	1416,097	56	1,126,308	44
Turkey	385,808	71	157,293	29
Bangladesh	173,591	64	99,544	36
Cambodia	11,191	15	62,307	85
India	213,952	43	62,307	85
Nepal	38,432	15	282,637	57
Pakistan	547,223	82	215,325	85
Philippines	45,900	16	246,895	84
Latin America	516,654	30	1,185,606	70
Brazil	144,820	22	51,503	78
Bolivia*	5,000	6	83,850	94
Colombia	147,040	62	91,003	38
Costa Rica*	12,996	4	344,744	96
El Salvador	-	-	-	-
Guatemala	-	-	-	-
Nicaragua*	12,398	6	184,265	94
Paraguay*	12,700	13	82,390	87
Peru	181,700	34	347,851	66
Africa	1,50,915	33	308,704	67
Kenya	106,145	28	271,207	72
Senegal	31,815	53	28,230	47
Madagascar	12,955	58	9,267	42

* These countries have the data for only one Action Programme.

A service delivery unit is more efficient when it provides more beneficial effects from the use of a given set of resources. For each input, the cost profile shows its value and its percentage share of total cost. It highlights the categories requiring attention or further studies of efficiency.

¹³ This is also related to the issue of sustainability in general. Further reviews and analysis arising from this paper should consider this.

4. Financial Sustainability

The Action Programmes studied were supported by resources from IPEC, implementing agencies, and often also from other donors. If the implementing agencies' own resources are substantially smaller than the projected costs, the programme is probably not financially sustainable after withdrawal of external aid to the programme.¹⁴

Table 12 shows the ratio of external sources to local sources' contribution to the Action Programme. The programmes in Latin America (e.g. in Brazil and Peru) appeared to have a relatively high financial sustainability.

Table 12: Financial Sustainability - Distribution of Contribution by Source

(In percent)			
Region/Country	IPEC	Other Donors	Implementing Agencies
Asia			
Turkey	82	6	12
Bangladesh	92	0	8
Cambodia	84	3	13
India	93	0	7
Nepal	96	0	4
Pakistan	86	1	13
Philippines	64	25	11
Latin America			
Brazil	28	0	72
Bolivia	100	0	0
Colombia	75	22	3
Costa Rica	43	0	57
El Salvador	-	-	-
Guatemala	-	-	-
Nicaragua	76	0	24
Paraguay	100	0	0
Peru	65	10	25
Africa			
Kenya	87	3	10
Senegal	53	0	47
Madagascar	91	0	9

¹⁴ However, sustainability has many other dimensions beyond the financial one, and it is particularly important to consider that the nature of a project is by definition a one-off activity to bring about changes or take one from one situation to an improved situation, and that it is not the project per se that has to be sustained (which relates to financial sustainability), but the changes brought about by the intervention of the project.

5. Non-Adjusted Unit Costs

Tables 13 and 14 complement tables 2 and 3 by giving the unit costs by nature of child labour and type of intervention in current US\$ (i.e. not adjusted for PPP).

Table 13 : Unit Costs by Nature of Child Labour (in current US\$ per child)

Nature of Child Labour	n=AP	Asia	Latin America	Africa	All	
		Mean	Mean	Mean	Mean	Median
Armed conflict/ military service	0	-	-	-	-	-
Domestic work in other household	4	106	-	226	166	135
Forced/ bonded labour	3	76	-	-	76	65
Hazardous work conditions	27	134	942	139	193	81
Drug trafficking or illegal activities	0	-	-	-	-	-
Prostitution and sexual exploitation	5	180	1,451	-	1,197	1,276
Sale and trafficking	1	185	-	-	185	185
Scavenging/ sanitation	3	238	-	947	474	392
Street life/ vending/ begging	2	201	-	-	201	201
Household work in own house	0	-	-	-	-	-
Wage employment	4	197	-	-	197	193

Table 14: Unit Costs by Programme Interventions (in current US\$ per child)

Interventions *	n=AP	Asia	Latin America	Africa	All
		Mean	Mean	Mean	Mean Median
Education					
Non-formal education	52	106	1,116	138	343 94
Formal education					
Early childhood care					
Training of teachers	9	93	725	-	374 161
Vocational training					
Skills training	24	147	1,296	258	318 139
Pre-vocational training					
Job placement					
Basic services and counselling					
Health, nutrition, shelter, legal aid	33	86	1,229	99	400 95
Training of inspectors/enforcement	4	19	-	-	19 17
Training of other adults					
Parents, youth groups, community leaders, self-help groups	15	146	783	42	309 161
Income generation, credit/revolving fund	29	127	926	293	382 157

* The Action Programme was selected for this analysis if it implemented at least one of interventions selected.

Annex 2

**IPEC COST BENEFIT STUDY
ACTION PROGRAMME INFORMATION ON COSTING**

Part I: General Facts on Action Programme

Action Programme Title			
Implementing Agency		Country	
AP Code		Cost of AP (US\$)	
Major Interventions (add as many as needed)	A:	Actual Period of Implementation	
	B: C: D:	Nature of Child Labour	

Part II: Outcome of Action Programme: Children Withdrawn or Prevented

Demographic Information	Boy			Girl			(g) Child Total (=a+b+c+d+e+f)
Age Group	<12 (a)	12-14 (b)	>14 (c)	<12 (d)	12-14 (e)	>14 (f)	
Estimated Number of Children Prevented or Withdrawn by Action Programme							

Nature of Child Labour	1. Armed conflict/ military service	2. Domestic work in other household	3. Forced/ bonded labour	4. Hazardous working condition, long hours	5. Drug trafficking or illegal activities	6. Prostitution and sexual exploitation	7. Sale and trafficking of children	8. Scavenging /sanitation work	9. Street life/ vending/ begging	10 Household work in own house (excluding 1-9)	11. Wage Employment (excluding 1- 9)	Child Total (h) (=g)
Number of Children Prevented or Withdrawn from:												

Part III: Costs Information

Programme Cost Information (please put <u>the actual expenditure</u> for the Action Programme.)			
Source of Funding	Start-up Costs (Actual Expenditure) (US\$)	Operating Costs (Actual Expenditure) (US\$)	Total of Expenditure of AP by Source of Funding (US\$)
IPEC Contribution to Action Programme			
Input of Implementing Agency to AP (Please calculate and include in-kind contribution)			
Contribution from other Sources to AP name of donor or agency: 1. _____ 2. _____			
Total	Total of Start-up Costs: US\$	Total of Operating Costs: US\$	GRAND TOTAL: US\$
Allocation of total cost by Major Intervention (%) (Part I)	A: %	A: %	
	B: %	B: %	
	C: %	C: %	
	D: %	D: %	

