

# Children Working in the Carpet industry of Nepal: Prevalence and Conditions

Research on Children Working in the Carpet Industry  
in India, Nepal and Pakistan

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## PREFACE

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In 2007, the Bureau of International Labor Affairs, United States Department of Labor (ILAB-USDOL) funded a cooperative agreement with Macro International (ICF)<sup>1</sup> entitled "Research on Children Working in the Carpet Industry of India, Nepal, and Pakistan" (Carpet Project). The Carpet Project's overall objective was to develop reliable and accurate data and information about the prevalence, working conditions, and demand for children's work and child labor in the production process of the handmade-carpet export industry in India, Nepal, and Pakistan. To accomplish its objectives, the Carpet Project designed and conducted six major quantitative research studies as well as semi-structured qualitative research activities. These included the following.

- Three Prevalence and Conditions (PC) Studies for India, Nepal and Pakistan. These were large-scale quantitative studies conducted to produce reliable, statistically sound, and nationally representative estimates of the prevalence of working children and the prevalence and nature of child labor as well as detailed descriptions of children's working conditions in the production process of the national carpet industries.
- The Labor Demand (LD) Survey. This was a longitudinal panel study of establishments producing carpets in all three countries to understand the underlying causes of variation in management's decisions about employing children in the carpet industry.
- The Sending Areas (SA) Study in Nepal. This was a qualitative rapid assessment of child trafficking and bonded labor focused on rural children who migrated to work in the carpet factories in the Kathmandu valley.
- The Schooling Incentives Project Evaluation (SIPE) Study in Nepal. This was a randomized controlled trial to assess the impact of two educational interventions on children's attendance and success in school.
- The Programs and Practices (PP) Review. This was a qualitative meta-analysis of existing and documented programs and practices that targeted child labor in the carpet industry in one or more of the three countries (India, Nepal, and Pakistan).

This Prevalence and Conditions Study report for Nepal was written by Art Hansen and Pablo Diego Rosell on behalf of the ICF research team, which acknowledged the important role played by New Era, the company that collected and processed the survey data in Nepal, and the assistance received from GoodWeave Nepal. The authors received valuable advice from Charita Castro and Angela Peltzer of USDOL and Don Ellison of ICF International.

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<sup>1</sup> The company was Macro International when the Cooperative Agreement was signed with USDOL. The company was ICF International, hereafter referred to as ICF, when this report was written.

## ABSTRACT

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This was a study of the prevalence of working children and the prevalence and nature of child labor in the production process of the export-oriented handmade carpet industry in Nepal in 2008-2009. The study included wool-processing activities (supplying the yarn) as well as carpet production and finishing. The methodology included preliminary qualitative research, development of a national sampling frame, and a large-scale cross-sectional sample survey of factory-based and household-based production.

The survey estimated that 714 factories and 15,847 households were engaged in Nepal's carpet industry, employing a total workforce of 49,539 usual workers, of whom 10,907 were children. The estimated number of working children was smaller than estimates by previous studies, but the estimated prevalence in the total industry workforce was comparable.

Most (80.2 percent) of the children working in the carpet industry in Nepal were working in households. Almost all children working in households (93.9 percent) were living with their parents, and more than four-fifths (86.8 percent) were girls. Factory-based children were mostly migrants (95.7%) from neighboring districts. Most (85.2 percent) were not living with their parents, and a majority (58.7 percent) were girls.

Nepal's child labor legislation identified the carpet industry as a risky (hazardous) activity, and the legislation prohibited employing children in risky activities. Therefore, all children working in the carpet industry in Nepal were in child labor because the work was hazardous. In addition, the data showed indications that half (51.9 percent) of the children worked excessive hours, a proportion that rose to 89.4 percent among factory-based child carpet workers. The study showed clear indications of forced or bonded labor, as well as indications of child trafficking among factory-based child carpet workers. A conservative estimate was that at least 7.8 percent of the factory-based child carpet workers showed indications of trafficking. There were no indications of forced or bonded labor or child trafficking among HH-based children.

An important difference between international standards and Nepalese standards is the age of a child. International standards define a child as a person under 18 years of age. Those standards are the basis for this study, which considered all carpet workers under the age of 18 (an estimated 10,907 children) to be child carpet workers. Nepal's child labor legislation defines a child as a person under 16 years of age, so Nepalese child labor legislation does not protect persons 16-17 years old. The minimum legal age to work in hazardous work by Nepalese standards is 16 years of age. More than two-thirds (70.6 percent) of the children (under 18 years of age) working in the industry were below 16 and, therefore, were working in breach of Nepali law.

## ABBREVIATIONS AND ACRONYMS

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|          |   |
|----------|---|
| CCIA     | Central Carpet Industry Association                                     |
| CWIN     | Child Workers in Nepal Concerned Centre                                 |
| DHS      | Demographic and Health Surveys  |
| HH       | Household   |
| ICF      | ICF International, Inc.   |
| ILAB     | Bureau of International Labor Affairs (USDOL)                           |
| ILO      | International Labour Organization (United Nations)                      |
| IPEC     | International Programme on the Elimination of Child Labor (ILO)         |
| KTM      | Kathmandu valley  |
| MoL      | Ministry of Labor and Transport Management                              |
| NGO      | Non-Governmental Organization   |
| OCFT     | Office of Child Labor, Forced Labor, and Human Trafficking (ILAB-USDOL) |
| PC Study | Prevalence and Conditions Study   |
| RA       | Rapid Assessment  |
| SIMPOC   | Statistical Information and Monitoring Programme on Child Labour (ILO)  |
| UNCHR    | United Nations High Commissioner for Refugees                           |
| UNICEF   | United Nations Children’s Fund  |
| USD      | United States Dollar <sup>2</sup>                                       |
| USDOL    | United States Department of Labor                                       |
| WFCL     | Worst Forms of Child Labor  |

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<sup>2</sup> The original data used in this study was collected between December 2008 and July 2009. The exchange rate for the Nepalese Rupee fluctuated during that period from 1:76 to 1:82 (Nepalese Rupees to 1 US Dollar). This report used the average exchange for that period of time, an exchange rate of 1:79.

## INTRODUCTION

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Child labor (when working children are exploited) is a global problem. In 2000, the ILO noted that one-fourth of the world's children (5-17 years old) were working, and 246 million of those working children were in child labor conditions. By 2008, there were still 215 million child laborers (ILO, 2010). More than half of the world's child laborers were located in the Asia and Pacific region, and child labor in the carpet industry in Asia had received a lot of international attention. A widely-circulated 1996 report noted:

The past few years have seen increasing public awareness...of the high incidence of child servitude in the carpet industry of South Asia. As a consequence, the international public has come to associate "child servitude" with the image of small children chained to carpet looms, slaving away over the thousands of tiny wool knots that will eventually become expensive carpets in the homes of the wealthy (Human Rights Watch, 1996:3).

This Prevalence and Conditions (PC) Study of Nepal addressed the problem of child labor and focused on the children who worked in the production process of the handmade carpet export industry of Nepal. Those children worked in households and factories processing wool for yarn and producing and finishing carpets to be exported. This research was relevant because previous reports about child labor in the carpet industry in Nepal had not provided accurate and reliable national-level estimates of the number and prevalence of working children and the prevalence and nature of child labor in the industry.

This study had three objectives:

- (1) Produce reliable, statistically sound, and nationally representative estimates of the prevalence of working children and child labor in the carpet industry in Nepal.
- (2) Describe children's working conditions in the production process of the carpet industry in Nepal.
- (3) Compare the working and living conditions of children working in the carpet industry and children working in other industries in Nepal.

Five broad research questions guided the design of the research. Some were directly testable, while others addressed broader areas and issues that were critical to the research.

- (1) How many children were working in the carpet industry in Nepal, and what was the prevalence of children in that industry's work force?
- (2) What were the characteristics of the children working in that carpet industry?
- (3) What was the nature of the children's work in the carpet industry, and what were their working conditions?

- (4) What were the indications of the existence of child labor, including the worst forms, in the situation of the children working in the carpet industry in Nepal?
- (5) How did the working (and living) conditions of the child carpet workers compare with the working (and living) conditions of children working in other industries in Nepal?

The primary sources of data for this report were cross-sectional sample surveys of the industry's factory-based and household-based establishments that were conducted in 2009. The surveys were preceded by qualitative research and development of national sampling frames. In each sampled factory, the manager and a sample of workers were interviewed. The household survey sampled rural and urban areas that had households engaged in carpet industry activities. In each sampled area, the survey team randomly sampled equivalent numbers of carpet and non-carpet households. In each sampled household, the head of household and all children aged 5-17 were interviewed. The interviewers completed an observation form for each factory and area.

This research made the following contributions to the knowledge base on the prevalence and nature of children's work and child labor in the carpet industry in Nepal:

- (1) Expanded the definition and scope of the carpet industry to include:
  - a. 17 specific activities that range from carpet-related supply chain processes (carding and spinning wool, producing and applying dyes) through carpet weaving and hand-loomed to the final finishing processes.
  - b. Factories and households that are spread across 22 districts in Nepal.
- (2) Produced reliable, statistically sound, and nationally representative estimates of:
  - a. The number and prevalence of working children in the carpet industry in Nepal.
  - b. The existence and prevalence of child labor in the carpet industry in Nepal.
- (3) Produced detailed descriptions of children's work and working conditions in the carpet industry in Nepal that included a number of key findings.
- (4) Produced benchmark data that compared the family background and living and working conditions of children working in the carpet industry and similar children working in other industries.

The first section of this report is an introduction, and the second section notes the international laws and conventions that provided the internationally-accepted definitions and standards for this study. The third section provides background information on child labor and the carpet industry in Nepal, and the fourth section describes in detail the methodology used in this research. The fifth section describes the data that were produced by this study about children working in the carpet industry and describes the nature and prevalence of child labor among those working children, and the sixth section discusses key issues not covered by the data in the previous

section, compares this study's findings with earlier findings, and notes the strengths and limitations of this study. The seventh section summarizes and concludes the report. That is followed by the bibliography and appendices.

## RESEARCH FRAMEWORK

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### 1.1. UNITED NATIONS INSTRUMENTS ON CHILD LABOR AND FORCED LABOR

The international legal framework for this study consisted of the United Nations instruments that defined and regulated children's work, child labor, forced/bonded labor, and child trafficking.

- ILO Convention 29 on Forced or Compulsory Labor (1930). Nepal ratified this Convention in 2002.
- ILO Convention 90 on Night Work of Young Persons (Industry) (1948)
- UN Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery (1956)
- ILO Convention 105 on the Abolition of Forced Labor (1957). Nepal ratified this convention in 2007.
- ILO Convention 138 on Minimum Working Age (1973), as amended by Recommendation 146 (1973). Nepal ratified this Convention in 1997.
- UN International Convention on the Rights of a Child (UNCRC, 1989). Nepal was a signatory to the UNCRC in 1989.
- ILO Convention 182 on the Worst Forms of Child Labor (1999) as amended by Recommendation 190 (1999). Nepal ratified this Convention in 2002.
- UN Trafficking Protocol, also known as the Palermo Protocol (2000) or the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, Supplementing the UN Convention Against Transnational Organized Crime
- Note on the definition of 'child trafficking' (2007). This note resulted from a dialogue among the ILO's program Towards the Elimination of the Worst Forms of Child Labour (TECL), the UN Office on Drugs and Crime, and the International Organization for Migration (IOM).

### 1.2. LEGAL PROTECTIONS FOR CHILDREN IN THE NEPAL CARPET INDUSTRY

Nepal ratified ILO Conventions 29, 105, 138 and 182, and was a signatory to the UN Convention on the Rights of the Child. While most definitions used in this study were based on international conventions the Nepal national legal framework was used to define aspects not covered by the international framework. The following instruments were in force at the time this research was conducted.

#### **Constitution of Nepal (2007, interim)**

- Pending the promulgation of a new constitution, Nepal is currently governed under the 2007 interim constitution, which replaced the 1990 constitution.

- Prohibited employing minors in factories, mines, and other hazardous work, as well as in the army, police, or in conflicts.
- Forbid forced labor, human trafficking, slavery, and bonded labor.

### **The Children's Rights and Welfare Act (1992)**

- Defined a child as a person below the age of 16 years.
- Prohibited employing children below the minimum age of 14 years.
- Prohibited employing children below 16 years of age in hazardous work
- Prohibited forced labor and required equal remuneration for equal work.
- Entitled working children below 16 years of age to a half-hour break for every three hours of work and to one day off a week.

### **The Labour Act (1992) and Labour Rules (1993)**

- Defined a child as a person below 14 years and a minor as a person 14-18 years of age.
- Prohibited employing children below 14 years of age in any establishment, but the workshop had to employ ten or more workers to be defined as an establishment.
- Prohibited employing children below age 16 (defined by the Act as minors) to work with dangerous machinery or in hazardous operations.
- Permitted employing children age 14-15 (defined by the Act as minors) but limited them to working no more than six hours a day and 36 hours a week.
- Permitted employing children age 16-17 (defined by the Act as minors) to work between 6 p.m. and 6 a.m. (nighttime hours).
- Limited all workers to working no more than eight hours a day and 48 hours a week with one day off a week.

### **The Child Labour (Prohibition and Regulation) Act (1999)**

- Amended the 1992 Labour Act.
- Defined a child as a person below 16 years of age.
- Prohibited employing children below 14 years of age to work as laborers.
- Prohibited employing children below 16 years of age to work in listed risky (hazardous) businesses. The list included carpet weaving, dyeing, and wool cleaning.
- Limited children below 16 years of age to working no more than six hours a day and 36 hours a week with a half-hour break after three consecutive hours of work.
- Prohibited employing children below 16 years of age from working between 6 p.m. and 6 a.m. (nighttime).
- Prohibited forced child labor.
- Required that children (defined as minors) be trained before working.

### **Bonded Labour (Prohibition) Act (2001)**

- Outlawed bonded labor, freed rural farmers and their children from debt bondage to their landlords, and extinguished debt flowing from such arrangements.

### **1.3. DIFFERENCES BETWEEN INTERNATIONAL AND NEPAL STANDARDS**

This study relied on international standards, utilized the international definition of a child as any person younger than 18 years of age, and applied the international definitions of child labor to the work and working conditions of all children who were employed in the carpet industry, even when they were working in their own household with their family or in workshops (factories or sheds) of any size.

One important difference between international standards and Nepalese standards is the age of a child. International standards define a child as a person under 18 years of age. Those standards are the basis for this study, which considered all carpet workers under the age of 18 to be child carpet workers. Nepal's child labor legislation (specifically the 1999 Child Labour Act) defines a child as a person under 16 years of age. For that reason, Nepal's legal protection of children differs from international standards because it fails to protect children 16-17 years of age.

Another important difference between international standards and Nepalese standards concerns the establishments that are regulated. The 1992 Labour Act prohibits employing children below 14 years of age (minimum working age) in any establishment, but the Act defines establishments as employing ten or more workers. The Act does not regulate establishments with fewer than ten employees, where one-fourth of Nepal's factory-based child carpet workers were employed.<sup>3</sup>

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<sup>3</sup> Gilligan (2003:33) noted that the Labour Act did not cover children who were self-employed and appeared to provide for legal child labor for children younger than 14 years of age.

## LITERATURE REVIEW

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### 2.1. WORKING CHILDREN AND CHILD LABOR IN NEPAL

The number and prevalence of working children in Nepal had been documented and analyzed, and the existence of extensive child labor (when children are exploited at work) in Nepal was well-known (USDOL, 2011), but a 1997 report (Suwal, et al., 1997) clearly demonstrated the absence of a consensus in Nepal at that time about how to distinguish working children and child labor). The report calculated the prevalence of child labor using five different definitions (none of them agreeing with current international standards).<sup>4</sup>

That report estimated that in 1997 two-fifths (41.7 percent) of Nepal's 6.2 million children (aged 5-14) were working, which was by far the highest rate in South Asia (UCW, 2003).<sup>5</sup> Almost all (93 percent) working children in Nepal (and 75 percent in urban areas) worked in agriculture, and almost all (93 percent) were unwaged family workers (working for their own families and not receiving wages); that was true for 94 percent of working children of both genders in agriculture and for 70 percent of girls and 36 percent of boys in manufacturing. Nepali children were supposed to start formal schooling when they were six, and 14 years was the minimum legal age to start working.

The 2008 Labour Force Survey (GoN, 2009) reported that only one-third (33.9 percent) of Nepal's 6.2 million children (5-14) were working, a sharp eight percent drop from what was reported in the 1997. More girls (37.8 percent) than boys (30.2 percent) and a much greater proportion of urban children (36.7 percent vs. only 14.4 percent of rural) were working.

Child labor in Nepal has been documented and analyzed by a number of studies (cited in KC, et al., 2002; UCW, 2003). In 2000-2001, 19 activities and areas of the worst forms of child labor in Nepal and seven immediate priorities for action were identified. The seven priorities were: agricultural bonded labor, domestic workers, porters, sex trafficking, rag-picking, carpet weaving, and mining. Rapid assessments were conducted in all seven areas.<sup>6</sup>

Based on the rapid assessments, a rough estimate was that at least 139,000 children (aged 5-17) were engaged in the seven priority areas with four-fifths (80 percent) of those children having migrated to work and 85 percent working in bonded labor, domestic service, and portering

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<sup>4</sup> The report analyzed data from the 1995-1996 Migration and Employment Survey.

<sup>5</sup> That included those participating in economic and non-economic (housekeeping or household chores) activities. Only one-fourth (26.7 percent) were working if only those participating in economic activities were counted. Estimates of the prevalence of working children among nearby countries at that time ranged from 4.8 percent in India and 6.2 percent in Bangladesh to a high of 17.7 percent in Pakistan.

<sup>6</sup> The carpet weaving rapid assessment was funded by USDOL (KC, et al., 2002).

(UCW, 2003). The studies indicated that the official statistics that two-fifths of the children were working probably overlooked most of the children who were vulnerable to the worst forms of child labor. The household surveys would miss the 80 percent of the children working in the worst forms of labor because those children were migrants living outside their households. Rapid assessments also indicated that the worst forms of child labor occurred most often in more populated areas and important urban and industrial centers.

At the time of this research, working children in Nepal continued to be exposed to health and safety risks doing hazardous work in agriculture, brick-making, mining, construction, rag-picking, recycling, portering, and other industries, and children, especially in domestic service, were also exposed to sexual exploitation. Children were working excessively long hours in unhealthy working environments and were also vulnerable to being trafficked (USDOL, 2011).

## **2.2. THE CARPET INDUSTRY IN NEPAL**

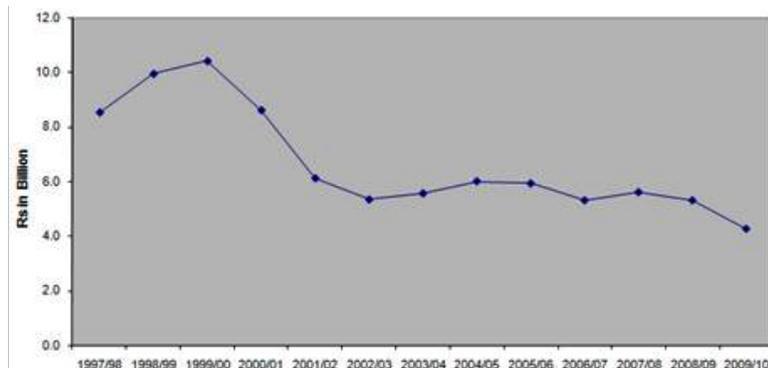
Unlike the situation in several neighboring countries, carpet production in Nepal is concentrated in carpet factories, almost all centrally located in the Kathmandu valley. Unlike other countries, the handmade carpet industry in Nepal did not grow from an existing craft tradition. The industry in Nepal really started during the late 1950s and early 1960s by Tibetan refugees. The first carpet-making workplaces were established at the three largest camps for Tibetan refugees, and the workers were refugees from the camps. The first exports of hand-knotted wool carpets from Nepal were in 1964. As international demand grew, the camp-based producers began hiring Nepali workers; Nepali entrepreneurs became involved; and more manufacturing workplaces were started outside the refugee camps. The handmade carpet manufacturing industry became incorporated into the Nepali economy as a factory-based industry with essentially all of the carpet manufacturing taking place in the central Kathmandu valley (KC, et al., 2002).

From 1975 to 1976, the volume of exports tripled, and the industry continued to grow during the 1980s and early 1990s. The carpet sector became a leading industry in export production and employment in Nepal, reaching its peak in 1993-1994 when the industry employed an estimated 250,000-300,000 workers in 2,000 factories and exported 190 million USD of carpets, which equaled 65 percent of Nepal's total exports. Since then, the Nepali carpet industry has diminished in size and importance as international demand for Nepali carpets decreased. In addition, 1998 was a global recession, and Nepal's state of emergency started in late 2001. Industry informants reported that 20-40 percent of Nepal's carpet factories closed during the state of emergency; the 2002 ILO study noted that one-third to two-thirds of the factories registered with the Central Carpet Industry Association (CCIA) appeared to have closed (KC, et al., 2002).

The value of Nepal's carpet exports were 10.4 billion rupees (132 million USD) in 1999-2000. After that, the value dropped sharply for two years, and then, since 2002, has remained relatively

stable (see Figure 1). The value in 2008-2009 was 5.4 billion rupees (68 million USD) (GoN Trade Export Promotion Council).

**Figure 1. Value of Nepal's Carpet Exports, 1997-2010**



Source: Nepal's Trade Export Promotion Council

## **2.3. CHILD LABOR IN THE CARPET INDUSTRY IN NEPAL**

### **2.3.1. Estimated Prevalence of Child Labor in the Carpet Industry**

The number and prevalence of children working in the carpet industry in Nepal have been disputed, with industry and Government estimates being much lower than NGO estimates. The industry is concentrated in factories in the Kathmandu valley, and all previous studies have focused there. Different studies have counted children of different ages (under 14, under 16, and under 18).

A small Government study in 1993 estimated that only nine percent of the workers were children, and a Government survey later in 1993 estimated that children under 14 constituted 0.76 percent (less than one percent) of the workers. The Government's numbers from the survey show that 19.2 percent of the workers were children under 18 (USDOL, 1994). Both statistics are shown in Table 1.

In 1993, a Nepali child's rights advocacy NGO (Child Workers in Nepal Concerned Centre) conducted a large-scale survey by interviewing children working in carpet factories in the Kathmandu valley. CWIN estimated that 150,000 children (50 percent) were employed in the industry workforce (Pradhan, 1993). That survey revealed the abusive working conditions of child carpet workers and the size of the problem and was the impetus for international attention and a national campaign. The estimate was widely cited, although it was derided as "highly exaggerated" in the 2002 ILO report (KC, et al., 2002). The

CWIN study also reported that certain clans and ethnic groups predominated among the child carpet workers. The Bhote clan (Tamang, Lama, and Sherpa) constituted 85 percent of the children working in the carpet industry, and only the minority came from the Newar, Chhetri, Brahman, and Magar communities (Pradhan, 1993).

In 1994, an extensive study by the National Society for Protection of Environment and Children (NASPEC) reported that many children working in the carpet industry had been rescued, but children were still working in carpet factories. That survey did not produce an estimation of the number or prevalence of child labour (New ERA, 1996). Another 1994 study by an NGO, the Asian-American Free Labor Institute, estimated that children under 14 represented 30 percent of the factory workforce (AAFLI, 1994, cited in USDOL, 1994).

The ILO was involved in a series of studies. A 1998 survey with ILO and the Ministry of Labour reported the prevalence of child carpet weavers to be 11 percent (Chapagain, et al., 1998). The rapid assessment conducted by ILO in 2002 noted the prevalence of children to be 12 percent (KC, et al., 2002). Based on the number of children of different age ranges presented in that report, prevalences were calculated for different categories; children under 14 represented less than one percent (see Table 1). In 2012, it was reported that carpet factories were increasing their employment of bonded child labor, but without any specific statistics (Anon, 2012).

A 2003 study surveyed children working in spinning wool into yarn for the carpet industry. By 2003, half of that industry was located in the Kathmandu valley, and the other half was located in eastern districts, primarily in Bhutanese refugee camps. More than 90 percent of the spinning was done by women and girls. The study estimated that there were 8,769 total workers spinning wool in factories. Three percent (n=283) were under 14 years; nine percent (n=788) were under 16 years; and 14 percent (n=1,256) were under 18 years (see Table 1).

**Table 1. Child Labor Estimates in in Nepal's Carpet Industry, 1993-2006**

| Year | Source                                   | No.     | Prevalence   | Age  |
|------|--|---------|--------------|------|
| 1993 | CWIN (Pradhan, 1993)                     | 150,000 | 50 percent   | 5-15 |
| 1993 | Government                               | -       | 9 percent    | 5-17 |
| 1993 | Government                               | 4,499   | 19.2 percent | 5-17 |
| 1993 | Government (same as above)               | 178     | >1 percent   | 5-13 |
| 1994 | AAFLI                                    | -       | 30 percent   | 5-13 |
| 1998 | Chapagain, et al., 1998 (BISCONS)        | -       | 11 percent   |      |
| 2002 | ILO – IPEC (KC, et al., 2002)            | 7,689   | 12 percent   | 5-17 |
| 2002 | ILO-IPEC (same as above)                 | 5,305   | 8 percent    | 5-15 |
| 2002 | ILO-IPEC (same as above)                 | 538     | >1 percent   | 5-13 |
| 2003 | Nepal RugMark Foundation (spinning wool) | 1,256   | 14 percent   | 5-17 |

### 2.3.2. Nature of Children's Work in the Carpet Industry in Nepal

The carpet research project studied children's work throughout the production process from the preparation of raw wool (carding, spinning, dyeing, etc.) to produce dyed yarn through the primary production of carpets and the many specific activities (washing, stretching, clipping, binding, etc.) that resulted in finished export-ready carpets. Unfortunately, almost all the studies of children in the carpet industry in Nepal focused on only one activity -- weaving carpets. The 1994 AAFLI report was an exception in noting that many children were spinning wool into yarn, and others were dyeing the yarn and washing carpets. That narrow focus missed the other activities in which children might have been involved. Other than a 2003 study of spinning yarn (Nepal RugMark Foundation, 2003), there was little baseline information on the nature of children's work in the carpet industry other than carpet-weaving.

### 2.3.3. Reasons Why Children Worked in the Carpet Industry in Nepal

The decision to work in the carpet factories in the Kathmandu valley also meant deciding to migrate away from home. The 2002 ILO study reported that children were more pushed than pulled to migrate to work in the Carpet factories. The main push factors were family poverty and the hardships of living at home, the parents encouraging the children to leave, dysfunctional families, and dropping out of school and needing to work. Many families needed more income, saw little benefit in education, and wanted their children to work to provide an extra income source for the family. Other migrants were running away from home (KC, et al, 2002; World Education, 2009).



Wool spinning factory in Kathmandu



Tools commonly used for weaving



Carpet weavers at a factory in Kathmandu

Among the most important pull factors attracting children to migrate were friends who had left and were working in the carpet factories. When the friends and other workers returned home for the holidays, the children who stayed at home were impressed by the returning workers' clothes and apparent prosperity. The industry had its own reasons for hiring children as workers. Children did not have the same negotiating skills as adults and were easier to manipulate.

### **2.3.4. Occupational Safety and Health Hazards in the Carpet Industry**

Many articles and reports documented unhealthy consequences for children who worked in the carpet industry (World Education, 2009; USDOL, 1994, 2011b; KC, 2002). The factories were often poorly ventilated and crowded with looms, workers, and material. Child carpet weavers suffered from respiratory illnesses and other health problems, and were particularly vulnerable to tuberculosis, due to constant inhalation of dust and tiny wool fibers. Another obvious hazard was the children having to work too many hours (10-16 hours) a day, six or seven days a week every week without rest. The long days spent in cramped positions damaged the children's backs and legs and caused backaches, swelling legs, and severe joint pain. Other commonly reported health problems included swollen knuckles, arthritis, eye strain, and children also complained of sore hands from weaving. Work-caused cuts and wounds were endemic and frequently became infected. Another hazard was sexual abuse by factory managers, co-workers, or labor contractors.

### **2.3.5. Forced and Bonded Labor in the Carpet Industry in Nepal**

The *peskii* system in Nepal involved workers taking advances on their future wages before they started working or while they were working. In the case of children, the advances were paid to the parents. The children started as bonded labor because they had to continue working until the advances were repaid. When the wages the children received, after their employers subtracted the costs of food and training, were not enough to cover the advances, the indebted children had to continue working for the employer (sometimes indefinitely) in order to try to repay their debts (O'Neill, 2004).

In its 1993 study, CWIN estimated that seven to eight percent of the surveyed carpet children were debt-bonded, working to pay debts incurred by their parents; the debts ranged from 100 to 15,000 rupees (2.50 - 375 USD).<sup>7</sup> In its 1994 study, AAFLI reported that none of the surveyed children were debt-bonded, but it was using a different standard, defining debt-bonded as being held and forced to work against their will to repay a family debt. All of the children AAFLI interviewed who had been recruited by a labor contractor (*naike*) had come to work after some advance had been paid to the children's parents. The primary benefit to the parents or family was the initial advance payment, as few of the children reported sending remittances to their families (USDOL, 1994).

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<sup>7</sup> The exchange rate calculations (1:40) were done by CWIN in 1993; this report uses the 1:79 rate for all other displays.

### **2.3.6. Child Trafficking in the Carpet Industry in Nepal**

For trafficking to exist, there must be movement. There was a lot of opportunity for trafficking in Nepal since almost all the children had to migrate to work in the carpet factories because almost all the carpet factories were clustered in the central Kathmandu valley.

The children migrating to the carpet factories were probably not the first from their households to migrate. The 2008 Labour Force Survey noted the importance of migration, especially labor migration, in Nepal. In 2008, one-third of the total population of Nepal had migrated to the place where they were surveyed, and 80 percent of those had migrated from rural areas to urban. Almost half (44 percent) of Nepali households had at least one member absent, usually working elsewhere. The economic importance of those absent members of the household was shown by the fact that 30 percent of Nepali households were receiving remittances. International labor migration was common, as more than one-fourth (29 percent) of households had at least one member of the household living outside Nepal (Graner, 2001).

The children were recruited by many people, including their relatives, neighbors, friends, and local people now working in the carpet industry. Those recruiters were part of the social push and pull factors affecting children's decisions about migrating to work. In addition, there were labor contractors who received advances from factory owners to recruit workers. The contractors would persuade families to send their children to work, sometimes by offering an advance on the child's wages (the *peskii* system) and sometimes by misleading the parents and children about the wages and conditions the child would find at the factory. The contractors would organize the transportation and, once in the Kathmandu valley, transfer the children to the factory owners (KC, et al., 2002; Pradhan, 1993).

Another different aspect of trafficking related to the carpet industry was that girls working in the carpet factories faced the risk of being trafficked into prostitution or slavery-like situations in Nepal or other countries. In 1993, CWIN estimated that 5,000 to 7,000 Nepali girls (10-20 years old) were sold to brothels in India every year (Pradhan, 1993; KC, et al., 2002).

### **2.4. EFFORTS TO COMBAT CHILD LABOR IN THE CARPET INDUSTRY IN NEPAL**

The Government took action in 1993 in response to the information about extensive child labor in the carpet industry. That same year, the Ministry of Labor and Transport Management (MoL) fined 23 factories for employing children. In 1994, the National Society for Protection of Environment and Children (NASPEC) conducted an extensive study of child labour in the carpet industry and reported that many children working in the carpet industry had been rescued following the campaign against child labour by the NGOs and the action in 1993 by the Ministry

of Labour. NASPEC was an NGO formed in 1994 by a coalition of industry groups and NGOs to combat child labor in the carpet industry.

The Government took steps to coordinate efforts against child labor in general by establishing a National Steering Committee that is headed by the Ministry of Labor and Transport Management (MoL), which is the principal Government agency with responsibility for enforcing anti-child labor laws and regulations. That Ministry has a National Master Plan on Child Labor, which is being revised to become a National Master Plan on the Prevention and Elimination of Child Labor. The Government also has established master plans to counter trafficking and to expand access to formal schooling.

The Government and ILO-IPEC have also partnered in several programs on child labor in general that were funded by USDOL. One of those was the Project on Sustainable Elimination of Child Bonded Labour in Nepal (2006-2010) that focused on two systems of bonded labor in Nepal that directly affected children. The program worked directly with children and their families in education and employment and also worked at a more general level to improve national capacity and promote policy reform. A second program was designed to improve the Government's ability to collect and process information about child labor. Another program (New Path New Steps) focuses on education for exploited and at-risk children in several sectors.

International actors and national NGOs have worked together for years to combat child labor in the carpet industry. The 1994 formation of NASPEC was mentioned already. Coordinated efforts also established the Nepal RugMark Foundation in 1995, which focuses on promoting child labor-free carpet production, monitoring child labor in carpet factories, and sponsoring education programs for children rescued from working in the factories and community-awareness programs for workers (National Labor Academy, 2007). Joint efforts in 2000-2001 identified priority areas for combating child labor and led to conducting a number of rapid assessments of those sectors as a basis for effective action.

The Brighter Futures Program, funded by USDOL, coordinated the efforts of a number of NGOs to provide educational support to help remove children from the worst forms of child labor, including working in the carpet industry, and to provide support to families to improve their livelihoods (World Education, 2009).

## RESEARCH METHODOLOGY

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### 3.1. RESEARCH FOCUS

This research starts by describing the number, prevalence, and working conditions of children working in the carpet industry and then analyzes the prevalence and nature of child labor among those working children.

#### 3.1.1. Research Questions

The purpose and objectives were noted earlier. The research was designed to address a set of specific questions that were asked by USDOL. Each question is addressed in the results or discussion sections of this report (specific sub-section in parenthesis).

- (1) How prevalent is the use of children in the carpet industry in Nepal? (see 5.2)
- (2) What are the demographic characteristics of children and families working in the carpet industry? (see 5.3.2.1, 5.3.2.2, and 5.4.1)
  - a. What are the individual characteristics of children working in the carpet industry (i.e., age, sex)? (see 5.4.1)
  - b. What is the educational status of children working in the carpet industry, and what is the educational status of their families? (see 5.3.2.1 and 5.4.2)
  - c. What are the household demographics, working status, and socioeconomic status of working children's families? (see 5.3.1.1, 5.3.1.2, and 5.3.2.1)
- (3) What is the relationship between a child's working status and educational opportunities? (see 5.4.2)
  - a. Are there particular educational barriers that make children more vulnerable to working in the carpet industry? (see 5.4.2 and 5.4.1)
- (4) To what extent do children and families migrate to work in the carpet industry? (see 5.5.3)
  - a. What role does the family play in children's migration? ( see 5.5.3 and 5.7.4)
- (5) To what extent are children who work in the carpet industry working under forced and/or bonded labor conditions? (see 5.7.3)
  - a. To what extent are children trafficked into these situations? (see 5.7.4)
- (6) What particular aspects of the carpet industry encourage or discourage the use of children? (see 5.3.3 and 5.4.2) Are there aspects of the carpet industry that lead to greater exploitation of children? (see 5.3.3)

- a. How do children enter into the carpet industry? (see 5.5)
  - b. What percentage of children work for their families vs. work as hired labor? (see 5.6.7)
  - c. Are there wage/payment systems that lead to exploitation of child workers? (see 5.6.5)
  - d. Is more or less child labor anticipated in the carpet industry in each country in the future? (see 5.3 and 6.3)
- (7) What are children's working conditions in the carpet industry? (see 5.6)
- a. In what specific activities are children engaged? (see 5.6.1)
  - b. What are the occupational safety and health hazards to which children are exposed? (see 5.6.4)
  - c. What are the typical hours of work? (see 5.6.3)
  - d. How are children paid (piece rate, by time period, etc.), and how does this relate to their overall conditions of work? (see 5.6.5)
  - e. How does children's work affect their participation in education? (see 5.4.2)
  - f. To what extent are children abused in the workplace, and by whom? And what is the nature of that abuse? (see 5.6.4)
- (8) In what regions is the carpet industry concentrated, and are there concentrated areas where children are most likely to be working? (see 5.2.1)

### **3.1.2. Research Populations of Interest**

#### **3.1.2.1. Children Working in the Carpet Industry**

The target population was the population of children (persons younger than 18 years of age) who were working in the production process (defined by 17 specific activities) of the handmade carpet industry in Nepal during the period of the research (2008-2009). That population included any refugee child carpet workers who were resident in Nepal at that time. The project assumed that the type of establishment influenced the characteristics of the work and working conditions and sampled separately two subpopulations of child carpet workers.

- Household-based child carpet workers. The majority of the child carpet worker population in Nepal lived and worked in carpet households (HHs). Almost all of the HH-based child carpet workers were living and working in their own family households. There were two clearly differentiated types of HH: processing HHs, which were involved in the production of wool for the carpet industry, and production HHs, which were involved in the weaving and finishing of carpets.

- Factory-based child carpet workers. A minority of the child carpet worker population in Nepal worked in carpet factories in the Kathmandu Valley, and almost all factory-based child carpet workers were hired workers.

### **3.1.2.2. Children Working in Other Industries**

The project compared the conditions of child carpet workers with those of children who worked in other industries. To do that, in each area where the study surveyed carpet HHs and HH-based child carpet workers, the project also surveyed an equal number of non-carpet HHs. The study interviewed all the children aged 5-17 within the carpet and non-carpet HHs. The populations of non-carpet HHs and the children in those HHs who were working in other industries were sampled only for the purpose of comparison with carpet HHs and child carpet workers, not for extrapolation to estimate any national populations.

### **3.1.3. Protection of Human Subjects**

ICF International was in compliance with Department of Health and Human Services regulations for the protection of human research subjects (45 CFR 46) and had established an Institutional Review Board (IRB) to review all research involving human subjects. The IRB was required to submit documentation of its reviews and approvals to the Federal government. The IRB at ICF International<sup>8</sup> was responsible for the protection of human subjects in this research, including supervising the training and certification of the project director/principal investigator in the protection of human research participants. The ICF IRB and the client of this research (USDOL) reviewed and approved the design, instruments, and protocols of this study. The application to the IRB seeking its approval for this study included a detailed description of the research design, any possible risks, and steps taken to avoid or mitigate them, as well as copies of all instruments, protocols, and training materials.

The IRB review and approval process ensured that persons participating in this study were protected from any risks of harm associated with participating in the study, that children were presented with research situations appropriate to their ages, that the research did not compromise the children's emotional or physical well-being, and that all IRB-approved study procedures for the protection of human subjects were implemented, even when study procedures were outsourced to another company or vendor. The organization in Nepal (New Era) that was subcontracted to collect and process survey data for the study also agreed to a detailed set of IRB procedures for implementing the study and protecting the human subjects and the data, including oral informed

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<sup>8</sup> The company was named Macro International when the Cooperative Agreement was signed in 2007.

consent from all participants. This consent detailed survey procedures, confidentiality, survey purpose, and benefits of the survey, as well as the right to refuse to participate.

### 3.2. CONCEPTUAL AND OPERATIONAL DEFINITIONS

The project established explicit definitions for all important factors based on the concepts described in UN and ILO documents and academic articles and also, when needed, created explicit operational definitions that consisted of specific features that researchers were able to directly measure.<sup>9</sup>

#### 3.2.1. The Carpet Industry and Establishments

This research defined the carpet industry to include 17 specific work activities that started with processing raw wool and ended with export-ready carpets (see Table 2).

**Table 2. Seventeen Activities of Manual Labor that Defined the Carpet Industry’s Production Process**

|            |    | Carpet related Activities  |
|------------|----|--|
| Processing | 1  | Separating wool according to its colors (e.g. in a bale there may be different colors of wool mixed together like black, white, brown, etc.)   |
|            | 2  | Cleaning/sorting out goat drops/other dirt from the raw wool   |
|            | 3  | Washing wool or silk   |
|            | 4  | Carding wool   |
|            | 5  | Sun drying wool  |
|            | 6  | Spinning wool to make thread   |
|            | 7  | Dyeing thread  |
|            | 8  | Balling thread   |
|            | 9  | Mixing/joining many colored yarns into one (e.g. same as plying, but joining is done usually for blending 3/4 different colors into one, depending upon the type of prints and patterns of the carpet) |
|            | 10 | Plying many yarns (usually silk) into one to make it thick (e.g. 12 plies, 15 plies, 20 plies, etc. depending upon the No of knots of the carpet)  |
| Production | 11 | Tufting carpets  |
|            | 12 | Hand looming carpets   |
|            | 13 | Weaving carpets  |
|            | 14 | Washing carpets  |
|            | 15 | Trimming carpets   |
|            | 16 | Stretching carpets   |
|            | 17 | Repairing errors/assuring rows are straight  |

<sup>9</sup> ILO’s guidelines for survey research noted that, “Operational definitions of the concepts...are needed to design a survey, which break down the legal definitions into elements that can subsequently be measured” (ILO, 2011).

A carpet establishment was any location where one of the 17 carpet industry activities occurred.

- A carpet factory was any establishment using primarily hired labor.
- A carpet HH was any establishment using primarily family labor.

The standard operational definition of a household (HH) was a person or group of persons who lived together in the same house or compound and shared the same cooking arrangements. The HH did not have to be a family and might include employees.

- A carpet HH was a HH in which at least one member worked in the carpet industry.  
A non-carpet HH was a HH in which no member worked in the industry.

The standard two reference periods to measure the work force were:

- Current workers, persons who had worked at least once during the last seven days.
- Usual workers, persons who had worked at least once during the last 12 months.

This study followed standard practice by reporting most measures on the basis of usual workers. The study measured and reported on current workers for detailed specific information about the number of hours worked during the day, time of day for activities, etc. The project asked only about the last few days because children's recollection would be more accurate for that shorter and more recent period.

### **3.2.2. Working Children**

This report clearly separates the description of working children from the description of child labor. Most of the report describes the living and working conditions of children who work in the carpet industry. Afterwards, the study analyzes the nature and conditions of their work to estimate the existence and prevalence of child labor among those working children.

This study defined all persons below the age of 18 years as children and studied only the children in the 5-17 year age range, a practice that has been adopted by SIMPOC and many other child labor studies (ILO, 2004, p. 20). This range considers children under five years old to be too young to be interviewed, and they also are outside the usual child labor pool.

Working children were defined as those in the economically active population. The economically active population "comprises all persons of either sex who furnish the supply of labor for the production of economic goods and services as defined by the United Nations system of national accounts and balances during a specific time referenced period" (ILO, 2000).

This definition included the following: paid employees (paid in cash or in kind), self-employed persons, own-account workers, apprentices who received payment in cash or in kind, and unpaid family workers who produced economic goods or services for their own household consumption.

This definition excluded the following: household chores, including fetching wood and/or water,<sup>10</sup> and activities that were part of schooling (ILO-IPEC, 2004).

One of the goals of this study was to obtain a precise measure of the prevalence of children working in the carpet industry; another was to compare children's work in the carpet industry with children's work in other sectors. For this reason, information about work was collected in the following two ways:

- Carpet work was measured by the question -- "Have you engaged in (*comprehensive list of carpet-related activities*) for at least one hour in the past 12 months?" A person was considered to have worked in the carpet industry if she/he has done any of the listed activities for at least one hour in the last 12 months.
- Non-carpet work was measured using a simple direct question -- "In the past 12 months, did you engage in any income generating or productive work not related to processing wool or silk or producing carpets?"

### **3.2.3. Unacceptable Work (Child Labor)**

The project wanted to differentiate between those forms of children's work that were considered acceptable, based on national and international standards, and those forms of children's work that were considered unacceptable (child labor). By unacceptable work, the study meant that the nature of the work and/or the working conditions exploited and/or abused working children. In addition to identifying those exploitative situations, the project wanted to measure them and estimate the prevalence of unacceptable work. By prevalence, the study meant the percentage of children working in the carpet industry who were engaged or trapped in unacceptable work.

This study looked to international conventions for guidance in identifying unacceptable kinds of work and working conditions. In general, international and Nepalese standards agreed. Nepal had ratified many ILO conventions and the UN Convention on the Rights of a Child (UNCRC), and Nepal had passed legislation that was based on or adapted international standards. Although the international and national standards agreed in general, the two sets of standards differed in some specific details and in the implementation. This study relied on international standards whenever there were differences between the two sets of standards and utilized Nepalese standards when they defined specific issues that were not defined by international standards.

The project developed a set of measures<sup>11</sup> to indicate and estimate the prevalence of three forms of unacceptable work in the carpet industry in India:

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<sup>10</sup> SIMPOC-supported surveys have considered fetching wood and water as work activities. The study decided, in the context of Nepal, that including those activities as household chores facilitated understanding the difference between work and chores.

<sup>11</sup> The composition of the measures is described in more detail in Appendix C.

- **Hazardous work.** The study examined the nature of the work (whether it was defined as inherently hazardous), the characteristics of the working conditions and workplace, and the medical histories of the working children.
- **Excessive work.** Another measure calculated the number of hours of total work for each child and compared that with the amount of work that was considered to be appropriate for the child given his or her age.
- **Trafficking.** Another measure examined the indications that there was child trafficking. Trafficking differed from forms of unacceptable work because trafficking (the organized movement of children for the purpose of exploitation) preceded unacceptable work.

This study did not collect sufficient information to create measures that indicated and estimated the prevalence of other forms of unacceptable work, such as forced labor and bonded labor. However, the study identified a number of variables that were critical to understanding those unacceptable forms, and this report provides a descriptive analysis of those variables, including whether there were indications that children were forced/coerced to start working or to continue working, and/or whether there were indications that children could not stop working and leave the workplace due to force, coercion, or outstanding debts.

### 3.3. RESEARCH DESIGN

The project's approach combined qualitative and quantitative research techniques. The qualitative research helped the project develop a synthesis of the general features of existing systems and conditions and guided the development of instruments and protocols for the subsequent formal survey.



Exploratory research team in Kathmandu

Participatory observation

Field trip in the Nepali Terai

#### 3.3.1. The Prevalence and Conditions (PC) Study

The primary source of information for this report was the Prevalence and Conditions (PC) Study in 2008-2009, which consisted of cross-sectional sample surveys of carpet factories and carpet HHs. The instruments for the surveys were based on standard questionnaires<sup>12</sup> that were augmented by several modules added specifically for this study, including a battery of carpet-related activities, a literacy/numeracy module, and a psychosocial quality-of-life module (Personal Well Being Scale). ICF designed the master questionnaires.

#### **4.3.2.1. The Carpet Factory Survey and Instruments**

In the survey of carpet factories, the primary sampling unit (PSU) was the individual factory. The study utilized three structured instruments for the factory survey: the manager and worker questionnaires and the observation sheet. In each sampled carpet factory, after interviewing the manager and a sample of carpet workers, the team recorded its observations about the factory, the factory workforce, and the conditions of the interviews.

#### **4.3.2.2. The Household Survey and Instruments**

In the survey of carpet households (HHs), the PSU was the geographic area that contained carpet HHs. In each sampled PSU, the team identified and interviewed a random sample of the carpet HHs and then interviewed an equivalent number of randomly selected non-carpet HHs.

The study utilized three structured instruments for the HH survey: the head of HH and child questionnaires and the observation sheet. After interviewing the head of HH (or the adult most knowledgeable about the HH and its members) and all children aged 5-17 in the HHs, the team recorded its observations about the PSU and the conditions of the interviews.

#### **4.3.2.3. Comparing Working Children**

The children working in the carpet industry were the key targeted population, but this study also established a benchmark for comparing the working and living conditions of HH-based child carpet workers with the conditions of neighboring children who lived in non-carpet HHs and worked in other industries.<sup>13</sup> The study assessed the influence of household poverty and

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<sup>12</sup> This study adopted many questions from the standardized instruments that were developed by ILO's Statistical Information and Monitoring Programme on Child Labour (SIMPOC) and USAID's Demographic and Health Surveys (DHS).

<sup>13</sup> Other possible comparisons were not pursued in this report because they were not of equivalent priority. The study collected the data to compare: (a) child carpet workers, children working in other industries, and non-working children in carpet HHs; (b) children working in other industries and non-working children in non-carpet HHs; and (c) all working and all non-working children.

indebtedness and whether children working in the carpet industry were better or worse-off than neighboring children working in other industries. Both samples were selected in the same PSUs, so many geographical and household variables were relatively similar.

### **3.4. SAMPLING**

#### **3.4.1. Sampling Frames**

To develop the sampling frames, ICF and New ERA conducted both secondary and primary research. Secondary research included collecting, updating, and consolidating the existing lists of exporters, manufacturers, processors, and contractors. Initially, there was no existing list of household-based establishments available from any sources.

A key first step in the primary research was a field trip by car by the ICF project director and the New ERA project director to various areas to observe possible areas of industry activity. That trip identified the need to study mountain areas and wool-processing as well as carpet factories and HH-based carpet production.

The teams collected seven different lists of exporters, manufacturers, and processors from five different organizations that were established for the promotion of the carpet industry in Nepal, including the Carpet and Wool Development Board (CWDB), Central Carpet Association (CCA), Carpet Manufacturers Association (CMA), Trade Promotion Centers (TPC), and RugMark. The team standardized a list after reviewing all the lists, eliminating the redundant entries, and including the new ones. The teams also collected a list of contractors from the Central Woolen Yarn Industries Association (CWYIA), which was then updated in consultation with the manufacturers who used to get their yarn supplies from the contractors. The manufacturers were also asked to mention the detailed contact addresses of their respective contractors.

Most of the primary research involved phone calls, site visits, and personal interviews. This started with phone calls to each carpet factory (CF) to identify its current functional status and to make an appointment for an interview. These were followed by site visits to each factory and interviews with the manager/key informant of each establishment. During the interview, the team asked managers/key informants about the types of activities they were performing, which allowed the team to classify each establishment in a category (e.g., exporter/manufacturer, manufacturer, manufacturer/ processor, or processor). During each interview, the team also used the snow-balling technique to identify and include any new establishments that were functioning as factories during the survey period but were not on the existing lists.

There was no existing list of cottage-based (or HH-based) establishments, so the field teams asked each of the exporters, manufacturers, and processors whether they had noticed any HH-

based establishments around them or had received any carpet supplies from such industries. This allowed the team to list HH-based establishments in Kathmandu valley. The team then made telephone calls to each of these cottage/home-based establishments for interviews followed by site visits to each cottage and interviews with the manager/key informant of each establishment. The team continued using the snowballing technique by asking HH-based managers to identify any more home-based establishments that were not included in the lists but were operating during the survey period. None of these field enquiries showed other home-based production outside of the Kathmandu valley.

The initial field trip had identified that there were contractors around the country who received raw wools in large quantities (usually transported on top of busses) and subcontracted the carding and spinning of yarn to individual households. The teams had collected names and addresses of contractors (see above) from the secondary research (CWYIA) and from manufacturers. Field teams then visited those areas, consulted each of those contractors, asked them for their complete contact addresses including phone numbers and email addresses, and prepared lists of communities and corresponding numbers of households/women involved in carding/spinning activities.

The initial field trip had identified that people in some sparsely settled mountain districts tended to weave carpets (HH-based establishments), possibly using the wool from their own animals. From preliminary enquiries, it appeared that there were four mountain districts (Manang, Mustang, Solukhumbu and Sindhupalchok) where the people weaving carpets were not in any associations or in contact with the national industry and were individually selling their carpets to tourists trekking through the mountain areas. The field teams visited the four mountain districts. Upon their arrival at the district headquarters, the teams consulted each District Cottage Industry Office, made lists of the Village Development Committees (VDCs), wards, and communities with the potential number of carpet weaving households, and then walked through each VDC and made a preliminary count of the number of carpet-weaving households by ward/community.

The original plan had been to have two sampling frames, one of factories and the other of HH-based establishments. Due to the unexpectedly large number of wool-processing households (19,548) and areas that were reported, the project decided to stratify the household (HH) stratum into two sub-strata (wool-processing and carpet-weaving) of households and separately survey each sub-stratum. The final sampling frames included:

- The frame of wool-processing HH areas, including 20 districts and an estimated 19,548 processing HHs.
- The frame of carpet-producing (weaving) HH areas, including 7 districts and an estimated 1,438 production HHs.
- The frame of carpet factories, with 948 factories, 935 of them in KTM Valley.

For greater detail on the final sampling frames, see Table 30 for the household frames and Table 31 for the factory frames.

### **3.4.2. The Samples of Areas, Households, and Workers**

The original plan had been to randomly survey areas of carpet-weaving households with the expectation that the result might be that as few as 50 HH-based child carpet workers were surveyed. To have more confidence in statistical calculation of the prevalence and conditions of child labor in the two types, the project decided to increase the total number of households that would be surveyed. The project decided to survey 300 processing HHs and 300 weaving HHs and an equivalent number of non-carpet (control) households for a total of 1,200 households, 600 of which would be carpet HHs.

#### **3.4.2.1. Sampling the Nepal Processing HH Stratum**

The final processing sampling frame was stratified geographically into five strata. The three districts in the Kathmandu valley (Central region) were merged to form one stratum (Kathmandu). The two mountainous districts in the Western region were merged to form another (Manang/Mustang). Each of the two districts in the Eastern region was a stratum (Jhapa and Morang), as was the remaining district in the Western region (Kaski). The target number of 300 processing HHs was allocated to the five strata using PPS. For selection purposes, the target of 300 processing HHs was divided into 60 units of five households each. After the 300 HHs had been allocated to the strata, areas within each stratum were selected randomly. Areas that had the largest populations of processing HHs were selected numerous times. The result was that a total of 38 areas in 19 VDCs in six districts were selected from the sampling frame.

In every location the teams interviewed an equal number of processing and non-carpet HHs. In each location the team identified the carpet HHs and then interviewed a random sample of the carpet HHs and a random sample of the non-carpet HHs. Therefore, the total sample for the processing HHs survey was 600 HHs, 300 being processing HHs and 300 non-carpet (control) HHs. At the end, there was a small shortfall in the number of carpet HHs in Manang district, which limited the final sample, which included:

- 285 processing HHs and 285 non-carpet HHs
- 405 children in processing HHs and 265 children in non-carpet HHs
  - 121 of the 405 were child carpet workers

### **3.4.2.2. Sampling the Nepal Production HH Stratum**

The final production sampling frame was stratified geographically into four strata, one including the districts in Kathmandu valley (Bhaktapur, Kathmandu, Lalitpur) with an estimated total of 141 CHHs, and the other three strata including three districts in the mountain region (Manang, Mustang, Sindhupalchok), with an estimated total of 1,253 CHHs.

The sample was stratified proportionally to the number of producing households in each strata. Households in KTM valley were listed individually and selected by systematic random sampling. Households in the other three strata were selected using cluster sampling with probability proportional to the population of production HHs in each cluster.

The carpet and non-carpet households within each cluster were listed and selected using systematic random sampling. In every location the teams interviewed an equal number of production and non-carpet HHs. In each location the team identified the carpet HHs and then interviewed a random sample of the carpet HHs and a random sample of the non-carpet HHs. The household survey included interviews with the most knowledgeable household member and all children aged 5-17 years.

Near the end of the survey, there was a major unanticipated shortfall in the number of carpet HHs in the two mountainous districts in the western region, particularly in Mustang district, where more than two-thirds of the sample weaving HHs were supposed to be located. There were also fewer weaving HHs than expected in Manang district, but there were enough carpet HHs to satisfy the target there. We responded by increasing the size of the sample in the valley districts (by 10) and in Sindhupalchok district (by 54) and by a significant reduction in the total target number. The final sample consisted of:

- 220 production HHs and 180 non-carpet HHs
- 259 children in production HHs and 149 children in non-carpet HHs
  - 77 of the 259 were child carpet workers

### **3.4.3. The Samples of Carpet Factories and Workers**

The final sampling frame included a total 935 factories. 13 factories, or 1.4 percent of the total, that were located outside the Kathmandu valley were excluded for logistical reasons. The project drew from this frame a sample of 250 factories, proportionally stratified by factory size, defined by the estimated number of workers in each factory (1-29, 30-49, 50-99 and 100 or more). Fieldwork showed that there were some factories that were found closed during the survey period due to low demand of carpets from the international markets or economic recession. Hence, the ICF team selected some more factories as replacements. Overall, a list of 314

factories (including substitutions) was sent to New ERA for the survey of which 241 were surveyed and remaining 73 (23%) were found to be closed.

Originally, only the child carpet workers were to be interviewed in the factories, but qualitative research revealed that focusing only on the child workers would inhibit and potentially deny the team's access to factory workers. The team expanded the survey focus to interview a sample of all factory workers with a disproportionately larger sample of younger workers. In each factory, after interviewing the manager, the team started by counting and recording the total number and gender of workers and listing them in two groups:

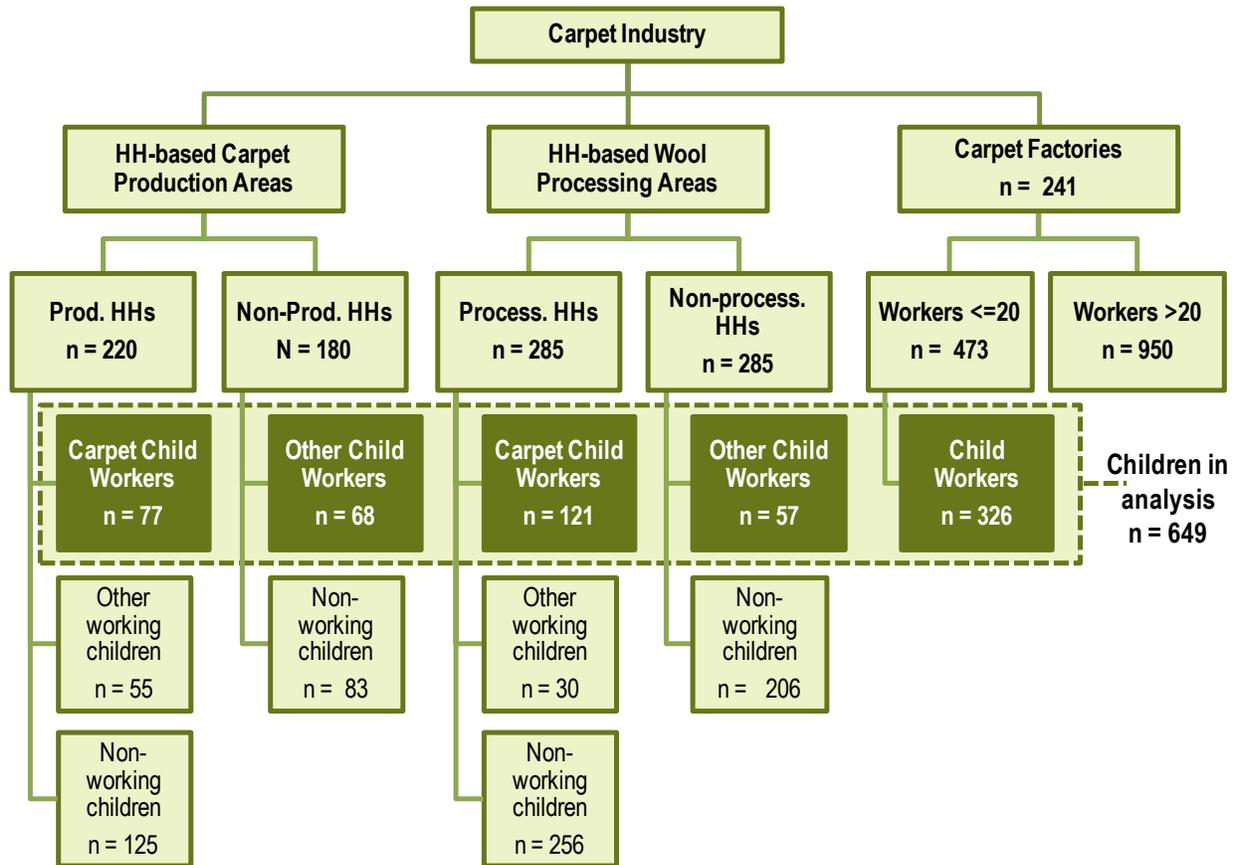
- A Group consisted of those workers who appeared (based on visual observation) to be 20 years old or younger.
- B Group consisted of those who appeared to be older than 20 years.

The study set a maximum number of workers to be interviewed per factory, regardless of the total number of workers in the factory. In each factory, four workers were selected at random from each group to be interviewed. If there were four or fewer workers in a group, then all of them were interviewed. By dividing the workers at an older age (20-21) and interviewing workers from both groups, the innovative approach served to diffuse the sensitivity and resistance. The final sample included:

- 241 factories and factory-managers
- 473 workers found in A Group
  - 326 of the 473 were child carpet workers (under 18)
- 950 workers found in B Group

Figure 2 summarizes the sampling design for the PC study and the final samples collected. Note that data were collected for six different groups of children, but only five groups of children were used in the analysis presented in this report. Although these five groups are disaggregated in Figure 2 for clarity, children in processing and production areas were analyzed in the rest of the report as a single group (HH-based children).

Figure 2. Sampling Design and Final Sample for the Prevalence and Conditions Study in Nepal



Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

### 3.5. IMPLEMENTATION OF THE SURVEYS

#### 3.5.1. Translating, Customizing, and Pretesting the Instruments

ICF designed the master questionnaires and then sent them to New Era, the research organization that implemented the survey in Nepal. New Era customized the questionnaire to the terms and conditions in Nepal, including changes to match Nepal's administrative units, languages, religions, and ethnicities. The instruments were then translated into Nepali and cognitive tested among children in the GoodWeave hostel, government schools, restaurants, tea stalls and individual households in non-sample areas in the Kathmandu valley and Sindhupalchok district. This cognitive testing allowed the research team to validate the Nepali translations and to verify that respondents, particularly children, could adequately comprehend the questions and provide valid responses.

### 3.5.2. Recruiting and Training Interviewers

Fieldwork was carried out under the leadership of a Project Director, with 2 Research Assistants and 18 Field Interviewers. These staff members were selected from among the regular staff of New ERA with previous experience with similar surveys. A three-week long training program was organized for the team members at New ERA's Kathmandu offices, covering survey contents and methodology. The training program also included three day's field practices in the non-sample area which helped interviewers get familiarized with the structure of the instruments, skipping patterns of the questions and recording processes of the pre-coded response categories.

### 3.5.3. Data Collection

The fieldwork and supervision of the household and factory surveys took 8 months. The survey started with processing households in eastern Nepal (Jhapa and Morang) from December 2008 to January 2009. The fieldwork of processing and producing households in the Kathmandu valley and Sindhupalchok districts was carried out in February-March, 2009. Although the Sindhupalchok district lies in the mountain belt, fieldwork in the area took place during late winter, as the survey area was located in the low altitude river-valleys and was not snowed in. However, the survey area in Manang and Mustang districts was comparatively different; and the field work was possible only during the month of April when the snow started melting down. The team then came down to Kaski district and accomplished fieldwork there with the processing households in May 2009. Finally, the team conducted the factory survey in the Kathmandu valley during the months of June-July 2009.



Cognitive testing - GoodWeave School



Field workers in the Terai



Conducting a household interview

### 3.5.4. Data Processing

The data received from the individual interviews was recorded in a pre-coded structured questionnaire itself. The completed questionnaires were edited manually at two levels, first by the field supervisors in the field itself, and then by the professional data scrutinizers at New ERA office. Since data collected were all in quantifiable form, they were entered into the computers and

edited using FoxPro software package. Under the leadership of a computer programmer, a team of one assistant data processing officer, six editors and four data entry clerks conducted the data entry (double), validation, logical checking, editing and cleaning activities. The clean data sets were then submitted to ICF Macro in SPSS format.

ICF conducted further quality control measures to check for consistency with the sample plan, duplicate records, data completeness (variables, labels, missing data), data validity (frequency distribution anomalies, out of range values), and data consistency (e.g., interviewing dates and length by interviewer, correspondence between number of interviews at each level, skip patterns, etc.).

### **3.5.5. Analysis**

#### **3.5.5.1. Procedures**

Most of the data that were analyzed in this study were quantitative, but qualitative inputs collected during the exploratory phase were interwoven to enhance the depth of the analysis. The study used a descriptive analytical approach using univariate or bivariate analysis.<sup>14</sup> The reference period was work in the last 12 months. The composition of the comparison groups was based on their occupational status during the last 12 months, but work in the last seven days or last three days was used to analyze the specific number of days and hours worked. In several sections of the report, data on children were available from both adult household respondents and the children's interviews. Only the children's reports were used except in cases where the comparison of both reports was critical.

#### **3.5.5.2. Variable construction**

Many of the variables that were studied and questions that were in the survey instruments were standardized and drawn from standard child labor surveys such as those implemented under the ILO SIMPOC program, ICF's Demographic and Health Survey (DHS) or widely-used and pre-coded modules studying literacy and numeracy competence (from the Indian/Prather Annual Status of Education Report) or psychosocial quality-of-life (Personal Well Being Scale). For the analysis of the quantitative data, ICF created all computed variables, including simple variable recodes (age, education, etc.), work status variables, and well-being scales, as well as population weights for each dataset. The indicator of the hazardous nature of work had a simple value system, but the other indicators of child labor were composed of multiple variables.

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<sup>14</sup> The analysis was not based on experimental data, precluding causal inferences.

### 3.5.5.3. Statistical methods

Data in this report were presented in simple tables with the analytic variables presented as rows and the comparison groups as columns. The first rows presented the weighted population estimate (*Weighted N*), rounded to the nearest whole number. The weighted N represented the sample base or denominator used to compute the results shown in each table.

**Missing cases.** Cases with missing responses for a given variable were omitted from the sample base or denominator when analyzing that given variable. The unweighted and weighted number of missing cases was shown in the table notes for each comparison group.

**Rounding errors.** Results were shown as percentages, averages, or medians. Percentages were always column percentages, rounded to the first decimal. The *Total* column summed the entire sample. Some totals did not sum to 100 percent. Some column and row totals did not add up because of rounding or because multiple items or multiple-response items were reported in the same table.

**Insufficient sample size.** Columns with a small sample size (unweighted  $n < 30$ ) were shown in table footnotes as having “insufficient sample” size, and results were omitted (shown as \*).

**Significance testing.** Difference between groups (columns) were tested for statistical significance using the SPSS complex samples module to adjust for the complex sampling design, with standard errors stratified by type of establishment and geographical setting, and clustered by location and establishment. The standard 95 percent confidence interval was used for all statistical tests. Significant results were flagged at the 95 percent confidence level (\*) and at the 99 percent confidence level (\*\*). In the case of multiple group comparisons, significant differences between specific pairs of groups were located by examining post-hoc tests. Since reporting post-hoc tests for each pair of groups would make reporting too cumbersome, the specific group differences driving significant results were only mentioned in the body of the report.

Significant differences for percentages are tested using the Pearson chi-square homogeneity test or the adjusted likelihood ratio statistic<sup>15</sup>. In the case of variables with multiple response categories, significant differences between specific cells were located by examining the adjusted standardized residuals (ASRs). Since reporting ASRs for each cell would make tables too cumbersome, significant differences between cells were only mentioned in the analytical text accompanying the tables. In the case of continuous variables (shown in tables with their median or average values), significance was tested using Analysis of Variance (ANOVA). The *p*-value referred in those cases to the *F* statistic.

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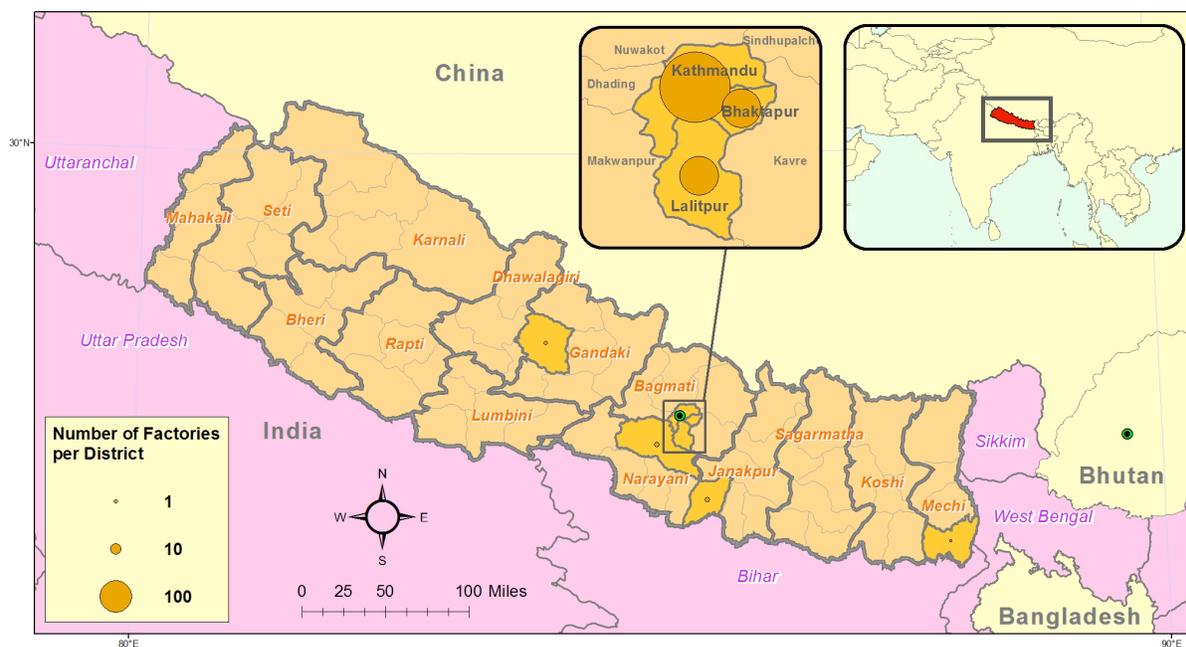
<sup>15</sup> The chi-square test is indicated when no more than 20% of the expected counts are less than 5 and none is less than 1. When these conditions are not met, the adjusted likelihood ratio statistic is used.

## RESULTS

### 4.1. THE CARPET INDUSTRY OF NEPAL

Carpet factories and carpet households (HHs) could be found in 22 of the 75 districts in Nepal, although there were clearly defined clusters that contained most establishments. This was most evident in the case of carpet factories, which were almost exclusively located in the three districts within the Kathmandu (KTM) valley (see Figure 3).

Figure 3. Regional Distribution of Factory-Based Carpet Industry Activities in Nepal



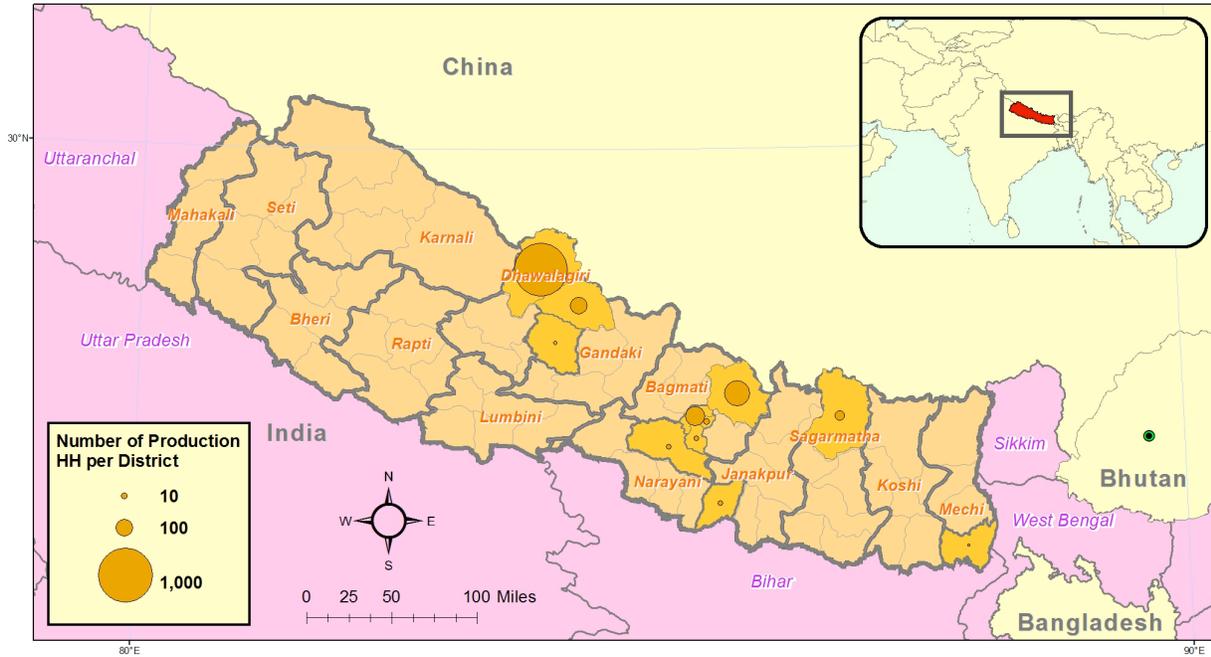
Source: Sampling frame developed for the factory-based PC study.

Disclaimer: The above map did not reflect a position by ILAB or ICF on the legal status of any country or territory or the delimitation of any frontiers.

Carpet households were more scattered, although there were also areas of concentration. In the case of production households, the main concentrations were in Mustang district, with secondary clusters in Sindhupalchok, KTM valley, and Manang (see Figure 4).

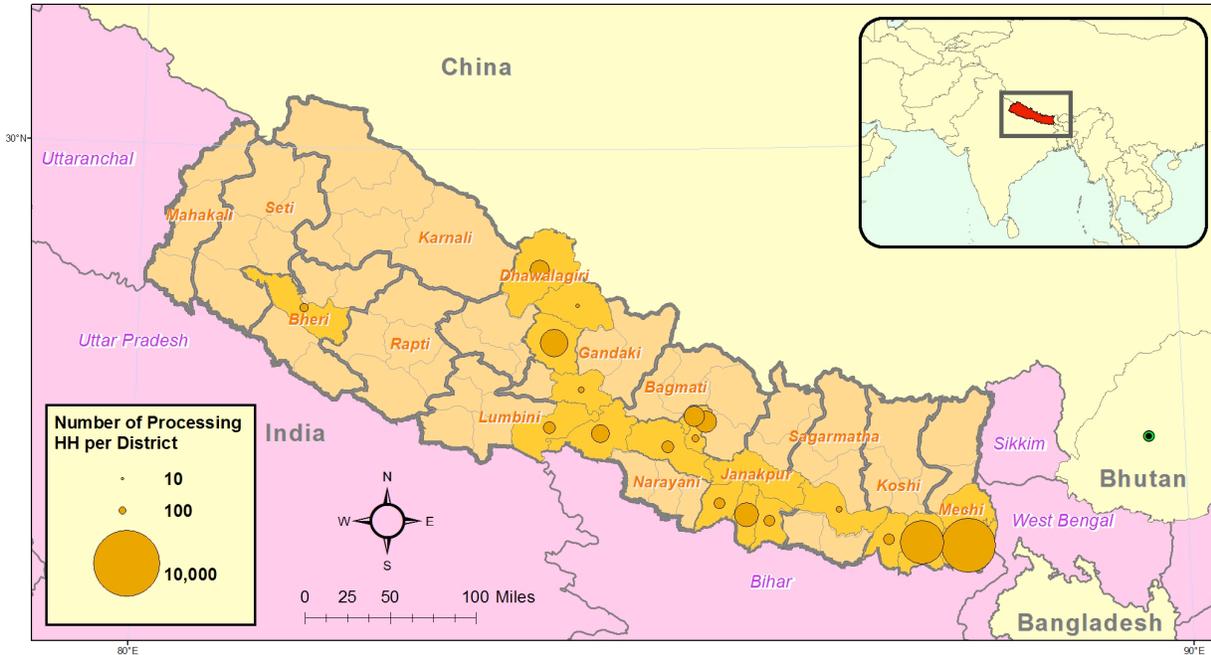
In the case of processing households, the refugee-driven wool processing industry in the Eastern districts of Jhapa and Morang accounted for a majority of processing households. There were smaller clusters in Kaski and Mustang districts in the Western region, as well as in KTM valley (see Figure 5).

**Figure 4. Regional Distribution of Household-Based Production Activities in Nepal**



Source: Sampling frame developed for the household-based production PC study.

Disclaimer: The above map did not reflect a position by ILAB or ICF on the legal status of any country or territory or the delimitation of any frontiers.



**Figure 5. Regional Distribution of Household-Based Processing Activities in Nepal**

Source: Sampling frame developed for the household-based production PC study.

Disclaimer: The above map did not reflect a position by ILAB or ICF on the legal status of any country or territory or the delimitation of any frontiers.

## 4.2. NUMBER AND PREVALENCE OF CHILD CARPET WORKERS

Based on the surveys of carpet HHs and factories, the study estimated that there were:

- 16,561 carpet establishments (HHs and factories) in Nepal.<sup>16</sup>
  - Almost all (95.7 percent) were HHs
- 49,539 total usual workers in the carpet industry in Nepal.
  - The majority (65.0 percent) of all carpet workers were HH-based.
- 10,907 usual child workers in the carpet industry in Nepal.<sup>17</sup>
  - The majority (80.2 percent) of child carpet workers were HH-based.
- The prevalence<sup>18</sup> of children in the industry work force was 22.0 percent (see Table 3).<sup>19</sup>
  - Children were less prevalent (12.4 percent) in the factory workforce.

**Table 3. Prevalence of Children Working in the Carpet Industry in Nepal**

|   | Total                | Households            | Factories             |
|---|----------------------|-----------------------|-----------------------|
| Total Estimated Number of Establishments  | 16,561 (100 percent) | 15,847 (95.7 percent) | 714 (4.3 percent)     |
| Total Estimated N of Carpet Workers       | 49,539 (100 percent) | 32,176 (65.0 percent) | 17,363 (35.0 percent) |
| Total Estimated N of Child Carpet Workers | 10,907 (100 percent) | 8,747 (80.2 percent)  | 2,160 (19.8 percent)  |
| Industry Prevalence of Child Workers (%)  | 22.0 percent         | 27.2 percent          | 12.4 percent          |

Source: Nepal PC Household child survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

### 4.2.1. Geographic Distribution of Child Carpet Workers

Two-thirds (66.9 percent) of the child carpet workers lived in the Terai districts (see Table 4). An additional one-fourth (27.4 percent) and all factory-based child carpet workers were in the KTM valley. Two-thirds (63.9 percent) of child carpet workers lived in urban areas, and only a few children (5.7 percent) could be found in the mountain districts.

<sup>16</sup> All of the results in this report express weighted survey data and refer to the situation that existed in 2009 during the surveys.

<sup>17</sup> The current workforce consisted of 6,898 children and 39,276 total workers. The prevalence of children in the current workforce was 17.6 percent.

<sup>18</sup> Prevalence and incidence were sometimes considered synonyms, but the two terms had distinct meanings in epidemiology, where prevalence was the number of existing cases (divided by) the population at risk, and incidence was the number of new cases (of some condition) during some period (divided by) the population at risk during that period.

<sup>19</sup> This report consistently refers to the usual workforce (people who worked in the last 12 months) instead of the current (those who worked in the last 7 days) workforce. The composition of the two carpet industry workforces in Nepal was similar, but the usual workforce was consistently larger.

**Table 4: Estimated Population of Children Working in the Carpet Industry by Province, Setting, and Establishment**

|                                 | Total  |        | Households |        | Factories |        |
|---------------------------------|--------|--------|------------|--------|-----------|--------|
|                                 | N      | %      | N          | %      | N         | %      |
| <b>Region</b>                   |        |        |            |        |           |        |
| Terai districts <sup>1</sup>    | 7,296  | 66.9%  | 7,296      | 83.4%  | 0         | 0.0%   |
| KTM Valley <sup>2</sup>         | 2,992  | 27.4%  | 833        | 9.5%   | 2,160     | 100.0% |
| Mountain districts <sup>3</sup> | 618    | 5.7%   | 618        | 7.1%   | 0         | 0.0%   |
| Total                           | 10,907 | 100.0% | 8,747      | 100.0% | 2,160     | 100.0% |
| <b>Setting</b>                  |        |        |            |        |           |        |
| Urban                           | 6,975  | 63.9%  | 4,815      | 55.0%  | 2,160     | 100.0% |
| Rural                           | 3,932  | 36.1%  | 3,932      | 45.0%  | 0         | 0.0%   |
| Total                           | 10,907 | 100.0% | 8,747      | 100.0% | 2,160     | 100.0% |

Base: Children who worked in the carpet industry in the last 12 months.

Source: Nepal PC Household child survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

<sup>1</sup> Sample base includes the districts of Jhapa, Morang and Sunsari.

<sup>2</sup> Sample base includes the districts of Kathmandu, Lalitpur and Bhaktapur.

<sup>3</sup> Sample base includes the districts of Kavrepalchok, Sindhupalchok, Kaski, Manang and Mustang.

One-fifth (19.8 percent) of the child carpet workers were factory-based. Three-fourths (76.6 percent) of the factories were large (11 or more employees), and almost all (95.8 percent) of the factory-based child carpet workers worked in large factories in the KTM valley (see Table 5).

**Table 5: Estimated Population of Children Working in Carpet Factories by Factory Size**

| Factory Size<br>(Number of Employees) | Factories |       | Child carpet workers |       |
|---------------------------------------|-----------|-------|----------------------|-------|
|                                       | N         | %     | N                    | %     |
| Small (5 or fewer workers)            | 40        | 5.6%  | 13                   | 0.6%  |
| Medium (6 to 10 employees)            | 127       | 17.7% | 76                   | 3.5%  |
| Large (11 or more employees)          | 547       | 76.6% | 2,070                | 95.8% |
| Total                                 | 714       | 100%  | 2,160                | 100%  |

Base: Children who worked in carpet factories in the last 12 months.

Source: Nepal PC Factory worker survey (April-July 2009).

### 4.3. CHARACTERISTICS OF CHILDREN WORKING IN THE CARPET INDUSTRY IN NEPAL

#### 4.3.1. Socio-Demographic Characteristics of Child Carpet Workers

Four-fifths (81.3 percent) of the child carpet workers were girls, and two-thirds (64.0 percent) were 14-17 years of age. Gender was the most significant demographic difference between child carpet workers in HHs and factories; girls were more than four-fifths (86.8 percent) of the HH-based child carpet workers, but only slightly more than half (58.7 percent) of the factory-based. Children working in carpet factories were also older on average; the median age was 15 years

(vs. 14 for HH-based), and 87.8 percent were 14 or older (vs. 58.2 percent for HH-based). The greater proportion (41.9 percent) of HH-based child carpet workers who were younger than 14 (the minimum working age), especially the inclusion (3.2 percent) of children younger than nine years of age, showed how many of the youngest children were working in the family setting.

**Table 6. Demographic Features of Children Working in the Carpet Industry in Nepal**

|  | Total  | Children Working in Households | Children Working in Factories | p value |
|--|--------|--------------------------------|-------------------------------|---------|
| Weighted N=                            | 10,907 | 8,747                          | 2,160                         |         |
| <b>Sex of child carpet workers (%)</b> |        |                                |                               |         |
| Male                                   | 18.7%  | 13.2%                          | 41.3%                         | <.01**  |
| Female                                 | 81.3%  | 86.8%                          | 58.7%                         |         |
| <b>Age of child carpet workers (%)</b> |        |                                |                               |         |
| 5–8 years                              | 2.6%   | 3.2%                           | 0.0%                          | <.05*   |
| 9–13 years                             | 33.4%  | 38.7%                          | 12.2%                         |         |
| 14–15 years                            | 34.6%  | 32.7%                          | 42.6%                         |         |
| 16–17 years                            | 29.4%  | 25.5%                          | 45.2%                         |         |
| Median Age                             | 14     | 14                             | 15                            | <.01**  |

Base: Children who worked in the carpet industry in the past 12 months.

Source: Nepal PC Household child survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

Nepal’s labor laws prohibited employing anyone under 14 years of age in any kind of work and employing anyone under 16 years of age in hazardous activities.<sup>20</sup> Two measures of the existence of child labor among those working children were that one-third (36.0 percent) of all child carpet workers were below 14, and more than two-thirds (70.6 percent) of all children in the carpet industry (an estimated 7,704 children), including more than half (54.8 percent) of those working in factories, were below 16 and working in obvious breach of Nepalese law.

#### **4.3.2. Educational Characteristics of Child Carpet Workers**

The study looked at the relationship between work and study because an indication that working children are being exploited is when work keeps children from attending school or interferes with the children’s ability to study. At the time of the survey, three-fourths (74.1 percent) of the child carpet workers were attending school, but that concealed a significant difference between the HH-based children, nearly all (95.3 percent) of whom were attending school, and the factory-based children, almost none (3.2 percent) of whom were attending. The educational disadvantage

<sup>20</sup> The 1999 Child Labor Act specifically lists “works relating to manufacture of (...) carpet, weaving, dying; wool cleaning” as hazardous occupations (p. 13).

of factory-based children was not limited to current attendance, which might in part be explained by their older age. One-fourth (23.6 percent) of factory-based children had never attended school, but almost all (99.8 percent) of the HH-based children had attended or were attending school.<sup>21</sup>

**Table 7. School Attendance Status for Child Carpet Workers**

|  | Total | Children Working in Households | Children Working in Factories | p value |
|--|-------|--------------------------------|-------------------------------|---------|
| Weighted N=                            | 9,401 | 7,241 <sup>1</sup>             | 2,160                         |         |
| <b>School Attendance Status</b>        |       |                                |                               |         |
| Currently attending                    | 74.1% | 95.3%                          | 3.2%                          | <.01**  |
| Not attending but attended in the past | 20.3% | 4.5%                           | 73.2%                         |         |
| Never attended                         | 5.6%  | 0.2%                           | 23.6%                         |         |

Base: Children who worked in the carpet industry in the past 12 months.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

<sup>1</sup>Note: Information on past attendance was not collected from HH-based child workers, so data from household informants was used instead. The Weighted N reflects a different estimate of child workers when using data from household informants.

Children in Nepal were expected to enter primary school when they became five years old. Secondary education went through the 12th Grade, with expected ages from 10 to 16 years.<sup>22</sup> Using these parameters we found that the few children in carpet factories who were currently attending school were doing so at a grade well below the expectation for their age. Although the sample was too small to produce a reliable quantitative estimate, most factory-based children showed an age-grade delay of more than two years. School progress for HH-based child carpet workers was assessed by asking about the age of the child relative to that of her/his classmates.<sup>23</sup> A majority (56.9 percent) reported that they were the same age as other children; one-third (33.2 percent) reported that most other children were older; only 10.0 percent reported that most of their classmates were younger (see Table 38). Based on the children's perceptions, carpet work did not appear to have a significant effect on school progress for HH-based child carpet workers relative to other children in the community.

Child carpet workers were administered standardized numeracy and literacy tests.<sup>24</sup> In the literacy test, children were asked to read letters of the alphabet, words, sentences, and texts of progressive difficulty (see Table 8). Only a few (4.9 percent) children were completely illiterate (unable to read even letters), and more than two-thirds (67.1 percent) of child carpet workers

<sup>21</sup> Information on past school attendance for HH-based child carpet workers came from adult HH interviews.

<sup>22</sup> See World Bank EdStats 5.3 <http://go.worldbank.org/ITABCOGIV1>

<sup>23</sup> The sample size of factory-based child carpet workers attending school was insufficient.

<sup>24</sup> The tests, developed for the Annual Status of Education Report (ASER) in India, had been translated into most languages in India and had been used in annual national surveys since 2005. More information on: <http://asercentre.org/asersurvey.php>

could comprehend the most difficult text. There were significant differences between the factory-based and HH-based children. The factory-based had much lower literacy levels; two-fifths (41.9 percent) were unable to read single words, and only 38.7 percent were able to read the hardest text with comprehension (vs. 74.1 percent of the HH-based).

In the numeracy test, children were asked to recognize numbers and then solve simple problems of addition and subtraction. Four-fifths (82.4 percent) of child carpet workers could perform both simple addition and subtraction. There were significant differences between the HH-based and factory-based. Only half (51.8 percent) of the factory-based children were able to do both simple additions and subtractions, compared to 90 percent of the HH-based.

**Table 8. Literacy and Numeracy of Child Carpet Workers by Setting**

|                                      | Total  | Children Working in Households | Children Working in Factories | p value |
|--------------------------------------|--------|--------------------------------|-------------------------------|---------|
| Weighted N=                          | 10,907 | 8,747                          | 2,160                         |         |
| <b>Maximum reading ability level</b> |        |                                |                               |         |
| Nothing                              | 4.9%   | 0.9%                           | 21.4%                         | <.01**  |
| Letters                              | 8.6%   | 5.7%                           | 20.5%                         |         |
| Words                                | 0.1%   | 0.0%                           | 0.3%                          |         |
| Level I Text as a set of words       | 17.0%  | 17.2%                          | 15.9%                         |         |
| Level I Text with comprehension      | 0.0%   | 0.0%                           | 0.0%                          |         |
| Level II Text as a set of words      | 2.3%   | 2.0%                           | 3.2%                          |         |
| Level II Text with comprehension     | 67.1%  | 74.1%                          | 38.7%                         |         |
| <b>Numeracy level</b>                |        |                                |                               |         |
| Cannot do addition or subtraction    | 4.4%   | 1.3%                           | 17.0%                         | <.01**  |
| Can only do addition problem         | 12.5%  | 8.0%                           | 30.8%                         |         |
| Can only do subtraction problem      | 0.6%   | 0.7%                           | 0.4%                          |         |
| Can do both addition & subtraction   | 82.4%  | 90.0%                          | 51.8%                         |         |

Base: Children who worked in the carpet industry in the past 12 months.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

One-sixth (16.0 percent) of the child carpet workers attending school reported that work interfered with their studies, mostly because the children did not have sufficient time left for school and, to a lesser extent, because they missed classes or felt tired. Two-fifths (42.0 percent) mentioned that they missed school for work at least once a year, although very few (0.6 percent) reported missing school for work very often (once or twice a week, see Table 39). One-sixth (15.9 percent) of the HH-based child carpet workers who attended school reported that chores interfered with their studies, mostly because they did not have enough time to study (see Table 61).

The great majority (85.2 percent) of child carpet workers who were not attending school were factory-based. Half (53.0 percent) of those children reported that the main reason they were not attending school was that they were not interested in school. Other main reasons included being unable to afford schooling (28.4 percent), in order to work (28.0 percent) or in order to help at home with household chores (21.3 percent, see Table 9).

**Table 9. Reasons for Not Attending School by Child Carpet Workers Who Were Not Currently Attending School**

|   | Total | Children Working in Households | Children Working in Factories | p value |
|---|-------|--------------------------------|-------------------------------|---------|
| Weighted N=   | 2,453 | 361                            | 2,092                         |         |
| <b>“Why are you not currently attending school?”</b>      |       |                                |                               |         |
| Not interested in school                                  | 54.3% | *                              | 53.0%                         | -       |
| Can't afford schooling                                    | 25.2% | *                              | 28.4%                         | -       |
| In order to work  | 25.2% | *                              | 28.0%                         | -       |
| Helping at home with other household chores               | 21.8% | *                              | 21.3%                         | -       |
| School too far  | 5.0%  | *                              | 5.5%                          | -       |
| Death in family   | 4.9%  | *                              | 5.8%                          | -       |
| Taking care of children in household                      | 4.5%  | *                              | 5.1%                          | -       |
| Family-related, health related or other problems          | 4.0%  | *                              | 4.4%                          | -       |
| Marriage  | 3.5%  | *                              | 0.0%                          | -       |
| Poor performance in school                                | 3.2%  | *                              | 3.2%                          | -       |
| Not enrolled school/college because planning to go abroad | 2.4%  | *                              | 2.5%                          | -       |
| To visit Kathmandu  | 1.7%  | *                              | 2.0%                          | -       |
| School not safe   | 1.6%  | *                              | 1.8%                          | -       |
| Taking care of sick household members                     | 1.5%  | *                              | 1.8%                          | -       |
| No time for school  | 1.2%  | *                              | 1.4%                          | -       |
| Attendance not regular                                    | 0.9%  | *                              | 0.9%                          | -       |
| Illness, injury, and/or disability                        | 0.7%  | *                              | 0.8%                          | -       |
| Often tired at school                                     | 0.4%  | *                              | 0.5%                          | -       |
| Relocation  | 0.3%  | *                              | 0.3%                          | -       |
| Extended absence from school                              | 0.3%  | *                              | 0.3%                          | -       |
| Others  | 1.3%  | *                              | 1.5%                          | -       |

Base: Children who worked in the carpet industry in the past 12 months and were not currently attending school. Insufficient sample size (n<30) for HH-based child carpet workers.

Note: Multiple response items, totals may add to more than 100 percent.

Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

### 4.3.3. Health Characteristics of Child Carpet Workers

The study looked at children’s health history because an indication that working children are being exploited is when working children are disproportionately ill or injured, especially when the children note that the illnesses or injuries were work-related. There were no significant differences between HH-based and factory-based child carpet workers in the proportion who reported being sick or in the illnesses, except for the factory-based suffering more from severe headaches (see Table 40). One-fourth (25.7 percent) of child carpet workers reported being sick in the last month, and the most common illness was fever (generic), which was reported by one-third (33.8 percent) of the children. The next most commonly reported illnesses were severe headaches and stomach problems, not including diarrhea or vomiting. Only a small proportion (2.6 percent) of child carpet workers reported having breathing problems.

The HH-based child carpet workers reported a greater prevalence of injuries during the past 12 months (21.7 percent vs. 13.2 percent) and significantly more injuries in the past week and month (see Table 10). Children were asked to recall what they were doing (working, playing, doing chores at home) when they suffered their most recent injury to eliminate the effect of non-work activities and estimate the prevalence of work-related injuries. Factory-based child carpet workers reported a greater frequency of work-related injuries. Although not many child carpet workers reported these injuries, there was a significant difference in the greater proportion of factory-based reporting injury to or swelling of the hands (2.5 percent vs. 0.1 percent) and cuts/wounds (2.3 percent vs. 0.1 percent).

**Table 10. Injuries among Child Carpet Workers by Setting (Selected Main Injuries)**

|  | Total  | Children Working in Households | Children Working in Factories | p value |
|--|--------|--------------------------------|-------------------------------|---------|
| Weighted N=  | 10,907 | 8,747                          | 2,160                         |         |
| <b>“When was the last time you were injured?”</b>                            |        |                                |                               |         |
| In the past 7 days   | 2.0%   | 2.4%                           | 0.4%                          | <.05*   |
| In the past 1 month (cumulative)   | 10.9%  | 12.6%                          | 4.2%                          | <.01**  |
| In the past 12 months (cumulative)   | 20.0%  | 21.7%                          | 13.2%                         | .28     |
| Longer ago   | 49.9%  | 47.3%                          | 60.4%                         |         |
| Never  | 29.3%  | 30.1%                          | 26.4%                         |         |
| DK/NR  | 0.8%   | 1.0%                           | 0.0%                          |         |
| <b>Main work-related injuries in the past 12 months (most recent injury)</b> |        |                                |                               |         |
| Injury to or swelling in hands   | 0.5%   | 0.1%                           | 2.3%                          | <.01**  |
| Injury to knees or legs  | 0.9%   | 1.0%                           | 0.5%                          | .50     |
| Twisted ankle or legs  | 0.1%   | 0.0%                           | 0.3%                          | .07     |
| Injury to feet or legs   | 0.2%   | 0.1%                           | 0.7%                          | .12     |
| Cuts/wounds  | 0.5%   | 0.1%                           | 2.0%                          | <.01**  |

Base: Children who worked in the carpet industry in the past 12 months.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

Among the child carpet workers who were ill or injured during the past 12 months, there were significant differences between the HH-based and factory-based in how they were treated. More than two-thirds (71.3 percent) of the HH-based but only half (49.6 percent) of the factory-based were taken to a medical clinic, health post, or hospital (see Table 56). There were other significant differences when children were asked why they were not taken to one of the above places. The most common reason reported by HH-based child carpet workers (58.2 percent) was that treatment was not necessary. Only 19.6 percent of the factory-based gave that reason. The most common reason reported by factory-based children (66.9 percent) was that they treated themselves by buying medicines (vs. only 26.4 percent of the HH-based).

The treatment for 90.5 percent of the children who were treated was in an outpatient department or a first-aid/preliminary examination room, and three-fourths (74.6 percent) were treated by a doctor. There were significant differences between the HH-based and factory-based child carpet workers in whether they were treated with prescription drugs (80.1 percent of HH-based vs. 97.3 percent of factory-based) or antiseptic and bandages (16.0 percent of HH-based vs. 2.6 percent of factory-based). Free treatment in refugee camps was a significant source of health-care for 17.5 percent of the HH-based children. (See Table 57 and Table 58).

#### **4.3.4. Psychosocial Well-Being of Child Carpet Workers**

The subjective sense of personal well-being (PWI) of the child carpet workers was measured using a standardized test that contained two summary measures: an overall satisfaction with life (happiness) and a composite index (PWI) score.<sup>25</sup> A general normative range for the PWI score for non-western populations was 60-70 (Lau, Cummins & McPherson, 2004). With an average PWI score of 76.9, children working in the carpet industry appeared to have higher levels of personal well-being when compared to this benchmark (see Table 42). Factory-based child carpet workers scored their quality of life lower than the HH-based on the overall satisfaction with their life, with additional significant differences in the personal safety, feeling part of the community, and future security domains. Those were significant signs that more factory-based than HH-based child carpet workers perceived themselves as vulnerable.

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<sup>25</sup> The Personal Well-Being Index (PWI) was originally developed in Australia, validated in several countries and languages, and used in the child labor study of the cocoa industry in Ghana and Cote d'Ivoire (see Cummins & Lau, 2005). The test contained items corresponding to seven quality of life domains: standard of living, health, life achievement, personal relationships, personal safety, community-connectedness, and future security. The test also provided a composite measure (the Personal Well-being Index) from aggregating and averaging each domain score. For scoring and interpreting guidelines, the full PWI-SC manual was available from the Australian Centre on Quality of Life, Deakin University, on: <http://acqol.deakin.edu.au/instruments/PWI/PWI-school.pdf>

#### 4.4. CHARACTERISTICS OF CHILDREN’S ENTRY INTO THE CARPET INDUSTRY

The study looked at when the children started working (their entry into the industry’s workforce) because indications that working children were being exploited would include the child not making voluntarily the decision to start working, the child being pressured to work, the involvement of third parties (such as labor contractors or creditors) in the decision or in making the arrangements, and any linkage between family debt and the child’s working.

##### 4.4.1. Reasons Why Children Work

The majority (54.9 percent) of the HH-based child carpet workers reported that their main reason for working was to supplement family income (see Table 11). The other common reasons were for personal expenses, food, and clothing and to help with the family enterprise. Almost none (0.1 percent) of the HH-based child carpet workers reported working to pay outstanding family debt.

**Table 11. Reasons to Work among Child Carpet Workers**

|  | Total | Children Working in Households | Children Working in Factories | p value |
|--|-------|--------------------------------|-------------------------------|---------|
| Weighted N=                                | -     | 8,741                          | -                             |         |
| <b>“What is the main reason you work?”</b> |       |                                |                               |         |
| To supplement family income                | -     | 54.9%                          | -                             | -       |
| For personal expenses, food, clothing      | -     | 30.7%                          | -                             |         |
| To help in household enterprise            | -     | 10.9%                          | -                             |         |
| To learn new skill                         | -     | 3.3%                           | -                             |         |
| To pay outstanding family debt             | -     | 0.1%                           | -                             |         |
| Cannot afford school fees                  | -     | 0.0%                           | -                             |         |

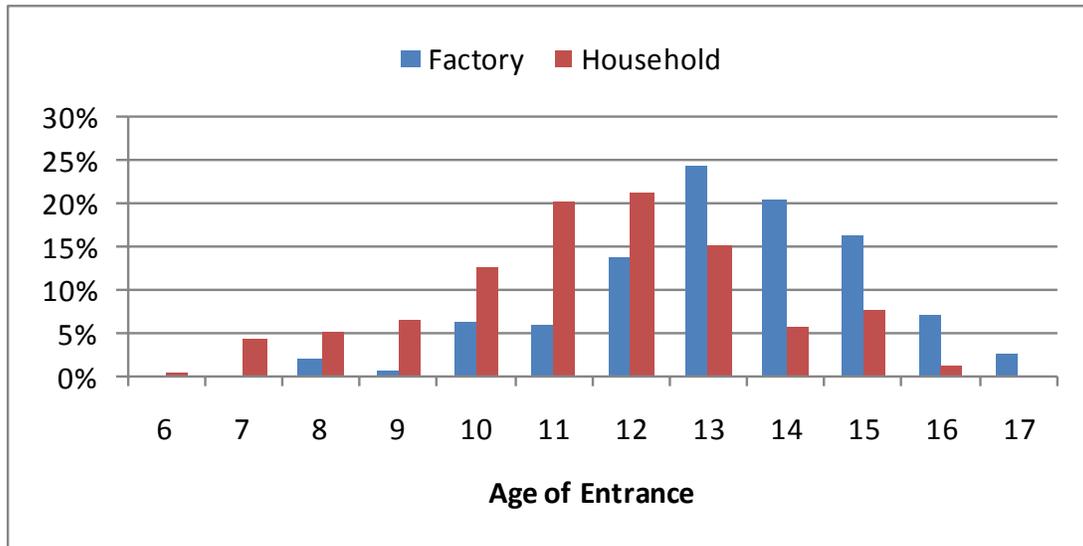
Base: Children who worked in the carpet industry in the past 12 months. Information missing for 1 HH Child (weighted N = 6). Information not collected from Factory Children.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

##### 4.4.2. Age When Children Began Working

The study examined whether children started working before they were old enough to be considered capable of making independent decisions. A majority of the children working in the carpet industry in Nepal began carpet-related work activities before they were twelve years old (see Figure 6). The age of entrance was higher for factory-based child carpet workers (median starting age of 13 years) than for HH-based (median starting age of 12 years).

**Figure 6. Age When Child Carpet Workers Began Engaging in Carpet Activities**



Base: Children (5-17) interviewed in the PC study who had worked in the carpet industry in the last 12 months.  
 Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

#### **4.4.3. Voluntary and Forced Migration When Entering the Workforce**

The study examined each child’s migration status because indications that child trafficking was occurring included the child migrating to work (labor migration), a third party (labor contractor) being involved in the decision to move and/or organizing the move, and the parents receiving money or repaying a debt in exchange for the child’s move to work.

Two major types of migrants were fundamental to the study of the carpet industry in Nepal. First, there were voluntary labor migrants, whose main purpose was finding a job. As noted by the 2008 Labor Force Survey, labor migration in Nepal was very common and mostly from rural areas to the urban centers, particularly to the Kathmandu valley (see 2.3.6).<sup>26</sup>

Second, there were forced or involuntary migrants, whose main purpose was escape or finding safety. Two major groups of refugees were important to this study: the Tibetan refugees,<sup>27</sup> whose arrival jump-started the carpet industry in Nepal, and the Bhutanese refugees, who constituted the majority of the people who processed wool for the carpet industry. Most of the Bhutanese refugees stayed in camps administered by the United Nations High Commissioner for Refugees (UNHCR) in the eastern Terai districts of Jhapa and Morang.

<sup>26</sup> Labor migration and child trafficking to the carpet factories of Kathmandu valley were studied in depth in the Sending Areas Study in Nepal. See “Child Trafficking and Bonded Labor in the Carpet Industry and Sending Areas in Nepal” for study results.

<sup>27</sup> Their numbers of Tibetan refugees in Nepal increased after the 1959 Lhasa uprising. The Bhutanese of Nepali ethnicity began arriving in 1990.

There were significant differences between the HH-based and factory-based child carpet workers in terms of their migration status, origin, and the context of their migration (see Table 12). Each group is discussed separately.

**Table 12. Migration Status of Child Carpet Workers in Nepal by Setting**

|  | Total  | Children Working in Households | Children Working in Factories | p value |
|--|--------|--------------------------------|-------------------------------|---------|
| Weighted N=  | 10,907 | 8,747                          | 2,160                         |         |
| <b>“Were you born here or somewhere else?”<sup>1</sup></b> |        |                                |                               |         |
| Born here  | 65.1%  | 80.1%                          | 4.3%                          | <.01**  |
| Somewhere else   | 34.9%  | 19.9%                          | 95.7%                         |         |
| <b>Country of Origin<sup>2</sup></b>                       |        |                                |                               |         |
| Weighted N=  | 3,810  | 1,743                          | 2,066                         |         |
| Nepal  | 63.4%  | 20.0%                          | 100.0%                        | <.01**  |
| India  | 4.7%   | 10.3%                          | 0.0%                          |         |
| Bhutan   | 31.9%  | 69.7%                          | 0.0%                          |         |

<sup>1</sup>Base: Children who worked in the carpet industry in the past 12 months.

<sup>2</sup>Base: Children who worked in the carpet industry in the past 12 months and were born elsewhere.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

#### **4.4.3.1. Voluntary Migration of Factory-Based Child Carpet Workers**

The children working in the carpet factories were all Nepalese and predominantly (94.7 percent) labor migrants, mainly coming from districts close to the KTM valley (see Figure 5).<sup>28</sup> The great majority (86.2 percent) reported that their main reason for migrating was to look for a job or because they had found a job (see Table 12 and Table 13). Only 11.9 percent reported moving with or for their family, and the great majority (85.2 percent) were not living with their parents, but reported that the parents had made the decision for the child to migrate to work. Only half of the migrant child carpet workers reported migrating voluntarily, but very few (3.9 percent) reported that a third party, such as an employer or labor contractor, had made the decision for the child to migrate (see Table 43).

However, there were indications that the movement to the factory had been organized by a third party for some of the child carpet workers. More than half (53.5 percent) said a job was waiting for them when they arrived. One-third (31.4 percent) reported that a labor contractor had been involved in finding the job, and a small proportion reported that someone had received money (or repaid a debt) in exchange for the child’s move (see Table 13). There might have been some misinformation or deceit in the way that migrant children were recruited to work, particularly among factory-based children. One-sixth of the immigrant factory-based child carpet workers

<sup>28</sup> Makwanpur district sent the largest number (almost one-third) of migrant children to the carpet factories, followed by Sindhuli (15.5 percent of the migrant children), and Sarlahi (12.5 percent). All three districts were in the central development region. These findings were consistent with previous reports (e.g. KC, et al., 2002).

reported that their jobs had not lived up to their expectations, mostly because what the children earned was different from what the children had expected (see Table 44).

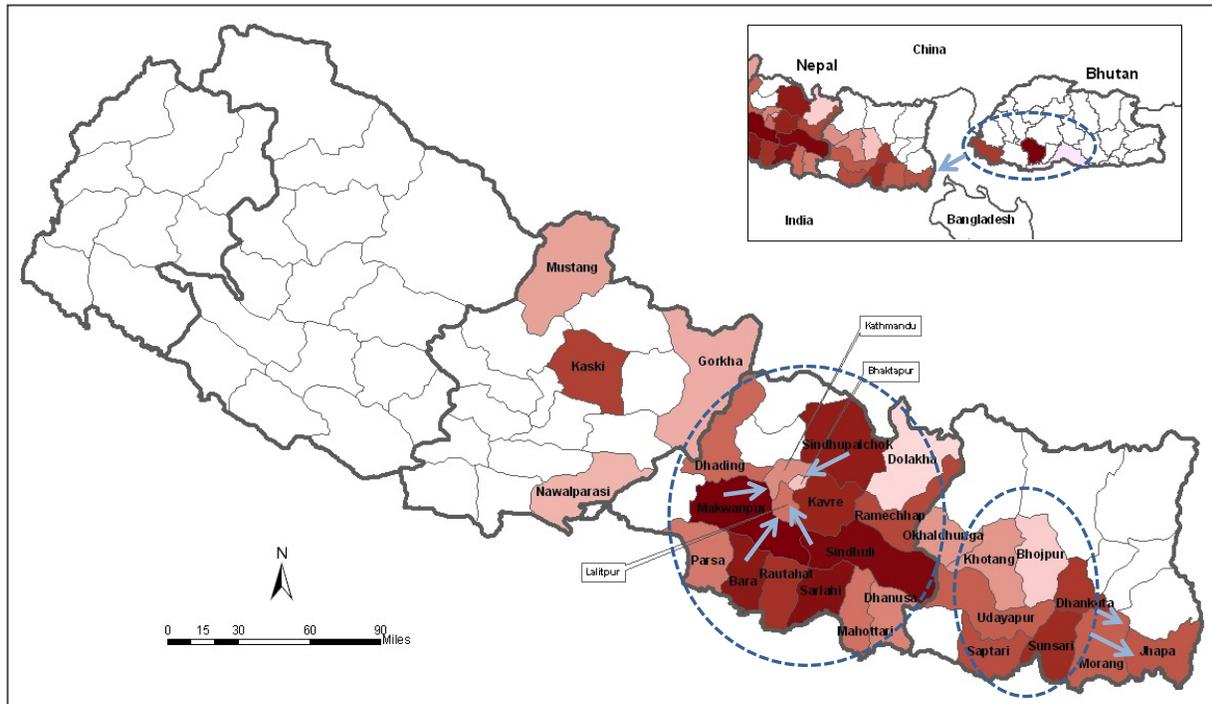


Figure 7. Distribution of Migrant Child Workers by District of Origin

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

#### 4.4.3.2. Voluntary and Forced Migration of HH-based Child Carpet Workers

Almost all (93.9 percent) the HH-based child carpet workers were living with their parents. Most (80.1 percent) of the HH-based child carpet workers were born in the districts where they were surveyed, but they were primarily second generation Bhutanese refugees, the children of refugees who fled Bhutan and settled in the eastern Nepalese districts of Jhapa and Morang. Of the 19.9 percent who were migrants, two-thirds (69.7 percent) arrived with the later waves of refugees from Bhutan. The others migrated from eastern Terai districts, such as Sunsari or Dhankuta, that were near Jhapa and Morang. Essentially none of the migrant HH-based child carpet workers qualified as labor migrants, as almost none (0.4 percent) reported the main reason for migrating was to look for a job or because they had found a job, and none reported the involvement of a third party or an organized move (see Table 13).

**Table 13. Purpose of Migration for Migrant Child Carpet Workers**

|  | Total | Children Working in Households | Children Working in Factories | p value |
|--|-------|--------------------------------|-------------------------------|---------|
| Weighted N=  | 3,810 | 1,743                          | 2,066                         |         |
| <b>“What was the main reason you came here?”</b>   |       |                                |                               |         |
| Job transfer or found a job  | 26.0% | 0.2%                           | 47.8%                         | <.01**  |
| Came as a refugee  | 24.2% | 52.9%                          | 0.0%                          |         |
| Looking for job  | 20.9% | 0.2%                           | 38.4%                         |         |
| Moved with family  | 12.0% | 17.2%                          | 7.7%                          |         |
| Stayed with grandparents   | 4.4%  | 4.9%                           | 4.0%                          |         |
| Marriage or divorce  | 1.1%  | 2.1%                           | 0.2%                          |         |
| To be closer to school   | 0.7%  | 0.3%                           | 1.1%                          |         |
| Others   | 3.0%  | 5.6%                           | 0.8%                          |         |
| DK/NR  | 7.7%  | 16.8%                          | 0.0%                          |         |
| <b>Indicators of Organized Movement</b>  |       |                                |                               |         |
| “Did you have a job waiting for you when you arrived at this town/locality?” (“Yes”)     | 29.1% | 0.2%                           | 53.5%                         | <.01**  |
| “Was a labor contractor/recruiter involved in finding your job?” (“Yes”)                 | 17.0% | 0.0%                           | 31.4%                         | <.01**  |
| “Did anyone receive money/anything else/repay a debt in exchange for your move?” (“Yes”) | 2.6%  | 0.0%                           | 4.9%                          | <.01**  |

Base: Children who worked in the carpet industry in the past 12 months and were born elsewhere.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

#### 4.5. CHARACTERISTICS OF CHILDREN’S WORK IN THE CARPET INDUSTRY

The study looked at the nature of children’s work and working conditions because indications that working children were being exploited would include the work being hazardous, the compensation being inadequate, or the child suffering in the workplace for other reasons.

##### 4.5.1. Children’s Specific Work-Related Activities in the Carpet Industry

Children in the carpet industry of Nepal were involved primarily in three tasks: spinning wool to make thread (71.4 percent), carding wool (34.3 percent), and weaving carpets (33.7 percent) (see Table 45).<sup>29</sup> A smaller proportion separated wool by colors (12.7 percent) and sun-dried wool (10.3 percent). Children’s involvement in other carpet-related tasks was almost negligible.

There was a clear-cut segregation of tasks by setting. Children who processed wool were almost exclusively HH-based. Most (89.0 percent) were spinning wool to make thread. Carding wool

<sup>29</sup> These were children who had performed any carpet related activities in the last 12 months (usual carpet workers).

was the second most frequent task (42.8 percent), followed by separating wool by colors (15.8 percent) and sun-drying wool (12.9 percent). Only a small percentage (3.8 percent) of HH-based child carpet workers worked in carpet production activities such as hand-weaving carpets. Factory-based children were almost exclusively (97.6 percent) dedicated to production activities, specifically to carpet weaving.

The concentration on these few tasks overshadowed any significant age or gender differences in terms of the carpet-related tasks that children performed, but there seemed to be a pattern. Wool processing tasks were carried out by younger children, whereas more specialized production tasks, such as weaving carpets and repairing errors, were carried out by older children (see Table 50).



#### 4.5.2. Seasonal Variation in Children’s Work in the Carpet Industry

Two-thirds (67.5 percent) of the factory managers agreed that work in the factory-based carpet industry followed a seasonal pattern. The high season was between the months of March and June, and a low season was between August and October (see Figure 8).

Seasonality was less pronounced in the HH-based carpet industry, according to children’s reports (see Figure 9). Their work peaked in March/April<sup>30</sup> with a secondary peak in December/January, which coincided with the off-farming season and the winter school vacation period. However, the seasonality patterns recounted by the children may have been a by-product of child recall

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<sup>30</sup> Child interviews asked months using the official Bikram Samwat calendar. This calendar begins in the month of Baishakh, in or around April 14<sup>th</sup>, and is divided in 12 months of about 30 days each (months are not predetermined, and change from year to year, varying from 29 days to 32 days), with the beginning and end of each month falling near the middle of Gregorian (western) months. Therefore, if a child mentions that he worked in Baishakh, it translates as mid April to mid May in the Gregorian calendar. For further details see: [http://www.unnepal.org/index.php?option=com\\_content&view=article&id=66:nepal-sambat-bikram-sambat-and-adjustment&catid=37:general&Itemid=68](http://www.unnepal.org/index.php?option=com_content&view=article&id=66:nepal-sambat-bikram-sambat-and-adjustment&catid=37:general&Itemid=68)

bias. The March-April peak coincided with the timing of the research. Those may be the months when children could better recall having worked.

### 4.5.3. Weekly and Daily Hours of Work by Child Carpet Workers

The study examined when and how long the children worked because indications that children were exploited at work included their working too many hours or working at inappropriate times. Child carpet workers worked a median of only three hours and ten minutes (3:10 hours) per day (see Table 14), but that masked significant differences between HH-based and factory-based child carpet workers. Factory-based children worked very long hours (median of 11 hours and 30 minutes) per day, whereas HH-based child carpet workers only worked a median of 1 hour and 40 minutes per day. HH-based children who were currently attending school worked fewer hours, with a median of 1 hour and 15 minutes.<sup>31</sup> A majority (61.2 percent) of HH-based child workers worked four days a week or less; only one-third (31.1 percent) worked seven days a week (see Figure 10).<sup>32</sup> Saturday and Sunday were the days when most children worked.

**Table 14. Hours Worked Per Day by Child Carpet Workers Who Worked in Last Three Days by Setting and by School Attendance**

|   | Total      | Children Working in Households | Children Working in Factories | p value |
|---|------------|--------------------------------|-------------------------------|---------|
| Weighted N=   | 5,354      | 3,332                          | 2,022                         |         |
| <b>Hours worked (All child carpet workers) <sup>1</sup></b>                                 |            |                                |                               |         |
| Total working 6 hours or less   | 59.0%      | 92.8%                          | 3.2%                          | <.01**  |
| Total working more than 6 hours   | 41.0%      | 7.2%                           | 96.8%                         |         |
| Median hours worked   | 3:10 hours | 1:40 hours                     | 11:30 hours                   | <.01**  |
| <b>Hours worked (Child carpet workers who were currently attending school) <sup>2</sup></b> |            |                                |                               |         |
| Weighted N=   | 3,078      | 3,022                          | 56                            |         |
| Total working 6 hours or less   | 92.1%      | 93.1%                          | *                             | -       |
| Total working more than 6 hours   | 7.9%       | 6.9%                           | *                             |         |
| Median hours worked   | 1:15 hours | 1:15 hours                     | *                             | -       |

<sup>1</sup> Base: Children who worked in the last three days. Work hours included carpet and non-carpet work.

<sup>2</sup> Base: Children who worked in the last three days and were currently attending school. Work hours included carpet and non-carpet work. Insufficient sample base (n<30) for Factory children.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

<sup>31</sup> There were too few factory-based child carpet workers who were currently attending school in the sample to produce a valid estimate of their working hours.

<sup>32</sup> Questions regarding the number of days worked during the week were answered only by the current workers, who had worked during the last week. The project focused only on the current workers and the past seven days when the children's recollections would be more accurate and precise. Questions regarding the specific hours worked during the work day were asked only about the last three days to ensure more precise and accurate information.

Nepal’s Child Labor Act established maximum working hours at six per day. Two-fifths (41.0 percent) of the child carpet workers, and nearly all (96.8 percent) of the factory-based child carpet workers, worked more than the legal maximum.

Nepal’s Child Labor Act also prohibited children from working during the night hours, defined as the period between 8:00 p.m. and 6:00 a.m. Nearly half (52.0 percent) of child carpet workers (and 97.1 percent of factory-based children) worked at night at least once during the last three days, particularly in the early morning (see Table 15).

**Table 15. Work at Night among Children Who Worked in the Last Three Days**

|  | Total | Children Working in Households | Children Working in Factories | p value |
|--|-------|--------------------------------|-------------------------------|---------|
| Weighted N=  | 5,354 | 3,332                          | 2,022                         |         |
| <b>Work at Night</b>   |       |                                |                               |         |
| Not working at night   | 48.0% | 75.3%                          | 2.9%                          | <.01**  |
| Finished working after 1800 at least once in the last three days | 16.8% | 17.2%                          | 16.1%                         |         |
| Started working before 0600 at least once in the last three days | 35.3% | 7.5%                           | 81.0%                         |         |

Base: Children who worked in the last three days. Work included carpet and non-carpet work.

Note: Night hours of 18:00 to 06:00, based on Nepal Child Labor (Prohibition and Regulation) Act (1999).

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

Nepal’s Child Labor Act stipulated that children should have a 30 minute break after three consecutive hours of work. There was a significant difference between the HH-based and factory-based child carpet workers in terms of break time. Children working a median of almost 12 hours a day should have a median of two hours of break a day, which was what the factory-based child carpet workers reported (see Table 16).

**Table 16. Break Time among Children Who Worked in the Last Three Days**

|   | Total | Children Working in Households | Children Working in Factories | p value |
|---|-------|--------------------------------|-------------------------------|---------|
| Weighted N=   | 5,304 | 3,283                          | 2,022                         |         |
| <b>“Combining all breaks during a day, how many hours are spent on breaks and not working?”</b> |       |                                |                               |         |
| None  | 0.0%  | 0.0%                           | 0.0%                          | <.01**  |
| 0hs. 01' - 2 hs.  | 72.3% | 81.1%                          | 58.0%                         |         |
| 3-4 hs.   | 27.2% | 18.9%                          | 40.8%                         |         |
| 5-6 hs.   | 0.5%  | 0.0%                           | 1.2%                          |         |
| More than 6 hs.   | 0.0%  | 0.0%                           | 0.0%                          |         |
| Median Number of Hours  | 2 hr. | 1 hr.                          | 2 hr.                         | <.01**  |

Base: Children who worked in the last three days. Information missing for one HH-based child (weighted N = 49).

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

#### 4.5.4. Children’s Environmental Working Conditions in the Carpet Industry

The study examined the children’s working environment to learn whether there were indications that the environment was hazardous. The working children were being exploited if their work was hazardous, which by international standards was work that was “likely to harm the health, safety or morals of children” (see ILO C182 in 1.1). Hazardous working conditions existed when children were exposed to dangerous agents or risky processes at work. Quantifying health and safety hazards was one of the main challenges in child labor research. The hazards were measured in this study using worksite observations and worker self-reports. Those measures were able to identify potentially hazardous elements or situations but could not determine if the elements or situations existed at levels that were sufficient to represent actual health hazards.

The survey teams observed and subjectively evaluated conditions in carpet factories. Most (88.8 percent) carpet factories were considered to be somewhat or very clean. Air quality ranged from clean (47.0 percent) to a little dusty (50.1 percent) with only 2.9 percent of all factories having an air quality poor enough to make it hard to breathe. Most factories showed some dust (92.0 percent) and particle matters such as wool fibers (99.1 percent). Noise was the next most frequent health and safety hazard, present in 45.5 percent of factories. Safety measures to protect workers were observed in very few factories.



Loom and scaffolding in a carpet factory    Young weaver working at the loom    Cutting the pile of wool to liberate the rod

Almost all (98.1 percent) child carpet workers reported working in rooms with smoke, dust, flames, and all child carpet workers identified some other work-related hazards (see Table 17). Most hazardous conditions were reported by a significantly greater proportion of factory-based child carpet workers. The other conditions most commonly reported by HH-based child carpet workers were loud noise and parasites. In addition to those hazards, factory-based children also mentioned extreme temperatures, working at heights, working with dangerous tools, and exposure to viral agents.

The children's major tasks (processing wool and weaving/hand-knotting) involved no machinery and only a few tools (see Table 17).<sup>33</sup> This study considered the scissors, needles, blades, and knives to be sharp and potentially dangerous tools. A significantly greater proportion of the factory-based child carpet workers reported using most tools at work (see Table 52 for a full list of tools and hazards examined in the study).

**Table 17. Workplace Conditions and Tools Used by Child Carpet Workers (Selected Hazards and Tools)**

| Workplace Hazards                      | Total  | Children Working in Households | Children Working in Factories | p value |
|--|--------|--------------------------------|-------------------------------|---------|
| Weighted N=                            | 10,901 | 8,741                          | 2,160                         |         |
| <b>Chemical Agents</b>                 |        |                                |                               |         |
| Smoke/dust/flames                      | 98.1%  | 97.8%                          | 99.0%                         | .28     |
| Insecticides/paints/fumes/odor         | 1.5%   | 1.4%                           | 2.0%                          | .66     |
| <b>Physical Agents</b>                 |        |                                |                               |         |
| Loud noise (from machine/people)       | 32.1%  | 20.9%                          | 77.0%                         | <.01**  |
| Extreme temperatures                   | 5.9%   | 0.0%                           | 29.7%                         | <.01**  |
| Dark/in rooms with inadequate lighting | 0.8%   | 0.1%                           | 3.8%                          | <.01**  |
| Heights                                | 8.5%   | 0.7%                           | 40.2%                         | <.01**  |
| Insufficient ventilation               | 1.4%   | 0.0%                           | 7.2%                          | <.01**  |
| Slip, trip, or falling hazards         | 2.1%   | 1.0%                           | 6.6%                          | <.01**  |
| Dangerous tools                        | 9.3%   | 4.6%                           | 28.5%                         | <.01**  |
| <b>Biological Agents</b>               |        |                                |                               |         |
| Viral                                  | 3.9%   | 0.2%                           | 18.9%                         | <.01**  |
| Fungal                                 | 4.4%   | 5.3%                           | 1.0%                          | <.01**  |
| Parasitical                            | 20.6%  | 18.2%                          | 30.1%                         | .10     |
| <b>Work with Heavy Loads</b>           |        |                                |                               |         |
| Usually                                | 0.8%   | 0.9%                           | 0.0%                          | .20     |
| Sometimes                              | 6.8%   | 7.2%                           | 5.0%                          |         |
| No                                     | 92.5%  | 91.9%                          | 95.0%                         |         |
| <b>Work with Dangerous Tools</b>       |        |                                |                               |         |
| Needle <sup>1</sup>                    | 3.4%   | 0.9%                           | 13.9%                         | <.01**  |
| Scissor <sup>1</sup>                   | 20.1%  | 6.3%                           | 76.1%                         | <.01**  |
| Blade <sup>1</sup>                     | 5.1%   | 6.4%                           | 0.0%                          | .32     |

Base: Children who worked in the carpet industry in the past 12 months. Information missing for one HH-based child carpet worker (Weighted N = 6).

Source: Nepal PC Household child survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

Note: Multiple response items, so totals may exceed 100 percent.

<sup>1</sup> Tools of sharp, trapping, pinching or crushing nature, considered to be dangerous.

<sup>33</sup> The most common tools included scissors to cut thread, a comb to pack the warp, and rods and sticks to compress and keep the thread in place. Sometimes additional cutters and needles were needed to correct weaving mistakes. See Table 52 for the full list of hazards and tools examined.

Work was less hazardous if the children received training. There were slight differences between HH-based and factory-based child carpet workers; 12.4 percent of factory-based received training, compared to only 2.5 percent of the HH-based child carpet workers (see Table 46).

Other hazardous working conditions included the child being severely punished and being sexually abused. One-fifth (21.9 percent) of child carpet workers reported being reprimanded or punished at work, but there were significant differences between HH-based and factory-based child carpet workers. Two-fifths (40.9 percent) of the factory-based child carpet workers reported being reprimanded or punished at work, compared to one-sixth (17.3 percent) of the HH-based child carpet workers (see Table 18). The factory-based children were usually reprimanded by an employer or supervisor, while the HH-based children were usually reprimanded by their parents.

A small proportion (2.2 percent) of the factory-based child carpet workers (none of the HH-based) reported being punished to the extent of being physically injured. Almost double that proportion in both HH and factory settings reported being touched inappropriately at work, which suggested possible sexual abuse (see Table 18). The sample base for pursuing the possible abuse was quite small, so the results should only be expressed qualitatively. The perpetrators of abuse who were reported most often by factory-based children were coworkers, managers, employers, and supervisors. The reported perpetrator for HH-based children was typically a stranger, although sometimes other family members.

**Table 18. Punishment and Potential Abuse for Child Carpet Workers**

| Exposure to Punishment/Abuse  | Total  | Children Working in Households | Children Working in Factories | p value |
|---|--------|--------------------------------|-------------------------------|---------|
| Weighted N=   | 10,901 | 8,741                          | 2,160                         |         |
| <b>Punishment and Potential Abuse</b>   |        |                                |                               |         |
| “Are you reprimanded or punished at work?” (“Yes”)                                      | 21.9%  | 17.3%                          | 40.9%                         | <.01**  |
| “Have you been punished to the extent that you were physically injured?” (“Yes”)        | 0.5%   | 0.0%                           | 2.2%                          | <.01**  |
| “Have you ever been touched in an inappropriate manner while you were working?” (“Yes”) | 4.5%   | 4.5%                           | 4.6%                          | .95     |

Base: Children who worked in the carpet industry in the past 12 months. Information missing for one HH-based child carpet worker (Weighted N = 6).

Source: Nepal PC Household child survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

Work that harms the morals of children is also considered hazardous, and another aspect of the workplace environment was the potential for permitting or enabling the child carpet workers to observe and engage in behaviors that were considered socially and culturally immoral or

unhealthy (see Table 47). The most prevalent of those factors for HH-based child carpet workers were observing children and youths drinking and smoking.

#### **4.5.5. What Children Earned by Working in the Carpet Industry**

The study examined how children were compensated for working because indications that the children were exploited at work included their not being paid, being paid less than other workers, not earning enough to support themselves, or having difficulties collecting their payments.

The majority (53.5 percent) of child carpet workers received no compensation for working, but that masked significant differences. Two-thirds (66.7 percent) of the HH-based received nothing, whereas all (98.2 percent) factory-based child carpet workers received cash. In addition to cash, 80.6 percent of the factory-based children said that they received shelter, food, and clothing as compensation, and 14.9 percent said they received food (see Table 48). Including cash and in-kind compensation, factory-based child carpet workers earned an estimated median of 600 rupees per week (8 USD). The HH-based received a very small median amount of only 50 rupees per week (roughly 60 US cents).

Three-fourths (77.8 percent) of the factory-based child carpet workers reported that their payment was based on their production (piece-rate or completion of a task), and 42.1 percent reported being paid monthly.<sup>34</sup> One-third (33.3 percent) of the HH-based child carpet workers received cash; 90.1 percent of those reported being paid based on their production.

#### **4.5.6. Transfers, Remittances, and Expenses**

There were significant differences between the HH-based child carpet workers who were paid (n=2,917) and the factory-based child carpet workers in their responses to questions about who controlled and kept the children's earnings. Almost all (96.9 percent) of the HH-based (vs. only 18.1 percent of the factory-based) children reported that they did not give their parents any of their earnings. Four-fifths (81.7 percent) of the factory-based child carpet workers reported that their parents received some (64.7 percent) or all (17.0 percent) of the children's earnings, and most reported that they, not the employers, had given the earnings to the parents (see Table 19).

The child carpet workers also were asked about whether any money was sent (remittances) to their parents or family. Again, there were significant differences. Two-thirds (66.1 percent) of the factory-based (vs. 0.3 percent of the HH-based) had sent money to their parents or family during the last 12 months, and another 10.2 percent of the factory-based (none of the HH-based) reported that someone else (probably the employer) had sent money (see Table 19). Of course,

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<sup>34</sup> Multiple responses were possible, and they sum to more than 100 percent.

the great majority of the HH-based children were living with their parents, which eliminated the need for those children to send remittances to the parents.

**Table 19. Recipient of Payment for Child Carpet Workers**

|   | Total | Children Working in Households | Children Working in Factories | p value |
|---|-------|--------------------------------|-------------------------------|---------|
| Weighted N=   | 5,076 | 2,917                          | 2,159                         |         |
| <b>"Do you or your employer give part or all earning/benefits to parents/guardian?"<sup>1</sup></b> |       |                                |                               |         |
| Yes, employer gives all income  | 6.7%  | 0.1%                           | 15.5%                         | <.01**  |
| Yes, I give all   | 0.6%  | 0.0%                           | 1.5%                          |         |
| Yes, employer gives part of my income   | 1.8%  | 0.0%                           | 4.1%                          |         |
| Yes, I give part myself   | 27.5% | 3.0%                           | 60.6%                         |         |
| No, none given to parents or relatives  | 63.3% | 96.9%                          | 18.1%                         |         |
| Others  | 0.1%  | 0.0%                           | 0.2%                          |         |
| <b>Remittances <sup>2</sup></b>   |       |                                |                               |         |
| Weighted N=   | 3,810 | 1,743                          | 2,066                         |         |
| "In the past 12 months, did you send any money to your parents/family?" ("Yes")                     | 36.0% | 0.3%                           | 66.1%                         | <.01**  |
| "Did your employer/contractor send any money to your parents/family in past 12 months?" ("Yes")     | 5.5%  | 0.0%                           | 10.2%                         | <.01**  |

<sup>1</sup>Base: Children who worked in the carpet industry in the past 12 months and received something in exchange for work.

<sup>2</sup>Base: Children who worked in the carpet industry in the past 12 months and were born elsewhere.

Source: Nepal PC Household child survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

In terms of how the children spent any money that they had, the great majority (86.7 and 88.8 percent) of both groups spent money on food and/or clothing. Except for agreement on that expenditure, there were significant differences between the HH-based child carpet workers who were paid and the factory-based child carpet workers about how they spent the earnings that were not sent to the parents. Factory-based child carpet workers earned significantly more than HH-based children, and a much greater proportion (62.0 percent vs. 23.6 percent of HH-based) spent money on entertainment. More than one-fourth (22.2 percent) of the HH-based children bought school materials and books, compared with almost none (1.1 percent) of the factory-based. Almost half (45.2 percent) of the children working in factories (vs. 9.6 percent of HH-based) reported sending money to their home (remittances), and a small proportion (2.1 percent) of the factory-based reported having to pay rent.

**Table 20. Use of Money Earned by Child Carpet Workers**

|  | Total | Children Working in Households | Children Working in Factories | p value |
|--|-------|--------------------------------|-------------------------------|---------|
| Weighted N=                                      | 5,076 | 2,916                          | 2,160                         |         |
| <b>“What do you do with any money you earn?”</b> |       |                                |                               |         |
| Buy school material/books                        | 13.2% | 22.2%                          | 1.1%                          | <.01**  |
| Buy food or/and clothing                         | 87.6% | 86.7%                          | 88.8%                         | .72     |
| Buy more goods to sell                           | 0.1%  | 0.0%                           | 0.3%                          | .09     |
| Use for entertainment                            | 39.9% | 23.6%                          | 62.0%                         | <.01**  |
| Pay rent   | 0.9%  | 0.0%                           | 2.1%                          | <.01**  |
| Save   | 16.9% | 14.3%                          | 20.3%                         | .45     |
| Don't get cash income                            | 0.6%  | 0.1%                           | 1.3%                          | <.01**  |
| Send the amount to own home/remittance           | 24.7% | 9.6%                           | 45.2%                         | <.01**  |
| For medication                                   | 0.0%  | 0.0%                           | 0.1%                          | .20     |
| Others   | 0.3%  | 0.0%                           | 0.7%                          | <.05*   |
| DK/NR  | 0.4%  | 0.0%                           | 1.0%                          | .10     |

Base: Children who worked in the carpet industry in the past 12 months and received something in exchange for work.

Note: Multiple response items, so totals may exceed 100 percent.

Source: Nepal PC Household child survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

#### **4.5.7. Children’s Ability to Leave Work in the Carpet Industry**

The study looked at whether children were able to stop working and leave the workplace (their exit from the industry’s workforce). The two groups of child carpet workers were significantly different in vulnerability and in their ability to leave their workplaces. Migrants (95.7 percent of factory-based vs. 19.9 percent of HH-based) who did not live with their parents (85.2 of factory-based vs. 6.1 percent of HH-based) were more vulnerable to coercion, and almost one-fifth (18.1 percent) of factory-based child carpet workers (vs. none of the HH-based) reported that they were unable to leave their job even if they wanted to leave (see Table 21). One reason that children reported for being unable to leave their jobs was that their employers will punish or not let them go (reported by 2.4. percent); another was that the children still had to pay debt (reported by 1.1 percent).

**Table 21. Ability to Leave Job among Child Carpet Workers**

|  | Total  | Children Working in Households | Children Working in Factories | p value |
|--|--------|--------------------------------|-------------------------------|---------|
| Weighted N=                                    | 10,907 | 8,747                          | 2,160                         |         |
| <b>Indicators of vulnerability</b>             |        |                                |                               |         |
| Child not working for parents                  | -      | 33.6%                          | -                             | -       |
| Child was not living with parents or spouse    | 21.8%  | 6.1%                           | 85.2%                         | <.01**  |
| Child was born elsewhere                       | 34.9%  | 19.9%                          | 95.7%                         | <.01**  |
| <b>Ability to leave job</b>                    |        |                                |                               |         |
| Child was unable to leave job if he/she wanted | 3.6%   | 0.0%                           | 18.1%                         | <.01**  |
| <b>"Why are you unable to leave this job?"</b> |        |                                |                               |         |
| Employer will punish or not let me go          | 0.5%   | 0.0%                           | 2.4%                          | <.05*   |
| Still have to pay debt                         | 0.2%   | 0.0%                           | 1.1%                          | <.01**  |
| Parents will punish                            | 0.4%   | 0.0%                           | 2.0%                          | <.01**  |
| No other job available                         | 1.8%   | 0.0%                           | 9.0%                          | <.01**  |
| Haven't earned enough money                    | 0.5%   | 0.0%                           | 2.7%                          | <.01**  |
| Don't know where to go                         | 2.1%   | 0.0%                           | 10.8%                         | <.01**  |

Base: Children who worked in the carpet industry in the past 12 months.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

#### 4.6. COMPARATIVE PERSPECTIVE OF CHILD CARPET WORKERS

The target population of this study -- child carpet workers – has been described. Now it is important to place those children in perspective. The environment where the HH-based carpet industry was located was the relevant environment for four-fifths (80.2 percent) of the children working in the carpet industry in Nepal.<sup>35</sup> Only some HHs in each sampled area were carpet HHs. How did the carpet HHs compare with their neighbors, and how did the living and working conditions of the child carpet workers in those carpet HHs compare with the conditions of other working children in the same areas? The study achieved that perspective by sampling reference (non-carpet) HHs in the same local areas where the study sampled carpet HHs. The sampled carpet HHs were representative of all carpet HHs in Nepal, but the sampled non-carpet HHs represented only the areas where carpet HHs were located. It is important to remember that the majority of the wool-processing HHs were composed of Bhutanese refugee families, and the majority of the areas where the wool-processing HHs were located were atypical for Nepal because they were in or adjacent to Bhutanese refugee camps.

<sup>35</sup> In the HH survey, an adult informant (the head of HH or the most knowledgeable member) in each HH and all children (5-17 years old) were questioned about the children's work. The reports from the adults and children were similar. This study preferred and reports the data from the children reporting their own personal work patterns and conditions.

## 4.6.1. Household Poverty and Indebtedness

### 4.6.1.1. Household Poverty

The sampled areas were mixed; 55 percent of the HHs were urban, and 45 percent were rural (see Table 4). Carpet HHs were relatively worse off than non-carpet HHs. A smaller proportion of carpet HHs owned agricultural land or livestock, but those were significant assets only for rural residents. Since a majority of households were urban, other indicators of socio-economic status needed to be examined (see Table 22). Compared with non-carpet HHs, significantly fewer carpet HHs owned other key durable goods with the obvious exception of carpet looms. Significantly more carpet HHs reported difficulty finding the money to buy food or clothes, and significantly fewer carpet reported being able to buy expensive goods.

**Table 22. Socio-Economic Status of Carpet and Non-Carpet HHs**

| HH Socio economic Indicators   | Carpet HH | Non Carpet HH | p value |
|--|-----------|---------------|---------|
| Weighted N=  | 15,847    | 15,728        |         |
| <b>Self-reported economic status</b>   |           |               |         |
| We don't have enough money for food  | 4.4%      | 5.3%          | <.01**  |
| We have enough money for food, but buying clothes is difficult                   | 65.2%     | 50.6%         |         |
| We have enough money for food/clothes & can save, but not to buy expensive goods | 26.5%     | 26.0%         |         |
| We can afford to buy certain expensive goods such as a TV set/refrigerator       | 3.1%      | 16.7%         |         |
| We can afford to buy whatever we want  | 0.8%      | 1.6%          |         |
| <b>HH assets (% of HH that own each asset)</b>                                   |           |               |         |
| Agricultural land  | 47.6%     | 55.0%         | .23     |
| Livestock or cattle  | 27.3%     | 44.6%         | <.05*   |
| Refrigerator   | 0.8%      | 6.0%          | <.01**  |
| Motorbike  | 3.5%      | 7.9%          | .13     |
| Mobile Telephone   | 30.8%     | 48.6%         | <.01**  |
| Loom for carpets   | 5.6%      | 0.6%          | <.01**  |

Base: Households interviewed for the PC HH survey.

Source: Nepal PC Household survey (Dec. 2008-April 2009).

### 4.6.1.2. Household Indebtedness

More than half of both sets of HHs had acquired some debt, and they shared many of the same reasons for acquiring debt, but the carpet and non-carpet HHs differed in the relative importance of the reasons why they became indebted (see Table 32 and Table 54). The most common reason for the carpet HHs was a major celebration, followed by medical treatment or purchasing domestic appliances. The most common reason for the non-carpet HHs was to expand the family

business, followed by purchasing domestic appliances and medical treatments. Although carpet and non-carpet HHs had similar levels of debt and similar reasons, more carpet HHs acquired debt to finance their short-term consumption needs, whereas more non-carpet HHs were also acquiring debt for longer-term investment in family businesses. More non-carpet HHs (6.0 percent vs. only 1.7 percent for carpet HHs) had acquired debt to pay off another debt, which was a sign of possible debt distress (see Table 54).

The median family debt was similar across both sets of households -- 6,000 to 8,000 rupees (76-101 USD) (see Table 32). That amount was approximately equivalent to a month's salary for an adult carpet weaver in Kathmandu, a seemingly manageable level of debt.<sup>36</sup> However, one-fifth (19.9 percent) of the child carpet workers' HHs owed more than 10,000 rupees (127 USD). Larger debts were more likely to have serious consequences because high fees and interest rates might result in the debts accumulating and leading to bonded labor conditions. The last lender for both sets of HHs was most often a local money lender, although there were a variety of other sources of credit (see Table 32). No carpet HHs had borrowed from an employer or labor contractor, a risk factor for bonded labor.

Two-fifths (40.3 percent) of the carpet HHs and three-fourths of the non-carpet HHs that acquired debt reported difficulties in the last 12 months in repaying their debts (see Table 33). When those HHs mentioned the reasons for the difficulties, the most common reasons were lower than expected income. More than half (54.0 percent) of the carpet HHs that had difficulties repaying their loans noted lower income from a HH enterprise (possibly carpet-industry related). One-fourth (27.1 percent) of those carpet HHs reported that a member of the HH was injured or ill and could not work. Then almost the same proportion of carpet HHs reported the reason was lack of income or no job (14.0 percent) or lower agricultural production than expected (13.2 percent). Only one-fifth (21.1 percent) of those carpet HHs mentioned unexpected expenses as the reason. The non-carpet HHs mainly reported lower agricultural production (44.7 percent) or unexpected expenses (36.7 percent)

#### **4.6.1.3. Repayment of Household Debts and Child Labor**

The study closely examined the issue of HH debt and whether HHs faced difficulties in repaying the debts. The HHs that had difficulties repaying their debts reported the possible consequences; three-fourths (73.1 percent) of the carpet HHs noted being charged higher interest rates; almost one-third (31.9 percent) mentioned being threatened by the creditor; and one-fifth (21.8 percent) noted the accumulation of fees and debt. HHs that cannot repay their debts and, thus, accumulate debt, and then are charged even higher fees, confront the risk of being trapped in permanent

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<sup>36</sup> As a reference, average U.S. household debt during the 2000s hovered above 100 percent of after-tax annual income. See, for example, <http://www.americanprogress.org/issues/2012/01/econsnap0112.html>

indebtedness. Providing labor to the creditor, a consequence related to bonded labor, was mentioned quite rarely (3.1 percent of the carpet HHs), although it was mentioned slightly more often among carpet HHs than non-carpet HHs (see Table 34). HH informants were further asked if any HH member was currently providing labor to repay any debt, but no HH mentioned that a child was providing the labor.

## 4.6.2. Socio-Demographic Characteristics

### 4.6.2.1. Socio-Demographic Characteristics of Households

Table 23. Socio-Demographic Characteristics of Carpet and Non-Carpet Households

| HH Socio Demographic Indicators                           | Carpet HHs | Non Carpet HHs | p value |
|---|------------|----------------|---------|
| Weighted N=   | 15,847     | 15,728         |         |
| <b>HH Demographics<sup>1</sup></b>                        |            |                |         |
| Setting (% rural)   | 43.4%      | 44.2%          | .98     |
| Number of HH members (median)                             | 5.0        | 5.0            | <.01**  |
| Number of HH members below 18 (median)                    | 2.0        | 1.0            | <.01**  |
| <b>Head of HH Demographics<sup>1</sup></b>                |            |                |         |
| Sex (% Male)  | 75.2%      | 75.8%          | .87     |
| Median Age  | 47.0       | 50.0           | <.05*   |
| Marital Status (% Married)                                | 83.8%      | 78.1%          | .18     |
| Education level (% never attended school)                 | 60.0%      | 50.8%          | <.05*   |
| Migration status (% born elsewhere)                       | 87.4%      | 85.5%          | .75     |
| Work Status (% worked in last 12 months)                  | 87.6%      | 74.6%          | <.01**  |
| <b>Demographics of Other Adult HH Members<sup>2</sup></b> |            |                |         |
| Weighted N=   | 36,075     | 34,654         |         |
| Sex (% Male)  | 33.7%      | 33.6%          | .99     |
| Median Age  | 27.0       | 28.0           | .23     |
| Education level (% never attended school)                 | 35.7%      | 33.3%          | .37     |
| Work Status (% worked in last 12 months)                  | 80.9%      | 62.6%          | <.01**  |
| <b>Child HH Member Demographics<sup>3</sup></b>           |            |                |         |
| Weighted N=   | 24,817     | 15,811         |         |
| Sex (% Male)  | 43.4%      | 47.9%          | .41     |
| Median Age  | 12.0       | 12.0           | .27     |
| Education level (% never attended school)                 | 1.1%       | 0.9%           | .84     |
| Work Status (% worked in last 12 months)                  | 33.4%      | 19.4%          | <.01**  |

Source: Nepal PC Household survey (Dec. 2008-April 2009).

<sup>1</sup>Base: Households interviewed for the PC HH survey.

<sup>2</sup>Base: Adult household members (18 years or older, excluding Head of HH) in households interviewed for the PC HH survey.

<sup>3</sup>Base: Child household members (5 to 17 years of age) in households interviewed for the PC HH survey.

Most HHs in both sets were urban, headed by married men, with a median size of five members (see Table 23). The heads of carpet HHs were younger and less likely to have attended school. The other adults (not the heads) in both sets of HHs were similar in that two-thirds were women; about one-third had never attended school; and their median age was 27. A significant difference was that a greater proportion of the adults (heads and other adults) in carpet HHs had worked in the last 12 months than the corresponding adults in non-carpet HHs.

#### **4.6.2.2. Socio-Demographic Characteristics of Working Children**

Carpet HHs had one more child, but the majority of children in both types of HHs were girls, and almost all had attended (or was currently attending) school. However, the children in carpet HHs were older with a median age of 12 (vs. 11 for non-carpet HHs), and a greater proportion were girls. A significant difference was that a greater proportion of the children in carpet HHs had worked in the last 12 months.<sup>37</sup>

The great majority (86.1 percent) of working children in carpet HHs worked in the carpet industry (see Table 24), and the study focused on only two groups of working children – child carpet workers and children in non-carpet HHs who worked in other industries, mainly as laborers in the agriculture and construction sectors (see Table 35). Because non-carpet HHs had fewer children and fewer of those worked, the study covered more than twice as many child carpet workers (Weighted N = 8,747) as children in non-carpet HHs who worked in other industries (Weighted N = 3,463).

The clearest difference between the two groups of working children was gender. There were slightly more girls than boys in both sets of HHs. In the non-carpet HHs, the boy:girl ratio of the working children was almost the same as the boy:girl ratio of all the children. The child carpet workers were 86.8 percent girls (see Table 24).<sup>38</sup> The differences in ages were less extreme, but the child carpet workers included a smaller proportion of the older (14-17) and a greater proportion of the younger (5-13) children.

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<sup>37</sup> The information in Table 23 came from adult respondents. Based on their reports, 33.4 percent of the children in carpet HHs and 19.4 percent of the children in non-carpet HHs had worked in the last 12 months. When the children were questioned, the resulting rates were different (40.9 percent in carpet HHs and 21.9 percent in non-carpet HHs). The survey used the children's self-reports to identify the sub-samples of working children.

<sup>38</sup> This report does not analyze the children in carpet HHs who worked in other industries, but their socio-demographic characteristics were very similar to the working children in non-carpet HHs. They were primarily the older boys.

**Table 24. Demographic Characteristics of Children in Carpet and Non-Carpet HHs**

| HH Socio economic Indicators               | Carpet HHs           |                     |                      | Non carpet HHs      |                      | p value |
|--|----------------------|---------------------|----------------------|---------------------|----------------------|---------|
|  | Child carpet workers | Other child workers | Non working children | Other child workers | Non working children |         |
| Weighted N=                                | 8,747                | 1,409               | 14,661               | 3,463               | 12,347               |         |
| <b>Sex</b>                                 |                      |                     |                      |                     |                      |         |
| Male                                       | 13.2%                | 74.8%               | 55.7%                | 46.3%               | 48.7%                | <.01**  |
| Female                                     | 86.8%                | 25.2%               | 44.3%                | 53.7%               | 51.3%                |         |
| <b>Age</b>                                 |                      |                     |                      |                     |                      |         |
| 5-8  | 3.2%                 | 1.7%                | 34.5%                | 0.7%                | 32.8%                | <.01**  |
| 9-13                                       | 38.7%                | 25.9%               | 47.6%                | 33.4%               | 41.4%                |         |
| 14-17                                      | 58.1%                | 72.5%               | 17.8%                | 66.0%               | 25.7%                |         |
| Median Age                                 | 14.0                 | 15.0                | 10.0                 | 14.0                | 10.0                 | <.01**  |
| <b>Education status</b>                    |                      |                     |                      |                     |                      |         |
| Currently attending school <sup>1</sup>    | 95.9%                | 97.4%               | 98.6%                | 91.7%               | 99.2%                | <.01**  |
| <b>Health status</b>                       |                      |                     |                      |                     |                      |         |
| Ill in the past 12 months                  | 60.9%                | 63.1%               | 61.0%                | 54.5%               | 63.0%                | .89     |
| Injured in the past 12 months <sup>2</sup> | 21.7%                | 29.9%               | 21.8%                | 23.6%               | 25.3%                | .85     |
| <b>Migration status</b>                    |                      |                     |                      |                     |                      |         |
| Born elsewhere? (% 'Yes')                  | 19.9%                | 32.5%               | 12.7%                | 21.2%               | 13.9%                | .17     |
| Country of origin (% Bhutan)               | 13.9%                | 4.1%                | 4.5%                 | 8.9%                | 6.2%                 | .11     |
| Country of origin (% India)                | 2.0%                 | 18.3%               | 3.4%                 | 0.0%                | 0.8%                 |         |

Base: Children interviewed in the PC Household Child Survey.

Source: PC Household Child Survey (June-December 2009).

### 4.6.3. Characteristics of the Children’s Work

#### 4.6.3.1. Reasons for Working

The great majority of working children in both sets of HHs reported that their main reason to work was to supplement family income. Labor migration was not important for either group. Very few had immigrated, and most of the immigrants had come as refugees. Working to repay outstanding family debt was not mentioned by either (see Table 11).

#### 4.6.3.2. Time Devoted to Work and Chores

There were no significant differences in the number of months, days, or hours worked by HH-based child workers. Only one-fourth of children in both groups worked 12 months of the year; about one third worked 7 days a week; and less than one-tenth worked more than six hours per day (see Table 25).

**Table 25. Months, Days, and Hours Worked by Children Working in the Carpet Industry and Other Industries**

|  | Child carpet workers<br>(Carpet HH) | Other child workers<br>(Comparison HH) | p value |
|--|-------------------------------------|--|---------|
| Weighted N=                                  | 8,747                               | 3,463                                  |         |
| <b>Months Worked<sup>1</sup></b>             |                                     |  |         |
| Median months worked per year                | 7.0                                 | 5.0                                    | .43     |
| Proportion working 12 months per year        | 24.1%                               | 23.0%                                  | .89     |
| <b>Days Worked<sup>2</sup></b>               |                                     |  |         |
| Weighted N=                                  | 4,657                               | 881                                    |         |
| Median days worked per week                  | 3.0                                 | 2.0                                    | .91     |
| Proportion working 7 days per week           | 31.1%                               | 34.5%                                  | .81     |
| <b>Hours Worked<sup>3</sup></b>              |                                     |  |         |
| Weighted N=                                  | 3,332                               | 727                                    |         |
| Median hours per day                         | 1:40                                | 2:00                                   | .17     |
| Proportion working more than 6 hours per day | 7.2%                                | 7.2%                                   | .99     |
| Working at night                             | 24.7%                               | 18.0%                                  | .53     |

<sup>1</sup> Base: Children who worked in the last 12 months.

<sup>2</sup> Base: Children who worked in the last seven days.

<sup>3</sup> Base: Children who worked in the last three days.

Source: Nepal PC Household survey (Dec. 2008-April 2009).

In addition to their economic work, child carpet workers spent 14 hours per week on unpaid HH chores, slightly less than other child workers, who spent a median of 15 hours per week. There were some differences in the types of chores that each group performed, which were probably due to the preponderance of girls among the child carpet workers. Girls in each group spent more hours than boys on HH chores. The overall median number of hours per week was moderately high, with a median of 15 hours among girl carpet workers and 19 hours among other girl workers, which might add significantly to the girls' workloads (see Table 36 and Table 51).

#### **4.6.3.3. The Workplaces**

Studies of child labor generally assume that working children are more likely to be exploited at workplaces that are distant from the social protection of the children's home and family. The great majority (90.5 percent) of child carpet workers were working in their own family HHs with only a few going to work at a refugee camp (see Table 37). Two-thirds of the children from non-carpet HHs worked at their employers' homes.

#### **4.6.3.4. Working Conditions**

A higher proportion of children working in other industries reported being exposed to unhealthy environmental conditions in their workplaces, including exposure to the sun (ultraviolet radiation), extreme temperatures, possibilities of slipping, tripping, or falling, and viral hazards. A slightly higher proportion of child carpet workers reported being exposed to dust and/or smoke. Both sets of working children reported similar levels of psychological abuse and possible sexual abuse. Both reported very low levels of physical abuse.

#### **4.6.3.5. Physical Health and Psychosocial Well-Being**

There were similar rates of illness and injury for both sets of working children over the last 12 months. There was a greater prevalence of some specific illnesses for child carpet workers, such as vomiting, eye problems, and skin problems. Children in other industries reported a greater proportion of breathing problems. There were very few work-related injuries in either group. In terms of mental health, both sets of children had similar scores for their personal well-being.<sup>39</sup>

#### **4.6.3.6. Earnings from Work**

Most children in both groups did not get paid for their work. The earnings of those children who were paid were similar: children working in other industries received a median of 32 rupees per week (equivalent to 40 cents), a symbolic amount similar to what child carpet workers received. Most children in both groups did not transfer any earnings to their parents.

#### **4.6.3.7. Ability to leave work**

Almost none of the children in either group reported being unable to leave their job if they wanted to leave, and none reported being unable to leave because of the menace of a penalty from a third-party.

### **4.6.4. Summarizing the Comparison**

The sampled areas were representative of all areas in Nepal where carpet HHs were located. The refugee camp areas were atypical of Nepal. Carpet HHs were relatively poorer than other HHs in their same areas. Both sets reported similar levels of debt and similar characteristics of their indebtedness and difficulty repaying debts. No link was found between the indebtedness of

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<sup>39</sup> Personal Well-Being Index (PWI) scores

carpet HHs and the use of child labor to repay those debts, although a small proportion of carpet HHs provided adult labor to repay their debts. Carpet HHs were larger with one more child. The heads of carpet HHs were younger and less likely to have attended school than the heads of non-carpet HHs. All HH members in carpet HHs (heads, other adults, and children) were more likely to have worked in the last 12 months than HH members in non-carpet HHs. HH-based child carpet workers were more female and less likely to work outside the HH than working children in non-carpet HHs. A majority of working children from both sets of HHs reported that they worked to supplement their families' income. Both groups of children experienced similar working conditions and worked a similar amount of time. The majority of both groups were not paid; those who were paid received similar low levels of compensation.

#### **4.7. MEASURING UNACCEPTABLE WORK (CHILD LABOR)**

This section addresses another objective -- Produce reliable, statistically sound, and nationally representative estimates of the number and prevalence of working children who were engaged in unacceptable work (child labor). By unacceptable work, the study meant that the nature of the work and/or the working conditions exploited and/or abused working children. The prevalence meant the percentage of child carpet workers who were engaged in that unacceptable work (see 3.2.3). This section presents the resulting estimates. A more detailed description of the methodology used to develop these measures and the specific crosswalks used to compute them is in Appendix C.

This study looked to international conventions for guidance in identifying unacceptable kinds of work and working conditions. In general, international and Nepalese standards agreed. Nepal had ratified many ILO conventions and the UN Convention on the Rights of a Child (UNCRC), and Nepal had passed legislation that was based on or adapted international standards. However, the international and Nepalese standards differed in terms of the minimum age to work (15 vs. 14 years), the age of a child and the minimum age to be engaged in hazardous work (under 18 vs. under 16 years), and the establishments that were regulated.

This study relied on international standards whenever there were differences between the two sets of standards and utilized Nepalese standards when they defined specific issues that were not defined by international standards, such as listing specific occupations as hazardous and setting the acceptable number of hours to work, etc.

##### **4.7.1. Indications of Hazardous Work**

The study examined the nature of the work (whether it was defined as inherently hazardous), the characteristics of the working conditions and workplace, and the medical histories of the working children. The international conventions did not identify specific industries as being hazardous, but Nepal's labor laws did identify specific occupations and processes.

Nepal's Child Labor Act prohibits children from working in occupations and processes that are hazardous, and the Act specifically identifies and lists carpet weaving and wool processing among those prohibited processes. Based on the nature of the work being identified as hazardous, all of the children working in the carpet industry in Nepal were in a situation of child labor.

#### **4.7.1.1. Hazardous Work (International Standards)**

By international standards, the category of child carpet worker encompasses all persons under 18 years of age who were working in the carpet industry. This study was based on international standards. Therefore, this study estimates that:

- 10,907 children were working in the carpet industry when the survey was conducted, and all of those child carpet workers were in child labor conditions due to hazardous work.

#### **4.7.1.2. Hazardous Work (Nepalese Standards)**

By Nepalese standards, only persons under 16 are prohibited from being employed in hazardous work. This report noted earlier (see 4.3.1) that, according to Nepalese standards:

- 70.6 percent of all child carpet workers were under 16 and in child labor conditions due to hazardous work (see Table 63 for operational definition).
- 54.8 percent of the factory-based children were under 16 and in child labor conditions due to hazardous work.

#### **4.7.1.3. Indications of Hazardous Work (Working Conditions)**

ILO Recommendation 190 (amending ILO Convention 182) described many specific hazards. The study prepared a list of specific hazards derived from Recommendation 190 and asked the research teams to record their observations and asked the working children to report whether their working environments contained those hazards. The research teams observed that nearly all factories had dust and particles, and more than half of the factories had poor air quality. The great majority of child carpet workers reported that their working environments featured many of the listed hazards. Nearly all child carpet workers reported dusty workplaces; one-third noted loud noise; and one-fifth reported the presence of parasites. There were sharp tools, and almost none of the child carpet workers had received training to use their tools. Other hazardous conditions were more serious but were reported by smaller proportions of the child carpet workers. Those conditions included being punished to the extent of being injured (physical abuse) and being touched inappropriately (sexual abuse). Factory-based children reported physical abuse more often than HH-based children (2.2 vs. 0.0 percent). Sexual abuse was mentioned by a measurable proportion of child carpet workers (4.5 percent) in both settings.

The study also examined children’s medical histories to learn whether working children showed signs that they were disproportionately injured and if the children noted that injuries were work-related. Although not many child carpet workers reported work-related injuries, there was a significant difference in the greater proportion of factory-based children reporting injury to or swelling of the hands (2.3 percent vs. 0.1 percent) and cuts/wounds (2.0 percent vs. 0.1 percent).

Even though hazards were more frequent in factory environments, this study estimates that all child carpet workers showed indications of being in hazardous working conditions once all hazards were aggregated into a measure of indications of hazardous working conditions (see Table 64 for operational definition).

#### 4.7.2. Indications of Excessive Work

The project analyzed the burden that carpet work represented for child carpet workers by looking at the number of hours they dedicated to carpet-related activities per week. Table 26 shows the proportion of children working a few hours (1-13 hours per week), a moderate number of hours (14-42 hours per week), and a large number of hours (43 hours per week or more) for different age groups (See Appendix C for rationale for these working hours breakdowns).

One-third (30.9 percent) of all child carpet workers worked more than 43 hours per week on carpet related activities, with a median of nine hours per week. There were large differences between HH-based and factory-based child carpet workers. Factory-based child carpet workers worked significantly longer hours than HH-based child carpet workers, with a median of 69 hours per week, compared to 5:30 hours among HH-based child carpet workers. Nearly nine-tenths (89.1 percent) of factory-based child carpet workers worked 43 hours or more per week, compared to only 4.6 percent of the HH-based child carpet workers. These patterns were similar for each of the age sub-groups examined. Both median weekly hours and the proportion working 43 hours or more per week were significantly greater for factory-based child carpet workers across all age groups.

**Table 26. Weekly Working Hours in Carpet-related Activities by Child Carpet Workers in India**

|                             | Total      | Children Working in Households | Children Working in Factories | p value |
|-----------------------------|------------|--------------------------------|-------------------------------|---------|
| <b>Children 12-13 years</b> |            |                                |                               |         |
| Weighted N=                 | 1,569      | 1,348                          | 221                           |         |
| 1 -13 hours                 | 76.3%      | 88.2%                          | *                             | -       |
| 14 - 42 hours               | 9.7%       | 10.8%                          | *                             |         |
| 43 hours or more            | 14.0%      | 1.1%                           | *                             |         |
| Median                      | 4:00 Hours | 3:00 Hours                     | *                             | -       |

|                                    | Total       | Children Working in Households | Children Working in Factories | p value |
|------------------------------------|-------------|--------------------------------|-------------------------------|---------|
| <b>Children 14-15 years</b>        |             |                                |                               |         |
| Weighted N=                        | 2,489       | 1,573                          | 916                           |         |
| 1 -13 hours                        | 48.7%       | 73.3%                          | 6.5%                          | <.01**  |
| 14 - 42 hours                      | 15.0%       | 21.0%                          | 4.6%                          |         |
| 43 hours or more                   | 36.3%       | 5.7%                           | 88.9%                         |         |
| Median                             | 17:30 Hours | 8:00 Hours                     | 70:00 Hours                   | <.01**  |
| <b>Children 16-17 years</b>        |             |                                |                               |         |
| Weighted N=                        | 2,311       | 1,340                          | 971                           |         |
| 1 -13 hours                        | 37.3%       | 58.4%                          | 8.3%                          | <.01**  |
| 14 - 42 hours                      | 21.1%       | 33.8%                          | 3.6%                          |         |
| 43 hours or more                   | 41.5%       | 7.8%                           | 88.1%                         |         |
| Median                             | 25:40 Hours | 6:00 Hours                     | 68:00 Hours                   | <.01**  |
| <b>Total (Children 5-17 years)</b> |             |                                |                               |         |
| Weighted N=                        | 6,898       | 4,747                          | 2,151                         |         |
| 1 -13 hours                        | 54.1%       | 75.5%                          | 7.0%                          | <.01**  |
| 14 - 42 hours                      | 14.9%       | 19.9%                          | 3.9%                          |         |
| 43 hours or more                   | 30.9%       | 4.6%                           | 89.1%                         |         |
| Median                             | 9:00 Hours  | 5:30 Hours                     | 69:00 Hours                   | <.01**  |

Base: Children who had worked in carpet-related activities in the last seven days in factories and households.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

Note: Subcategory of 5-11 year old child carpet workers is omitted from the table due to insufficient sample size (n<30). Those children are however included in the Total (Children 5-17).

The hours dedicated to carpet activities only provided a partial picture of each child's total workload, which may include other economic work and a significant amount of unpaid household chores. The amount of work that was permissible for different age groups also varied. In order to address these issues, the project developed a measure that indicated the existence and prevalence of child labor based on equating each child's total work load with the child's age and the standards for an appropriate workload. The total work load combined the time that HH-based children spent performing unpaid household services with the economic work that children may have performed. Child labor existed when the child worked an excessive number of hours (see Table 27 for the operational definition).

**Table 27. Measuring Excessive Work**

|                                 | Economic Work |                  | Combination of Work |                  |
|---------------------------------|---------------|------------------|---------------------|------------------|
|                                 | Work          | Child Labor      | Work                | Child Labor      |
| Children under-12 (5-11 years)  | <1 hour       | 1 or more        | <28 hours           | 28 or more       |
| Children under-14 (12-13 years) | <14 hours     | 14 or more       | <35                 | 35 or more       |
| Children under-16 (14-15 years) | <43           | 43 hours or more | <43                 | 43 hours or more |
| Children under-18 (16-17 years) | <43           | 43 hours or more |                     |                  |

Note: The criteria for measuring excessive work were developed by the Research on Children Working in the Carpet Industry in India, Nepal, and Pakistan project, 2007-2012.

The measure (see Table 28) revealed that:

- More than half (51.9 percent) of the child carpet workers in Nepal showed indications of being in child labor because of enduring an excessive workload.
- 100 percent of the youngest (aged 5-11 years) workers showed indications of enduring an excessive workload.<sup>40</sup>
- 89.4 percent of the children working in factories and one-third (34.9 percent) of the HH-based child carpet workers showed indications of enduring an excessive workload.

**Table 28. Excessive Work among Child Carpet Workers in Nepal**

|  | Total No. of Child Carpet Workers in Nepal | Children Working in Households | Children Working in Factories | p value |
|--|--|--------------------------------|-------------------------------|---------|
| Weighted N=                                      | 6,898                                      | 4,747                          | 2,151                         |         |
| <b>Proportion Working Excessive Hours by Age</b> |  |                                |                               |         |
| Children under-12 (5-11 years)                   | 100.0%                                     | 100.0%                         | 100.0%                        | -       |
| Children under-14 (12-13 years)                  | 41.6%                                      | 32.8%                          | 95.6%                         | <.01**  |
| Children under-16 (14-15 years)                  | 43.7%                                      | 17.3%                          | 88.9%                         | <.01**  |
| Children under-18 (16-17 years)                  | 56.8%                                      | 34.2%                          | 88.1%                         | <.01**  |
| Total child carpet workers                       | 51.9%                                      | 34.9%                          | 89.4%                         | <.01**  |

Base: Children who had worked in carpet-related activities in the last seven days in factories and households.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

### 4.7.3. Indications of Child Trafficking

The study developed a set of variables that estimated the extent to which children showed indications of having been trafficked to work in the carpet industry in Nepal (See Appendix C). This addressed another specific question that the study was designed to answer: To what extent were children trafficked into these situations?

<sup>40</sup> Children under 12 were considered to have worked excessive hours if they worked one hour per week or more.

One key factor was the amount of movement of children for work purposes. Child trafficking required work-related movement from one place to another location. None of the HH-based child carpet workers qualified as labor migrants (see section 4.4.3.2), but almost all (94.7 percent) of the factory-based child carpet workers had migrated to the place where they were interviewed. A majority (85.2 percent) were not living with their parents, and most of those who had moved (86.2 percent) reported that the main reason for migrating to the place where they were surveyed was to look for a job or because they had found a job. The study also examined (a) whether somebody in addition to the child had decided that the child would migrate, which was the case for 57.0 percent of factory-based child carpet workers, (b) whether a labor contractor was involved in the move (30.0 percent), and (c) whether the child was in a child labor situation (100 percent). Using those indicators (see Table 67 for operational definition), it was estimated that:

- 1.5 percent of child carpet workers, or 168 children, showed indications of being victims of child trafficking.
- 7.8 percent of factory-based child carpet workers, or 168 children, showed indications of being victims of child trafficking. (All of the apparent victims of child trafficking worked in carpet factories.)

These variables established clear indications of child trafficking in the factory-based carpet industry in Nepal. A more in-depth analysis of labor migration and child trafficking to the carpet factories of Kathmandu Valley may be found in the project's Sending Areas Study report.<sup>41</sup>

#### **4.7.4. Indications of Forced Labor or Bonded Labor**

The project developed a set of variables that indicated the existence of forced or bonded labor by examining three stages: when the child entered the workforce, when the child was working, and when the child left the workforce (ILO, 2011). This addresses another specific question that the study was designed to answer: To what extent were children working in the carpet industry working under forced and/or bonded labor conditions?

One possible indicator was the age of the child carpet worker when the child started working and when the child was interviewed. Was he or she too young to be considered capable of making an independent voluntary decision? This factor was indecisive for the factory-based child carpet workers. Their median age to start working was 13 years; their median age was 15 years when they were interviewed; and only 12.2 percent of them were below 14 at that time. The HH-based child carpet workers included younger children, including some 5-8 years old. Obviously some of the HH-based children did not independently make the decision to start working. Their parents

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<sup>41</sup> See the project's report on "Child Trafficking and Bonded Labor in the Carpet Industry and Sending Areas in Nepal."

made the decision. However, parental and family pressure on children to work in the family setting does not qualify as forced labor. Coercion must be applied by a third party (not the child's parents) to be considered an indication of forced labor (see ILO, 2011:17).

Another important factor was family poverty and indebtedness, which might indicate that the family was trapped in indebtedness and had to repay debt with labor (possible bonded labor). If the entire family was forced to work, then the child also would be in forced or bonded labor. In its guidelines on forced labor, the ILO noted that, "If a child is working as a direct consequence of his or her parents being in a situation of forced labour, then the child is also considered to be in forced labour."

Family poverty and indebtedness were obviously important in influencing children's entry into the carpet industry workforce; 54.9 percent of HH-based child carpet workers reported that they were working to supplement family income, and another 10.9 percent were working to help the HH enterprise. Factory-based children in particular appeared to be an important source of financial support for their families, as evidenced by the fact that all or some of the earnings from 81.7 percent of these children were given to the parents. The fact that the majority of children were working to help support their families was an indication of family poverty rather than an indication of possible forced or bonded labor.

The comparative research showed that carpet HHs appeared to be poorer than other HHs in the same areas. More than two-thirds (69.6 percent) of the carpet HHs reported difficulty finding money to buy food or clothes. More than half (57.1 percent) of carpet HHs had acquired some debt, and two-fifths of the carpet HHs that acquired debt reported difficulties in the last 12 months in repaying debt (see Table 32 and Table 33). The consequences for not repaying debts included higher interest rates and accumulation of fees, indicating that those HHs already may have entered, or might enter in the future, a spiral of perpetual debt.

There were very few indications that household debt had resulted in bonded labor situations among HH-based child carpet workers. Providing labor to the creditor, a consequence related to bonded labor, was mentioned quite rarely, although it was mentioned slightly more often among carpet HHs than non-carpet HHs (see Table 34). No HH reported that a child's labor had been part of the exchange. Almost none (0.1 percent) of the HH-based child carpet workers reported working to pay outstanding family debt (see Table 11). Another potential indication was the responses when child carpet workers were asked about their ability to stop working. No HH-based child carpet worker reported being unable to leave their job because they had to pay debt, or any other form of coercion from a third party.

The factory-based child carpet workers showed clear indications of forced or bonded labor. A majority of the children working in carpet factories were living in vulnerable conditions: 95.7

percent were migrants, and 85.2 percent were not living with their parents. One-fifth (18.1 percent) of the factory-based child carpet workers reported that they were unable to leave their job even if they wanted to leave (see Table 21). A small proportion (2.4 percent) of the factory-based children reported that they could not leave because their employer would punish them or not let them go, and an additional 1.1 percent mentioned that they could not leave because they still had to pay an outstanding debt.

There were strong indications that there was some forced or bonded labor, and that it was found predominantly in isolated migrant children working away from their families in carpet factories, who could not leave the job because the employer would punish or harm the child if he or she tried to leave the job. There were few indications of a direct link between family poverty and forced or bonded labor conditions.

## DISCUSSION

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### 5.1. CONTRIBUTIONS

One of the contributions of this study was expanding the definition and scope of the carpet industry. Previous research had typically focused only on carpet weaving in carpet factories in the central Kathmandu (KTM) Valley. This study examined the workforce involved in a range of 17 activities that included supply chain processing of the wool as well as producing and finishing the carpets (see 3.2.1). Based on that expanded definition, the study developed a sampling frame and then conducted surveys that encompassed not only carpet factories in the KTM Valley but also thousands of households spread across Nepal that were engaged in the carpet industry.

The importance of Tibetan refugees to the Nepalese carpet industry was well-known, and their influence was still visible in the HH-based production of carpets in the mountainous districts bordering what used to be Tibet. The study revealed the importance of another group of refugees, the Bhutanese in refugee camps in the eastern Terai who were the primary source of HH-based workers carding and spinning the wool for the carpet industry.

A primary contribution of this study was the production of reliable, statistically sound, nationally representative, and current estimates of the number and prevalence of children working in the carpet industry. The focus of previous studies had been children working in the carpet factories in the KTM Valley. Expanding the scope of the industry highlighted the fact that 80.2 percent of Nepal's child carpet workers were based in HHs, with two-thirds (66.9 percent) of all the child carpet workers in Nepal based in HHs in the Terai. One-fourth (27.4 percent) of the child carpet workers, including all of the children working in factories, were in the KYM Valley.

Another primary contribution of this study was identifying and measuring the existence and extent of forms of unacceptable work (child labor). That work is discussed extensively in an earlier section (see 4.7) and in an appendix. The study highlighted the stark differences between the children who were HH-based and those who worked in carpet factories. Almost all (95.3 percent) HH-based children, but almost none (3.2 percent) of the factory-based, were attending school at the time of the survey. One-fourth of the factory-based children had never attended school, and 41.9 percent were unable to read single words. Only half (51.8 percent) of the children working in the factories, compared to 90.0 percent of HH-based child carpet workers, could do simple addition and subtraction.

The study also contributed significantly to the knowledge base and understanding of the children working in the carpet industry and their families by placing them in perspective and comparing them with other households in their same areas. This also established benchmark data to assist any future research and action programs with those families or in those areas.

## 5.2. THE SIZE OF THE CARPET INDUSTRY IN NEPAL IN 2008-2009

### 5.2.1. Comparing Study Findings with Previous Research

Previous research had typically focused on only the carpet factories in the central Kathmandu Valley. For this reason, the only estimate from this study that was comparable with the earlier estimates was the estimate of the number and prevalence of children working in the carpet factories in the Kathmandu Valley.

**Table 29. Child Labor Estimates in in Nepal's Carpet Industry, 1993-2006**

| Year | Source                                   | No.     | Prevalence   | Age  |
|------|--|---------|--------------|------|
| 1993 | CWIN (Pradhan, 1993)                     | 150,000 | 50 percent   | 5-15 |
| 1993 | Government                               | -       | 9 percent    | 5-17 |
| 1993 | Government                               | 4,499   | 19.2 percent | 5-17 |
| 1993 | Government (same as above)               | 178     | >1 percent   | 5-13 |
| 1994 | AAFLI                                    | -       | 30 percent   | 5-13 |
| 1998 | Chapagain, et al., 1998 (BISCONS)        | -       | 11 percent   | -    |
| 2002 | ILO – IPEC (KC, et al., 2002)            | 7,689   | 12 percent   | 5-17 |
| 2002 | ILO-IPEC (same as above)                 | 5,305   | 8 percent    | 5-15 |
| 2002 | ILO-IPEC (same as above)                 | 538     | >1 percent   | 5-13 |
| 2003 | Nepal RugMark Foundation (spinning wool) | 1,256   | 14 percent   | 5-17 |
| 2010 | ICF Prevalence and Conditions Study      | 10,907  | 22.0 percent | 5-17 |
| 2010 | ICF PC Study (only factory-based)        | 2,160   | 12.4 percent | 5-17 |

The most recent and substantive study on the Nepalese carpet industry was an ILO quantitative rapid assessment on child labor in the carpet factories of Kathmandu valley (KC, et al., 2002). That study estimated that there were a total of 794 carpet-related factories in Kathmandu valley. These factories employed a total of 64,304 workers, of which 7,689 were child workers, representing an industry prevalence of 12.0 percent.

Except for the difference in the absolute size of the workforce, the current study closely replicates most of the findings from the 2002 rapid assessment. However, this study estimated that the absolute size of the workforce was much smaller (17,363 total workers, of which 2,160 were children).

A declining trend in overall employment had been observed in the Indian and Pakistani carpet industries as well, and in those countries it was explained to some extent by the decline in global

demand resulting from the 2007/2008 recession. However, the Nepal carpet industry had suffered its sharpest decline between 1999 and 2003, followed by a mild decline through the 2007/2008 recession. This mild decline was consistent with the correspondence between the 2002 estimate of 794 factories and the current estimate of 714 factories, but this study's estimate of the total workforce was less than one-third of the 2002 estimate (64,304 vs. 17,363), which was not justified by the 14 percent drop in export volume over the same period. Since the number of carpet factories remained relatively constant, the difference must be driven by the number of workers per factory.

### **5.3. TRENDS IN THE INDUSTRY**

A question about whether more or less child labor should be anticipated in the carpet industry in Nepal in the future involved speculation about future economic trends. However, the project was able to collect information about trends in production technology and the use of labor that might predict future trends in child labor in the carpet industry.

#### **5.3.1. Changes in the Structure of the Industry**

The carpet industry in Nepal was reported to be undergoing major structural change in the aftermath of the PC study. The project was able to document this change through the Labor Demand (LD) Study, a panel study of carpet producing establishments that was conducted in Nepal between May 2010 and July 2011. Those years had been filled with news accounts of difficulty in the carpet sector in Nepal due to shrinking global demand, an unstable political situation, and rising demand for Nepali workers in the Middle East and East Asia. The project received many reports of plant closings and outsourcing of production out of factories and into households to lower costs, avoid regulation, and evade the attempts at extortion that reportedly were directed at larger establishments with increasing frequency. However, the LD census of establishments did not suggest a general decline in the number of looms or establishments over the time period.

The prevalence of migrant labor was increasing across rounds of the LD study, a finding that was consistent with narrative reports where employers complained about having more difficulty in finding workers than in the past. The prevalence of workers owing debts also declined over the period, which was again consistent with narrative reports from the field of more competition for workers.

### **5.3.2. Changes in Consumers' Tastes**

In many private discussions, carpet exporters complained about a factor that had affected their sales and, in India, was affecting the technology of producing carpets, a technological shift that might occur (quickly or eventually) in Nepal. Carpet exporters believed that many western consumers were no longer looking for a permanent carpet that had historic and craft value and was very durable. The exporters stated that western consumers were looking for disposable carpets that fit a current color and decorating scheme. When the consumer decided to switch color schemes in a room, everything that did not match that color (including handmade carpets) would be discarded. For that reason, the consumers were looking for cheaper carpets and did not care that they were also less durable.

### **5.3.3. Changes in Production Technology and Children's Work**

The traditional technology for producing handmade carpets is weaving on a hand loom. The most durable technique is called hand-knotting because it involves the weaver tying knots in the thread after every pass. Weaving carpets, especially hand-knotting, is a slow process due to the labor that was involved. Children are utilized in many activities during the production of carpets from the wool processing through to the final finishing, but children are most commonly used to weave (or hand-knot) carpets.

Exporters in India have shifted much of their production to other techniques such as tufting and hand-loomed, which produce less durable carpets much quicker. These technologies fit better with factory-based production in which the workers work full workdays. Tufting frames are much cheaper than the traditional looms used for weaving and can fit anywhere. The hand-loomed are large and relatively expensive, and manufacturers locate them in factory settings.

Manufacturers in Nepal have not made a shift away from Tibetan hand-knotting, which were still the only type of carpets produced in Nepal.<sup>42</sup> A shift would probably cause many changes in the volume of production and the demand for labor.

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<sup>42</sup> The researchers did not observe any tufting or hand-loomed in Nepal.

## 5.4. REMAINING QUESTIONS

The study produced results that answered almost all of the research questions (see 4.1.2.1). Three questions remained for which the survey data had not provided definitive answers.

### **5.4.1. Were there particular educational barriers that made children more vulnerable to working in the carpet industry?**

The study did not collect any evidence or reporting of any particular educational barriers that were specifically related to the carpet industry. Three-fourths (74.1 percent) of child carpet workers were attending school, and the most commonly reported reason why children were not attending school was lack of interest in school, although the cost of schooling was the second reason most commonly reported (see Table 9). In Nepal, families usually had to pay tuition fees and buy a school uniform, books, and other learning materials, even for primary education in public schools. To place that cost in perspective, more than two-thirds of the carpet households had difficulties buying the necessary food and clothing (see Table 22). Still, nearly all (95.3 percent) HH-based child carpet workers were currently attending school.

The real conflict between work and schooling in Nepal occurred among factory-based children: almost none (3.2 percent) of those children were currently attending school. An obvious reason was that those children were on average older than HH-based children, with almost half of them (45.2 percent) being 16 or older, the age when children were supposed to complete secondary school in Nepal.

However, a clearer barrier for those children was their status as labor migrants, which in many cases included indications of child trafficking and/or forced/bonded labor. The Sending Areas study analyzed in detail the factors surrounding the decision to migrate among those children. A precursor to the decision to migrate was the family's attitude towards education; There was clear evidence indicating that families that sent their children to work placed less importance on education than non-sending families. The eventual decision to drop out from school was often related to family poverty, although contractors might also entice children and/or their parents with advance payments. In some cases, children themselves decided to go by themselves, to seek the excitement of city life or to elope. Only once the decision to drop out from school had been made did children migrate to work in the Kathmandu Valley. This decision to drop out from school was in most cases definitive.

#### **5.4.2. What particular aspects of the carpet industry encouraged or discouraged the use of children? Were there aspects of the carpet industry that led to greater exploitation of children?**

Given that carpet-related activities were hazardous and, thus, all children working in the carpet industry were exploited, the two questions call for the same answer. The primary aspect of the carpet industry in Nepal that encouraged the use of children and, thus, increased the extent of child labor was that the industry was predominantly household-based, which also meant family-based. Dispersing the production of thread among rural and urban households permitted or encouraged more families to put their children to work.

The household-based wool-processing enterprise was well-suited for very poor households that did not own physical assets, such as land or livestock. The carpet industry did not require that the members of the household go elsewhere to work, and it did not require investments other than some inexpensive common tools, which allowed the industry to respond to increased market demand by simply putting more workers (or more households) to work. When the industry expanded, all it really required was more labor, and that simple need led to greater exploitation of children.

Another basic aspect was the low wage paid to child carpet workers. If carpet establishments operated as profit maximizing entities, the lower cost of employing children would induce a substitution towards children and away from adults. However, in the case of Nepal, it seemed that the main motive for child labor was poverty rather than profit maximization. This was documented by the LD study, which found that an increase in child wages led to an increase in child employment and concluded that “the increase in child employment with higher child wages and the decline with higher adult wages is consistent with poverty motives for child employment, a classic model of labor supply rather than the hiring decisions of perfectly competitive enterprise.”

In addition to the aspects that encouraged employment of children in general (and therefore child exploitation), there were several aspects that encouraged the exploitation among particular groups of children. More specifically, the factory-based carpet industry recruited mostly migrant labor, including a large number of children. Children migrated away from their families for the purposes of finding work, a movement that was often organized and amounted in many cases to child trafficking. Children ended in vulnerable living conditions -- a mode of payment based on production volume, paired with earnings that were below those of adult workers, well below the minimum living wage and sometimes withheld by the employer. This exploitive payment system was likely also a driver of the long hours that factory-based children had to work in order to earn a basic living and send some money back home. Their vulnerable living and working conditions

put factory-based child carpet workers in a clearly exploitive situation, which in some cases was akin to forced or bonded labor.

### **5.5. STRENGTHS OF STUDY**

The PC Study in Nepal benefited from the qualitative field research done by the PD/PI and Child Labor Specialist at the onset of the project. The five person-weeks of in-country exploratory research provided helpful inputs to inform the design and instruments used in the PC Study. It also helped provide the adequate context to interpret the findings of the quantitative surveys.

The PC Study in Nepal was based on a comprehensive set of sampling frames that were built expressly for this research. A critical input for the sampling frames was the initial exploratory research, which allowed the project to uncover several areas of HH-based carpet activities, including mountain areas and the wool-processing areas in the eastern districts. The latter represented the most significant inclusion, as those were the areas containing most child carpet workers. Additionally, the project carried out an exhaustive review of secondary sources and existing lists. Those lists were validated and expanded by conducting primary research, including phone calls, site visits, and personal interviews with exporters, factory owners, wool processors, and subcontractors. The project's primary research also allowed building sampling frames of HH-based areas, for which no previous data existed.

An additional strength of this study was the use of standardized scales to assess critical child-level outcomes, including literacy, numeracy, and psychosocial well-being. Those scales provided field-tested and validated instruments that were used to obtain objective scores and, in some cases, also normative data to assess the relative standing of those scores.

Finally, this study also represented an improvement over previous research because it provided benchmarks to compare children working in the carpet sector with children who were living in the same areas but were working in other sectors. That made it possible for this study to evaluate differences between child carpet workers and children in other occupational situations (including non-working children) while holding constant many geographical and household type variables.

### **5.6. LIMITATIONS OF STUDY**

The PC study in Nepal did not face major challenges and had few limitations beyond those that were inherent to all child labor research. Child labor, trafficking, forced and bonded labor, and hazardous work were prohibited by law and socially sensitive. International reports about the existence and prevalence of those practices had severe repercussions on foreign markets in the past. The project expected that factory-based gatekeepers and employers in particular would try to conceal child labor and prevent researchers from gaining access for interviewing and observation.

However, the intensive primary research conducted during the sampling frame building exercise allowed the research team to build rapport with gatekeepers and employers even before the study commenced. Additionally, the study utilized various methods, ranging from public presentations to revising the method of selecting the samples of factory workers that helped alleviate any initial reluctance. The research team was confident that the final data was valid and reliable, accurately reflecting the prevalence and conditions in the areas covered by the sampling frame.

Another limitation resulted from the complex and sensitive nature of some of the constructs and populations being measured. Concepts such as child labor, trafficking, and forced or bonded labor, which are essential to this study, were multi-faceted and appeared in different forms and contexts. As an example, the ILO's guidelines to estimate the forced labor of children (ILO, 2011) demanded a complex measurement framework, including multiple indicators of unfree recruitment, work and life under duress, and impossibility to leave. Forced labor was only one of a wide variety of topics related to the work of children that the study was designed to cover in a geographically and geopolitically diverse area. As a consequence, all of the topics could not be covered as exhaustively as possible.

## SUMMARY AND CONCLUSIONS

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### Summary

This is the final report of the Prevalence and Conditions (PC) Study of Nepal, which was one of the studies conducted by the USDOL-funded “Research on Children Working in the Carpet Industry of India, Nepal, and Pakistan” project that was administered by ICF. The study had three objectives.

The first objective was to produce reliable, statistically sound, and nationally representative estimates of the prevalence of working children and child labor in the carpet industry in Nepal. Based on its survey findings, the study estimated that:

- There were 10,907 children working in the carpet industry in Nepal.
- Children constituted 22.0 percent of the carpet industry workforce in Nepal.
- Based on the work being hazardous, all of the child carpet workers in Nepal were in child labor.
  - The project investigated further using other measures and determined, based on hours of total work per week, that more than half (51.9 percent) of the children working in the carpet industry showed indications of being in child labor because of working too many hours. This rate was much higher (89.4 percent) among the factory-based child carpet workers
  - More than two-thirds (70.6 percent) of all child carpet workers were below 16 years of age and working in breach of Nepalese law.
  - The study found clear indications of child trafficking among factory-based child carpet workers. A conservative estimate was that at least 7.8 percent of factory-based child carpet workers showed indications of trafficking. There were no indications of child trafficking among the HH-based children.

The second objective was to describe children’s working conditions in the production process of the carpet industry in Nepal.

- Four-fifths (80.2 percent) of the child carpet workers were in the household-based industry, and their main activity was spinning wool to make thread. Their median age was 14 years; most were girls; and they mostly worked in their own households.
- Carpet households were characterized by poverty and indebtedness, but there were no indications that children’s labor was used to repay those debts.
- Three-fourths (74.1 percent) of child carpet workers were currently attending school, but only 3.2 percent of factory-based child carpet workers. Most children were able to read with fluency (67.1 percent) or perform both addition and subtraction (82.4 percent), but factory-based children scored much worse.

- Very few child carpet workers reported work-related injuries, including injuries to knees or legs (0.9 percent), injury or swelling of hands (0.5 percent), and cuts/wounds (0.5 percent). Most of those injuries were predominantly suffered by factory-based child carpet workers.
- HH-based carpet workers worked in moderation: a majority (61.2 percent) worked four days a week or less, and a median of 1:40 hours per day. Factory-based children on the other hand worked very long hours, with a median of 11 hours and 30 minutes per day.
- Child carpet workers earned a median of 100 rupees per week. Household-based children earned only a symbolic allowance (50 rupees). Factory-based children earned 600 rupees per day, which was slightly more than half the median salary of an adult carpet worker. In most cases, part or all of those earnings were transferred to their parents.
- Most children were exposed to some hazardous agent or process in the workplace, including dust (98.1 percent), loud noise (32.1 percent), or parasites (20.6 percent).

The third objective was to compare the working and living conditions of children working in the carpet industry and children working in other industries in Nepal.

- Carpet households were larger and relatively poorer than other local households.
- The heads of carpet HHs were younger and less likely to have attended school than the heads of non-carpet HHs. All HH members in carpet HHs (heads, other adults, and children) were more likely to have worked in the last 12 months than HH members in non-carpet HHs.
- HH-based child carpet workers were more female and less likely to work outside their home than working children in non-carpet HHs.
- Both groups of children experienced similar working conditions, worked a similar amount of time, and received similar pay.

## **Conclusions**

Almost 11,000 (n=10,907) children were working in the carpet industry in Nepal at the time of this study. That estimated population of children working was smaller than previous estimates, but their prevalence among the total workforce was similar.

All of the children working in the carpet industry in Nepal were working in a worst form of child labor, as indicated by the hazardous nature of the work<sup>43</sup>. There were stark differences between household and factory-based children.

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<sup>43</sup> The hazardous nature of the carpet industry was established both by definition (according to Nepal's Child Labor Act, 1999) and based on the evidence collected by the Nepal PC study of hazardous agents and processes in the workplace.

Most children working in the carpet industry were working in households, and most of the household-based child carpet workers were living with their parents. Those children worked relatively few hours and were able to combine school and work. Except for the hazardous working conditions, their work could be characterized as acceptable light work.

Family poverty was important in influencing children's entry into the carpet industry. Household-based child carpet workers belonged to households that were on average larger and poorer than other households in the same geographic areas. Most of those households were in debt, and some provided adult labor in exchange to repay their debts. However, no direct link was found between the indebtedness of carpet HHs and the use of child labor to repay those debts.

Factory-based child carpet workers, on the other hand, worked very long hours for little pay. Most were labor migrants living away from their parents, and many were in conditions of child trafficking and/or forced labor. Those children were vulnerable and were working in clearly exploitative conditions.

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## APPENDIX A – THE RESEARCH TEAM

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The Prevalence and Conditions (PC) Study was conducted between December 2008 and July 2009 by Macro International (ICF), which administered all contracts, monitored and secured the flow of all necessary funds, and obtained all necessary permissions and authorizations including human subjects' approval. ICF also supported the principal researcher with methodological design, questionnaire development, tabulation of data, and professional editing of the report. ICF had final reporting responsibilities to USDOL.

ICF executes its projects through a team structure placing the project director at the center of the project with authority to make all necessary decisions while providing an integrated team of qualified staff to plan and implement projects.

Dr. Art Hansen was the Principal Investigator/Project Director (PI/PD) for the project. He had led project teams over the last 20 years with a special focus on child labor and child welfare. He had conducted projects for a range of USG agencies including USDOL-ILAB as well as international donor agencies such as the UN.

Pablo Diego Rosell was the Research Consultant for the project. He had 9 years of experience conducting research studies and had worked in child labor data collection projects in multiple countries.

New ERA was the implementing institution in Nepal in charge of data collection, fieldwork quality control, data processing, and data cleaning. New ERA, a Kathmandu-based non-profit research organization founded in 1971, was the primary social research organization in Nepal, having completed over 450 projects, including studies of children working in the carpet industry, large-scale surveys, and rapid assessments. New ERA has also conducted projects with ICF International for the USAID funded Demographic and Health Surveys (DHS).

## APPENDIX B – ADDITIONAL DATA

**Table 30: Household Sampling Frames.**

| District      | Processing    |               | Production   |               |
|---------------|---------------|---------------|--------------|---------------|
|               | Full frame    | Reduced frame | Full frame   | Reduced frame |
| Bhaktapur     | 1,112         | 1,112         | 11           | 11            |
| Chitwan       | 743           | -             |              |               |
| Dhanusa       | 272           | -             |              |               |
| Ilam          | 6             | -             |              |               |
| Jhapa         | 6,630         | 6,630         |              |               |
| Kaski         | 1,808         | 1,808         |              |               |
| Kathmandu     | 946           | 946           | 122          | 122           |
| Lalitpur      | 119           | 119           | 8            | 8             |
| Mahotari      | 1,270         | -             |              |               |
| Makawanpur    | 302           | -             |              |               |
| Manang        | 21            | 21            | 98           | 98            |
| Morang        | 4,206         | 4,206         |              |               |
| Mustang       | 883           | 883           | 945          | 945           |
| Nawalparasi   | 350           | -             |              |               |
| Sarlahi       | 287           | -             |              |               |
| Sindhuli      | 54            | -             |              |               |
| Sindhupalchok | -             | -             | 210          | 210           |
| Solokhumbu    | -             | -             | 34           | -             |
| Sunsari       | 239           | -             |              |               |
| Surkhet       | 160           | -             |              |               |
| Tanahu        | 70            | -             |              |               |
| Udaypur       | 70            | -             |              |               |
| <b>Total</b>  | <b>19,548</b> | <b>15,725</b> | <b>1,438</b> | <b>1,394</b>  |

**Table 31: Carpet Factory Frame and Sample**

| Strata<br>(Estimated No. of Workers) | Sampling Frame |                    | Final Sample |
|--------------------------------------|----------------|--------------------|--------------|
|                                      | In Valley      | Outside (Excluded) |              |
| 100 +                                | 38             | 6                  | 84           |
| 50-99                                | 129            | 0                  | 74           |
| 30-49                                | 244            | 1                  | 58           |
| 1-29                                 | 524            | 6                  | 25           |
| <b>Total</b>                         | <b>935</b>     | <b>13</b>          | <b>241</b>   |

**Table 32. Household Debt of Carpet and Non-Carpet HHs**

|   | Child Carpet Workers<br>(Carpet HHs) | Other Child Workers<br>(Non Carpet HHs) | p value |
|---|--------------------------------------|---|---------|
| Weighted N=   | 8,747                                | 3,463                                   |         |
| <b>Household Debt Levels</b>  |                                      |   |         |
| % with some HH member that has acquired any debt <sup>1</sup>                     | 57.1%                                | 60.8%                                   | .74     |
| Weighted N=   | 4,996                                | 2,106                                   |         |
| Median HH debt (Rs.) <sup>2</sup>   | 6,000                                | 8,000                                   | .20     |
| <b>"Who loaned money (last borrowed money) to anyone in the HH?" <sup>2</sup></b> |                                      |   |         |
| Family member   | 18.6%                                | 21.1%                                   | .63     |
| Local money lender  | 42.3%                                | 28.5%                                   |         |
| Bank/finance company  | 3.1%                                 | 5.9%                                    |         |
| Cooperatives/community organizations/saving and credit group                      | 15.4%                                | 19.1%                                   |         |
| Relatives   | 2.8%                                 | 12.4%                                   |         |
| Friends/Neighbors   | 17.7%                                | 12.9%                                   |         |

Source: Nepal PC Household survey (Dec. 2008-April 2009).

<sup>1</sup> Base: Households of Child carpet workers and Other Working Children.

<sup>2</sup> Base: Households of child carpet workers and Other Working Children that have acquired any debt.

**Table 33. Distressed Debt among Carpet and Non-Carpet HHs**

|  | Child Carpet Workers<br>(Carpet HHs) | Other Child Workers<br>(Non Carpet HHs) | p value |
|--|--------------------------------------|---|---------|
| Weighted N=  | 4,996                                | 2,106                                   |         |
| <b>Difficulty paying off debt <sup>1</sup></b>   |                                      |   |         |
| "In the past 12 months has your household had any difficulty paying off debt?" (% 'yes') | 40.3%                                | 72.3%                                   | <.05*   |
| <b>"What made it difficult to pay off debt?" <sup>2</sup></b>                            |                                      |   |         |
| Weighted N=  | 2,012                                | 1,522                                   |         |
| Household member was injured or sick and couldn't work                                   | 27.1%                                | 19.6%                                   | .68     |
| Agricultural production lower than expected  | 13.2%                                | 44.7%                                   | .06     |
| Death in Family  | 0.0%                                 | 3.5%                                    | .30     |
| Unexpected expenses  | 21.1%                                | 36.7%                                   | .37     |
| Lower than expected income from enterprise   | 54.0%                                | 20.7%                                   | <.05*   |
| Lack of income, no job   | 14.0%                                | 0.5%                                    | <.01**  |
| Family members not sending money from foreign country                                    | 1.3%                                 | 0.1%                                    | <.05*   |

Source: Nepal PC Household survey (Dec. 2008-April 2009).

<sup>1</sup> Base: Households of Carpet Child Workers and Other Working Children that have acquired any debt.

<sup>2</sup> Base: Households of Carpet Child Workers and children working in other industries that have acquired any debt and had difficulty paying off debt.

**Table 34. Consequences of Not Repaying Debt for Carpet and Non-Carpet HHs**

|   | Child Carpet Workers<br>(Carpet HHs) | Other Child Workers<br>(Non Carpet HHs) | p value |
|---|--------------------------------------|---|---------|
| Weighted N=   | 2,012                                | 1,522                                   |         |
| <b>“What are the consequences if you are unable to make your payments?”</b> |                                      |   |         |
| Accumulate fees/debt  | 21.8%                                | 32.1%                                   | .57     |
| Loss of land  | 3.9%                                 | 13.4%                                   | .08     |
| Loss of house   | 9.1%                                 | 1.0%                                    | <.05*   |
| Higher interest rate  | 73.1%                                | 41.6%                                   | .09     |
| Loss of personal assets   | 1.1%                                 | 1.8%                                    | .72     |
| Provide labor to creditor   | 3.1%                                 | 0.3%                                    | <.05*   |
| Threats from creditor   | 31.9%                                | 7.0%                                    | <.05*   |
| Others  | 0.0%                                 | 30.9%                                   | <.05*   |

Source: Nepal PC Household survey (Dec. 2008-April 2009).

Base: Households of Child carpet workers and children working in other industries that have acquired any debt and had difficulty paying off debt.

**Table 35. Types of Jobs of Children Working in the Carpet Industry and Other Industries**

|  | Child Carpet Workers<br>(Carpet HHs) | Other Child Workers<br>(Non Carpet HHs) | p value |
|--|--------------------------------------|---|---------|
| Weighted N=  | 8,747                                | 3,463                                   |         |
| <b>Types of job for income in last 12 months</b>           |                                      |   |         |
| Laborer in the Carpet Industry                             | 100.0%                               | 0.0%                                    | <.01**  |
| Agricultural, forestry and fishery laborers                | 11.0%                                | 69.7%                                   | <.01**  |
| Laborers in mining/construction/manufacturing & transport  | 3.1%                                 | 19.2%                                   |         |
| Trader workers (Food processing/wood work/garment/utility) | 0.0%                                 | 1.1%                                    |         |
| Others   | 0.1%                                 | 10.0%                                   |         |
| <b>Industry classification</b>                             |                                      |   |         |
| Carpet industry  | 100.0%                               | 0.0%                                    | <.01**  |
| Agriculture, hunting & forestry                            | 11.1%                                | 72.4%                                   | <.01**  |
| Manufacturing (excluding carpets)                          | 2.0%                                 | 3.7%                                    |         |
| Construction   | 1.0%                                 | 21.3%                                   |         |
| Others   | 0.3%                                 | 2.6%                                    |         |

Base: Household-based children who worked in the last 12 months.

Source: Nepal PC Household survey (Dec. 2008-April 2009).

**Table 36. Hours Spent on Household Chores by Children Working in the Carpet Industry and Other Industries**

|  | Child Carpet Workers<br>(Carpet HHs) | Other Child Workers<br>(Non Carpet HHs) | p value |
|--|--------------------------------------|---|---------|
| Weighted N=  | 4,747                                | 881                                     |         |
| <b>Proportion performing each chore in the last 7 days</b> |                                      |   |         |
| Cooking/ serving meals/washing dishes                      | 86.2%                                | 79.4%                                   | .52     |
| Cleaning the house, washing clothes etc.                   | 98.9%                                | 93.4%                                   | .16     |
| Shopping for HH goods                                      | 49.9%                                | 42.9%                                   | .65     |
| Minor repairs on household items                           | 0.1%                                 | 14.0%                                   | <.01**  |
| Taking care of old or sick family members                  | 6.0%                                 | 0.3%                                    | <.01**  |
| Taking care of younger children                            | 31.9%                                | 14.6%                                   | .23     |
| Collecting wood/dung for cooking or heating                | 14.2%                                | 55.2%                                   | <.01**  |
| Collecting fodder for livestock                            | 8.0%                                 | 59.2%                                   | <.01**  |
| Collecting water for HH use                                | 87.9%                                | 58.8%                                   | <.05*   |
| Total doing any chores in last 7 days                      | 99.0%                                | 97.1%                                   | .51     |
| <b>Median Hours per Week</b>                               |                                      |   |         |
| Total (All chores)   | 14.0                                 | 15.0                                    | .74     |

Base: Children who were engaged in household chores in the past seven days.

Source: Nepal PC Household survey (Dec. 2008-April 2009).

**Table 37. Work Locations of Children Working in the Carpet Industry and Other Industries**

|   | Child Carpet Workers<br>(Carpet HHs) | Other Child Workers<br>(Non Carpet HHs) | p value |
|---|--------------------------------------|---|---------|
| Weighted N=   | 4,656                                | 881                                     |         |
| <b>"Where did you do your carpet/other work on (each day of the week)?"</b> |                                      |   |         |
| At family dwelling  | 90.5%                                | 100.0%                                  | .18     |
| Employer's house  | 0.1%                                 | 65.5%                                   | <.01**  |
| Formal office   | 0.0%                                 | 0.0%                                    | -       |
| Factory   | 0.0%                                 | 0.0%                                    | -       |
| Shop/market/kiosk   | 0.0%                                 | 0.0%                                    | -       |
| In village  | 0.0%                                 | 0.0%                                    | -       |
| Different places (mobile)   | 0.0%                                 | 0.0%                                    | -       |
| On the street   | 0.0%                                 | 0.0%                                    | -       |
| Refugee Camp  | 9.4%                                 | 0.0%                                    | .18     |
| Others  | 0.0%                                 | 0.0%                                    | -       |

Base: Aggregated multiple responses for each day of the week from children who worked in the last seven days. Information missing for one HH-based Child carpet workers (Weighted N = 91).

Note: Multiple response items, so totals may exceed 100 percent.

Source: Nepal PC Household survey (Dec. 2008-April 2009)

**Table 38. School Progress for Child Carpet Workers by Setting**

|  | Total | Children Working in Households | Children Working in Factories | p value |
|--|-------|--------------------------------|-------------------------------|---------|
| Weighted N=  | 8,455 | 8,386                          | 69                            |         |
| <b>“Are most of your classmates of the same age as you are?”<sup>1</sup></b> |       |                                |                               |         |
| Most are older   | -     | 33.2%                          | -                             | -       |
| Most are younger   | -     | 10.0%                          | -                             | -       |
| Same age   | -     | 56.9%                          | -                             | -       |
| <b>Age-Grade Delay<sup>2</sup></b>   |       |                                |                               |         |
| Median Age-Grade Delay (Years)   | -     | -                              | *                             | -       |

Base: Children who worked in the carpet industry in the past 12 months and were currently attending school. Insufficient sample base (n<30) for factory based children.

<sup>1</sup> The factory-based children were not asked this question.

<sup>2</sup> Household-based children were not asked this question.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

**Table 39. Work Interfering with Education for Child Carpet Workers by Setting**

|  | Total | Children Working in Households | Children Working in Factories | p value |
|--|-------|--------------------------------|-------------------------------|---------|
| Weighted N=  | 8,449 | 8,380                          | 69                            |         |
| <b>Work Interference in Education<sup>1</sup></b>                    |       |                                |                               |         |
| Does your work interfere with your studies? (%“yes”)                 | 16.0% | 15.9%                          | *                             | -       |
| <b>“How does your work interfere with your studies?”<sup>2</sup></b> |       |                                |                               |         |
| Weighted N=  | 1,348 | 1,331                          | 17                            |         |
| Feel tired in the evening  | 16.3% | 16.6%                          | *                             | -       |
| Not enough time for homework   | 79.7% | 79.4%                          | *                             | -       |
| Feel tired in classroom  | 6.9%  | 6.9%                           | *                             | -       |
| Low marks in school  | 11.4% | 11.2%                          | *                             | -       |
| Miss classes   | 17.8% | 17.7%                          | *                             | -       |
| Arrive late at school  | 30.2% | 30.6%                          | *                             | -       |
| <b>“How often do you miss school for work?”<sup>2</sup></b>          |       |                                |                               |         |
| Weighted N=  | 1,348 | 1,331                          | 17                            |         |
| Very often (Once a week or more)                                     | 0.6%  | 0.2%                           | *                             | -       |
| Sometimes (2-4 times a year)   | 17.0% | 16.9%                          | *                             |         |
| 1-2 times a year   | 24.4% | 24.7%                          | *                             |         |
| Never  | 58.0% | 58.2%                          | *                             |         |

<sup>1</sup> Base: Children who worked in the carpet industry in the past 12 months and were currently attending school. Insufficient sample base (n<30) for factory based children.

<sup>2</sup> Base: Children who worked in the carpet industry in the past 12 months, were currently attending school, and reported that their work interfered with their studies. Insufficient sample base (n<30) for children in carpet factories.

Note: Multiple response items, so totals may exceed 100 percent.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

**Table 40. Illnesses among Child Carpet Workers by Setting**

|   | Total  | Children Working in Households | Children Working in Factories | p value |
|---|--------|--------------------------------|-------------------------------|---------|
| Weighted N=   | 10,907 | 8,747                          | 2,160                         |         |
| <b>“When was the last time you were sick?”</b>              |        |                                |                               |         |
| In the past 7 days  | 13.7%  | 14.6%                          | 10.2%                         | .23     |
| In the past 1 month (cumulative)                            | 25.7%  | 26.7%                          | 21.6%                         | .31     |
| In the past 12 months (cumulative)                          | 60.7%  | 60.9%                          | 59.7%                         | .39     |
| Longer ago/Never  | 36.6%  | 35.6%                          | 40.3%                         |         |
| DK/NR   | 2.8%   | 3.5%                           | 0.0%                          |         |
| <b>“What illnesses have you had in the past 12 months?”</b> |        |                                |                               |         |
| Diarrhea  | 3.1%   | 2.8%                           | 4.6%                          | .41     |
| Vomiting  | 4.9%   | 5.4%                           | 2.8%                          | .35     |
| Other stomach problems                                      | 13.9%  | 15.2%                          | 8.9%                          | .10     |
| Fever   | 33.8%  | 32.5%                          | 39.1%                         | .25     |
| Malaria   | 0.0%   | 0.0%                           | 0.0%                          | -       |
| Typhoid fever   | 0.7%   | 0.3%                           | 2.7%                          | <.05*   |
| Anemia  | 0.5%   | 0.7%                           | 0.0%                          | .52     |
| Cholera   | 0.0%   | 0.0%                           | 0.1%                          | .08     |
| Eye problems  | 3.4%   | 4.0%                           | 1.2%                          | .09     |
| Breathing problems  | 2.6%   | 2.4%                           | 3.6%                          | .53     |
| Severe headaches  | 18.5%  | 15.8%                          | 29.3%                         | <.01**  |
| Tooth aches   | 0.5%   | 0.6%                           | 0.3%                          | .54     |
| Muscle aches  | 1.3%   | 1.2%                           | 1.6%                          | .75     |
| Ear aches   | 1.0%   | 1.1%                           | 0.7%                          | .65     |
| Jaundice  | 0.0%   | 0.0%                           | 0.1%                          | .14     |
| Skin problems   | 3.0%   | 2.9%                           | 3.3%                          | .83     |
| Cough & cold  | 6.6%   | 5.6%                           | 10.7%                         | .16     |
| ENT problem   | 3.7%   | 3.7%                           | 4.0%                          | .87     |
| Other illness   | 4.2%   | 4.9%                           | 1.3%                          | <.05*   |

Base: Children who worked in the carpet industry in the past 12 months.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

**Table 41. Injuries among Child Carpet Workers by Setting**

|   | Total  | Children Working in Households | Children Working in Factories | p value |
|---|--------|--------------------------------|-------------------------------|---------|
| Weighted N=                                       | 10,907 | 8,747                          | 2,160                         |         |
| <b>“When was the last time you were injured?”</b> |        |                                |                               |         |
| In the past 7 days                                | 2.0%   | 2.4%                           | 0.4%                          | <.05*   |
| In the past 1 month (cumulative)                  | 10.9%  | 12.6%                          | 4.2%                          | <.01**  |
| In the past 12 months (cumulative)                | 20.0%  | 21.7%                          | 13.2%                         | .28     |
| Longer ago  | 49.9%  | 47.3%                          | 60.4%                         |         |

|   | Total | Children Working in Households | Children Working in Factories | p value |
|---|-------|--------------------------------|-------------------------------|---------|
| Never   | 29.3% | 30.1%                          | 26.4%                         |         |
| DK/NR   | 0.8%  | 1.0%                           | 0.0%                          |         |
| <b>Work-related injuries in the past 12 months (most recent injury)</b> |       |                                |                               |         |
| Head injury   | 0.0%  | 0.0%                           | 0.0%                          | -       |
| Injury to ears or deafness  | 0.0%  | 0.0%                           | 0.0%                          | -       |
| Eye injury  | 0.0%  | 0.0%                           | 0.0%                          | -       |
| Injury to shoulder  | 0.0%  | 0.0%                           | 0.0%                          | -       |
| Injury to or swelling in hands  | 0.5%  | 0.1%                           | 2.3%                          | <.01**  |
| Smoke or chemical damage to lungs                                       | 0.0%  | 0.0%                           | 0.0%                          | -       |
| Injury to abdomen   | 0.0%  | 0.0%                           | 0.0%                          | -       |
| Back strain/pain in back  | 0.0%  | 0.0%                           | 0.0%                          | -       |
| Injury to knees or legs   | 0.9%  | 1.0%                           | 0.5%                          | .50     |
| Twisted ankle or legs   | 0.1%  | 0.0%                           | 0.3%                          | .07     |
| Injury to feet or legs  | 0.2%  | 0.1%                           | 0.7%                          | .12     |
| Heat stroke   | 0.0%  | 0.0%                           | 0.0%                          | -       |
| Burn from fire  | 0.0%  | 0.1%                           | 0.0%                          | -       |
| Chemical burn   | 0.0%  | 0.0%                           | 0.0%                          | -       |
| Cuts/wounds   | 0.5%  | 0.1%                           | 2.0%                          | <.01**  |
| Other injuries  | 0.0%  | 0.0%                           | 0.0%                          | -       |

Base: Children who worked in the carpet industry in the past 12 months.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

**Table 42. Personal Well-Being of Child Carpet Workers by Setting**

|   | Total  | Children Working in Households | Children Working in Factories | p value |
|---|--------|--------------------------------|-------------------------------|---------|
| Weighted N=   | 10,896 | 8,747                          | 2,149                         |         |
| <b>“How happy are you about...” (Average)</b>                               |        |                                |                               |         |
| Standard of living (“The things you have like the money & things you own?”) | 74.2   | 74.1                           | 74.6                          | .82     |
| Health (“How healthy you are?”)   | 76.4   | 76.5                           | 76.0                          | .80     |
| Achievement (“The things you make or the things you learn?”)                | 77.6   | 76.8                           | 80.5                          | .09     |
| Personal relationships (“Getting on with the people you know?”)             | 83.7   | 83.8                           | 83.3                          | .76     |
| Personal safety (“How safe you feel?”)                                      | 76.1   | 77.0                           | 72.5                          | <.05*   |
| Feeling part of the community (“Doing things outside your home?”)           | 79.1   | 80.4                           | 73.9                          | <.01**  |
| Future security (“How things will be later on in your life?”)               | 71.6   | 73.1                           | 65.4                          | <.01**  |
| <b>Summary Scores (Average)</b>   |        |                                |                               |         |
| How happy are you about your life as a whole?                               | 70.0   | 71.7                           | 63.1                          | <.01**  |
| Personal Well-Being Index Score   | 76.9   | 77.3                           | 75.2                          | .06     |

Base: Children who worked in the carpet industry in the past 12 months. Information on Achievement missing for 21 HH Children (weighted N =1,407). Invalid data for three Factory Children (weighted N =11).

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

**Table 43. Decision to Migrate for Child Carpet Workers by Setting**

|  | Total | Children Working in Households | Children Working in Factories | p value |
|--|-------|--------------------------------|-------------------------------|---------|
| Weighted N=  | 3,810 | 1,743                          | 2,066                         |         |
| <b>Voluntary Movement</b>                                |       |                                |                               |         |
| "Did you come here of your own wish?" (%Yes)             | 49.2% | 0.3%                           | 90.5%                         | <.01**  |
| <b>"Who made the decision that you would move here?"</b> |       |                                |                               |         |
| Father   | 43.7% | 46.7%                          | 41.3%                         | .69     |
| Mother   | 47.9% | 63.7%                          | 34.6%                         | <.01**  |
| Other relative   | 14.1% | 10.0%                          | 17.6%                         | .38     |
| Friend   | 1.9%  | 0.0%                           | 3.4%                          | <.01**  |
| Employer   | 0.5%  | 0.0%                           | 0.9%                          | .15     |
| Labor contractor   | 1.6%  | 0.0%                           | 3.0%                          | <.01**  |
| Self   | 47.9% | 26.6%                          | 65.8%                         | <.01**  |

Base: Children who worked in the carpet industry in the past 12 months and were born elsewhere.

Note: Multiple response items, totals may add to more than 100 percent.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

**Table 44. Deceptive Recruitment of Migrant Child Carpet Workers by Setting**

|   | Total | Children Working in Households | Children Working in Factories | p value |
|---|-------|--------------------------------|-------------------------------|---------|
| Weighted N=   | 3,810 | 1,743                          | 2,066                         |         |
| <b>Deceptive recruitment</b>                        |       |                                |                               |         |
| "Has this job lived up to your expectations?" (%No) | 9.6%  | 0.2%                           | 17.5%                         | <.01**  |
| <b>"How is it unlike your expectations?"</b>        |       |                                |                               |         |
| Weighted N=   | 365   | 3                              | 362                           |         |
| Lower salary or payment not in time                 | 67.8% | *                              | 67.5%                         | -       |
| Living quarters not good enough                     | 6.5%  | *                              | 6.6%                          | -       |
| Vacation days                                       | 13.7% | *                              | 13.8%                         | -       |
| Work hours  | 22.9% | *                              | 23.1%                         | -       |
| Work not as expected                                | 25.8% | *                              | 26.0%                         | -       |
| Can't attend school                                 | 7.8%  | *                              | 7.8%                          | -       |
| Others  | 2.4%  | *                              | 2.4%                          | -       |

<sup>1</sup> Base: Children who worked in the carpet industry in the past 12 months and were born elsewhere.

<sup>2</sup> Base: Children who worked in the carpet industry in the past 12 months, were born elsewhere and report that their job was not like they expected it. Insufficient sample base (n<30) for household-based children.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

**Table 45. Carpet-Related Activities Performed by Children in the Last 12 months by Setting**

|  | Industry Total | Children in Households | Children in Factories | p value |
|--|----------------|------------------------|-----------------------|---------|
| Weighted N=  | 10,907         | 8,747                  | 2,160                 |         |
| <b>“Have you engaged in _____ in the past 12 months?”</b>  |                |                        |                       |         |
| <i>The following 17 activities comprised the industry’s productive process that was studied.</i>                   |                |                        |                       |         |
| Separating wool according to its colors  | 12.7%          | 15.8%                  | 0.0%                  | <.05*   |
| Cleaning/sorting out dirt from raw wool  | 2.0%           | 2.5%                   | 0.0%                  | .45     |
| Washing wool or silk   | 0.1%           | 0.1%                   | 0.0%                  | .41     |
| Sun drying wool  | 10.3%          | 12.9%                  | 0.1%                  | <.01**  |
| Carding wool   | 34.3%          | 42.8%                  | 0.0%                  | <.01**  |
| Spinning wool to make thread   | 71.4%          | 89.0%                  | 0.0%                  | <.01**  |
| Dyeing thread  | 0.0%           | 0.0%                   | 0.1%                  | .58     |
| Balling thread   | 2.9%           | 3.0%                   | 2.6%                  | .77     |
| Plying many yarns (usually silk) into one  | 0.0%           | 0.0%                   | 0.0%                  | -       |
| Mixing/joining many colored yarn into one  | 0.0%           | 0.0%                   | 0.0%                  | -       |
| Weaving carpets  | 22.4%          | 3.8%                   | 97.6%                 | <.01**  |
| Tufting carpets  | 0.0%           | 0.0%                   | 0.0%                  | -       |
| Hand looming carpets   | 0.0%           | 0.0%                   | 0.0%                  | -       |
| Washing carpets  | 0.0%           | 0.0%                   | 0.2%                  | .08     |
| Trimming carpets   | 0.4%           | 0.0%                   | 2.0%                  | <.01**  |
| Stretching carpets   | 0.0%           | 0.0%                   | 0.0%                  | -       |
| Repairing errors/assuring rows are straight  | 2.8%           | 0.5%                   | 12.5%                 | <.01**  |
| <i>Children were usually asked about three other trade-related tasks that fell outside the productive process.</i> |                |                        |                       |         |
| Transporting/packing carpets   | 0.0%           | 0.0%                   | 0.0%                  | -       |
| Buying or selling wool for use in carpets  | 0.5%           | 0.6%                   | 0.0%                  | .46     |
| Buying/selling silk/synthetic silk for use in carpet   | 0.0%           | 0.0%                   | 0.0%                  | -       |
| Buying & selling completed carpets   | 0.0%           | 0.1%                   | 0.0%                  | .51     |

Base: Children who worked in the carpet industry in the past 12 months.

Source: Nepal PC Household child survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

**Table 46. Protective Measures for Child Carpet Workers by Setting**

|   | Total | Children Working in Households | Children Working in Factories | p value |
|---|-------|--------------------------------|-------------------------------|---------|
| Weighted N=   | -     | 8,741                          | -                             |         |
| <b>“Is there an adult present at the time of work for supervision?”<sup>1</sup></b> |       |                                |                               |         |
| Yes, always   | -     | 17.4%                          | -                             | -       |
| Yes, sometimes  | -     | 40.3%                          | -                             |         |
| No  | -     | 42.3%                          | -                             |         |

|   | Total | Children Working in Households | Children Working in Factories | p value |
|---|-------|--------------------------------|-------------------------------|---------|
| <b>“Have you received any training that prepared you to use these tools?”<sup>2</sup></b> |       |                                |                               |         |
| Weighted N=   | 9,949 | 7,789                          | 2,160                         |         |
| Yes   | 4.7%  | 2.5%                           | 12.4%                         | <.01**  |
| No  | 95.3% | 97.5%                          | 87.6%                         |         |

<sup>1</sup> Base: Children who worked in the carpet industry in the past 12 months. Information missing for one HH-based child carpet workers (Weighted N = 6). Information not collected from Factory-based child carpet workers.

<sup>2</sup> Base: Children who worked in the carpet industry in the past 12 months and used any tools for work.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

**Table 47. Socially Unhealthy Environmental Conditions of Household-Based Child Carpet Workers**

| Exposure to Corruption  | Children Working in Households |
|---|--------------------------------|
| Weighted N=   | 8,741                          |
| <b>(“How frequently do you see the following activities in your community or at your place of work?”)</b> |                                |
| <b>Children &amp; youths abusing drugs</b>  |                                |
| Always or often   | 5.7%                           |
| Sometimes   | 15.5%                          |
| Rarely or never   | 78.7%                          |
| <b>Children &amp; youths stealing/fighting</b>  |                                |
| Always or often   | 6.8%                           |
| Sometimes   | 42.0%                          |
| Rarely or never   | 51.3%                          |
| <b>People selling drugs</b>   |                                |
| Always or often   | 0.1%                           |
| Sometimes   | 3.1%                           |
| Rarely or never   | 96.8%                          |
| <b>Prostitution</b>   |                                |
| Always or often   | 0.0%                           |
| Sometimes   | 1.1%                           |
| Rarely or never   | 98.9%                          |
| <b>Children &amp; youths drinking</b>   |                                |
| Always or often   | 15.6%                          |
| Sometimes   | 50.3%                          |
| Rarely or never   | 34.1%                          |
| <b>Children &amp; youths smoking</b>  |                                |
| Always or often   | 40.2%                          |
| Sometimes   | 37.1%                          |
| Rarely or never   | 22.7%                          |

Base: Children who worked in the carpet industry in the past 12 months. Information missing for one HH-based child carpet workers (Weighted N = 6). Information not collected from factory children.

Source: Nepal PC Household survey (Dec. 2008-April 2009).

**Table 48. Mode of Payment for Child Carpet Workers by Setting**

|   | Total  | Children Working in Households | Children Working in Factories | p value |
|---|--------|--------------------------------|-------------------------------|---------|
| Weighted N=   | 10,907 | 8,747                          | 2,160                         |         |
| <b>“What do you get in exchange for your work?”<sup>1</sup></b> |        |                                |                               |         |
| Cash  | 46.2%  | 33.3%                          | 98.2%                         | <.01**  |
| New skills  | 1.1%   | 0.0%                           | 5.7%                          | <.01**  |
| Education   | 0.1%   | 0.0%                           | 0.2%                          | .11     |
| Shelter, Food, clothing   | 16.1%  | 0.1%                           | 80.6%                         | <.01**  |
| Medical assistance  | 0.9%   | 0.1%                           | 4.4%                          | <.01**  |
| Nothing   | 53.5%  | 66.7%                          | 0.0%                          | <.01**  |
| Food  | 2.9%   | 0.0%                           | 14.9%                         | <.01**  |
| Clothes   | 0.3%   | 0.0%                           | 1.5%                          | <.01**  |
| <b>“How are your pay/benefits determined?”<sup>2</sup></b>      |        |                                |                               |         |
| Weighted N=   | 5,076  | 2,916                          | 2,160                         |         |
| Upon completion of task   | 51.8%  | 72.4%                          | 24.1%                         | <.01**  |
| Piece-rate  | 33.0%  | 17.7%                          | 53.7%                         | <.01**  |
| Monthly   | 18.0%  | 0.2%                           | 42.1%                         | <.01**  |
| By weight (kgs.)  | 8.6%   | 13.4%                          | 2.1%                          | <.01**  |
| Daily   | 6.0%   | 10.4%                          | 0.1%                          | <.01**  |
| Weekly  | 0.9%   | 0.1%                           | 1.8%                          | <.01**  |
| Others  | 0.3%   | 0.1%                           | 0.7%                          | <.05*   |
| <b>Weekly Earnings<sup>2</sup></b>                              |        |                                |                               |         |
| Median Weekly Earnings (Nepali Rupees)                          | 100    | 600                            | 50                            | <.01**  |

<sup>1</sup> Base: Children who worked in the carpet industry in the past 12 months.

<sup>2</sup> Base: Children who worked in the carpet industry in the past 12 months and received something in exchange for work.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

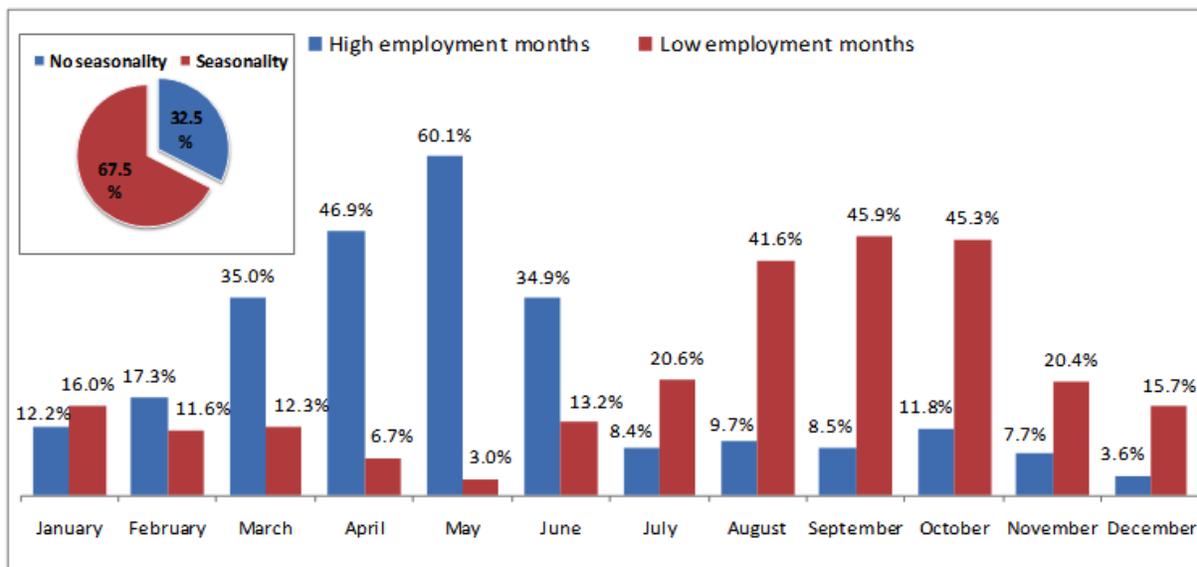
**Table 49. Sick Benefits for Child Carpet Workers by Setting**

|   | Total  | Children Working in Households | Children Working in Factories | p value |
|---|--------|--------------------------------|-------------------------------|---------|
| Weighted N=   | 10,907 | 8,747                          | 2,160                         |         |
| <b>“If you become ill/injured during work, how much expenses your employer bear?”</b> |        |                                |                               |         |
| All expenses  | 0.8%   | 0.1%                           | 3.6%                          | <.01**  |
| Some expenses   | 3.0%   | 0.0%                           | 15.3%                         |         |
| None  | 43.1%  | 34.3%                          | 78.7%                         |         |
| N/A (usually work in family business)   | 52.7%  | 65.7%                          | 0.0%                          |         |
| DK/NR   | 0.5%   | 0.0%                           | 2.4%                          |         |

Base: Children who worked in the carpet industry in the past 12 months.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

**Figure 8. Work seasonality: Percent of Managers Who Mention Each Month as Low or High Unemployment Months**

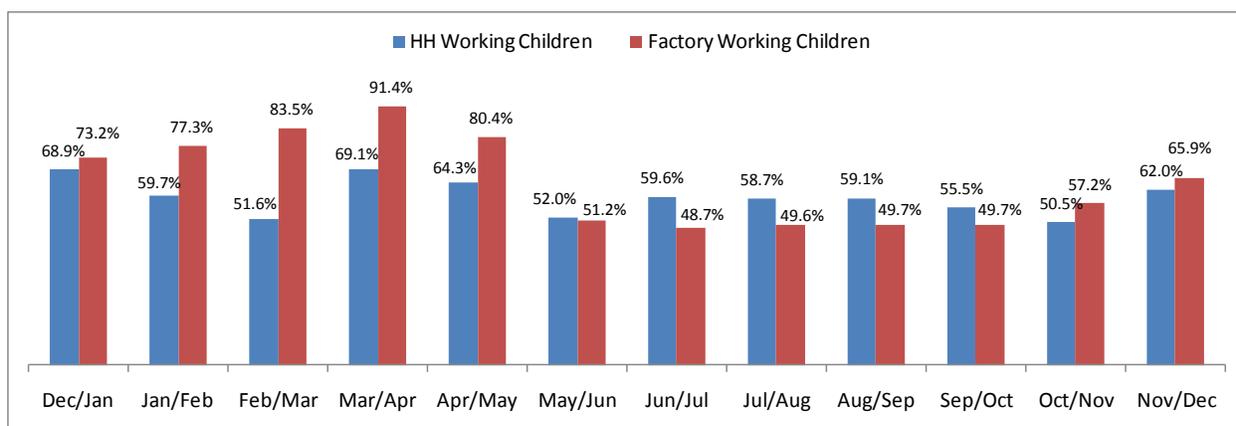


Multiple response items, totals may not add up to 100%.

Base: Factories with work seasonality ("Do not employ the same number of workers every month") (n=170).

Source: Nepal PC Factory Manager Interviews (April-July 2009)

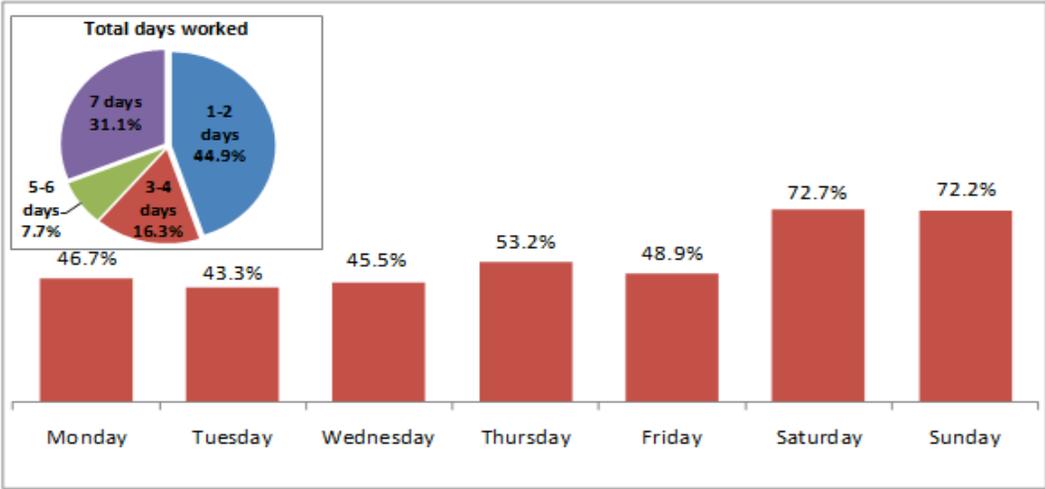
**Figure 9. Work Seasonality: Percent of Child Carpet Workers Reporting Working Each Month by Setting**



Base: Children interviewed for the PC study who worked in the last 12 months.

Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009)

**Figure 10. Days Worked: Percent of Child Carpet Workers Reporting Performing Carpet Activities by Day and Total Number of Days Worked in Last Week**



Base: Children interviewed for the PC study who worked in the last 7 days (Multiple response). Data not collected for factory-based children  
 Source: Nepal PC Household Child Survey (Dec. 2008-April 2009)

**Table 50: Carpet-Related Activities Performed by Child Carpet Workers in the Last 12 Months by Setting and Age**

| "Have you engaged in _____ in the past 12 months?" | Factories                |        |       | P-value | Households               |       |       | P-value | Total                    |       |       | P-value |
|--|--------------------------|--------|-------|---------|--------------------------|-------|-------|---------|--------------------------|-------|-------|---------|
|  | 5-8                      | 9-13   | 14-17 |         | 5-8                      | 9-13  | 14-17 |         | 5-8                      | 9-13  | 14-17 |         |
| Weighted N=  | 0                        | 264    | 1,896 |         | 281                      | 3,381 | 5,085 |         | 281                      | 3,645 | 6,981 |         |
| Separating wool according to its colors            | Insufficient Sample Size | 0.0%   | 0.0%  | -       | Insufficient Sample Size | 23.7% | 11.4% | .21     | Insufficient Sample Size | 22.0% | 8.3%  | .09     |
| Cleaning/sorting out dirt from raw wool            |                          | 0.0%   | 0.0%  | -       |                          | 6.3%  | 0.1%  | <.01**  |                          | 5.8%  | 0.1%  | <.01**  |
| Washing wool or silk                               |                          | 0.0%   | 0.0%  | -       |                          | 0.1%  | 0.1%  | .65     |                          | 0.1%  | 0.1%  | .78     |
| Sun drying wool                                    |                          | 0.0%   | 0.1%  | .62     |                          | 14.0% | 8.7%  | .54     |                          | 13.0% | 6.4%  | .35     |
| Carding wool                                       |                          | 0.0%   | 0.0%  | -       |                          | 42.7% | 40.1% | .76     |                          | 39.6% | 29.2% | .14     |
| Spinning wool to make thread                       |                          | 0.0%   | 0.0%  | -       |                          | 86.9% | 91.0% | .35     |                          | 80.6% | 66.3% | <.05*   |
| Dyeing thread                                      |                          | 0.0%   | 0.1%  | .62     |                          | 0.0%  | 0.0%  | -       |                          | 0.0%  | 0.1%  | .23     |
| Balling thread                                     |                          | 2.1%   | 2.6%  | .83     |                          | 3.6%  | 2.7%  | .39     |                          | 3.5%  | 2.7%  | .42     |
| Plying many yarns (usually silk) into one          |                          | 0.0%   | 0.0%  | -       |                          | 0.1%  | 0.0%  | .19     |                          | 0.1%  | 0.1%  | .16     |
| Mixing/joining many colored yarn into one          |                          | 0.0%   | 0.0%  | -       |                          | 0.0%  | 0.1%  | .32     |                          | 0.0%  | 0.0%  | .37     |
| Weaving carpets                                    |                          | 100.0% | 97.3% | .39     |                          | 3.2%  | 4.4%  | .33     |                          | 10.2% | 29.6% | <.01**  |
| Tufting carpets                                    |                          | 0.0%   | 0.0%  | -       |                          | 0.0%  | 0.0%  | -       |                          | 0.0%  | 0.0%  | -       |
| Hand looming carpets                               |                          | 0.0%   | 0.0%  | -       |                          | 0.0%  | 0.0%  | -       |                          | 0.0%  | 0.0%  | -       |
| Washing carpets                                    |                          | 0.0%   | 0.2%  | .61     |                          | 0.0%  | 0.0%  | -       |                          | 0.0%  | 0.1%  | ..37    |
| Trimming carpets                                   |                          | 0.0%   | 2.3%  | .46     |                          | 0.0%  | 0.0%  | -       |                          | 0.0%  | 0.7%  | .19     |
| Stretching carpets                                 | 0.0%                     | 0.0%   | -     | 0.0%    | 0.0%                     | -     | 0.0%  | 0.0%    | -                        |       |       |         |
| Repairing errors/assuring rows are straight        | 7.9%                     | 13.1%  | .43   | 0.2%    | 0.7%                     | .10   | 0.7%  | 4.1%    | <.01**                   |       |       |         |

Base: Children interviewed for the PC study who performed at least one carpet-related activity in the last 12 months. Insufficient sample base (n<30) for the 5-8 age group.  
 Note: Multiple response items, totals may not add up to 100%.  
 Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

**Table 51: Median Number of Hours per Week Spent on Household Chores by HH-Based Working Children by Gender and Type of Work**

|  | Child Carpet Workers in Carpet HHs |        |       | p-value | Working children in Non-Carpet HHs |        |       | p-value |
|--|------------------------------------|--------|-------|---------|------------------------------------|--------|-------|---------|
|  | Male                               | Female | Total |         | Male                               | Female | Total |         |
| Weighted N=  | 1,151                              | 7,596  | 8,747 |         | 1,603                              | 1,860  | 3,463 |         |
| Cooking/ serving meals/washing dishes  | 1.0                                | 6.0    | 4.0   | <.01**  | 3.0                                | 7.0    | 6.0   | <.01**  |
| Cleaning the house, washing clothes etc.   | 2.0                                | 3.0    | 3.0   | <.01**  | 2.0                                | 3.0    | 2.0   | <.05*   |
| Shopping for HH goods  | 1.0                                | 0.0    | 0.0   | .46     | 0.0                                | 0.0    | 0.0   | .61     |
| Minor repairs on household items   | 0.0                                | 0.0    | 0.0   | .09     | 0.0                                | 0.0    | 0.0   | <.05*   |
| Taking care of old or sick family members  | 0.0                                | 0.0    | 0.0   | <.05*   | 0.0                                | 0.0    | 0.0   | .84     |
| Taking care of younger children  | 0.0                                | 0.0    | 0.0   | <.05*   | 0.0                                | 0.0    | 0.0   | .25     |
| Collecting wood/dung for cooking or heating  | 0.0                                | 0.0    | 0.0   | .25     | 0.0                                | 0.0    | 0.0   | .88     |
| Collecting fodder for livestock  | 0.0                                | 0.0    | 0.0   | .93     | 0.0                                | 0.0    | 0.0   | .47     |
| Collecting water for HH use  | 1.0                                | 3.0    | 2.0   | .30     | 1.0                                | 2.0    | 1.0   | .06     |
| Total (All chores)   | 6.0                                | 15.0   | 14.0  | <.01**  | 12.0                               | 19.0   | 17.0  | <.01**  |
| Base: Children interviewed for the Household Child Survey.<br>Source: Nepal PC Household survey (Dec. 2008-April 2009) |                                    |        |       |         |                                    |        |       |         |

**Table 52. Workplace Conditions and Tools Used by Child Carpet Workers**

| Workplace Hazards                        | Total  | Children Working in Households | Children Working in Factories | p value |
|--|--------|--------------------------------|-------------------------------|---------|
| Weighted N=                              | 10,901 | 8,741                          | 2,160                         |         |
| <b>Chemical Agents</b>                   |        |                                |                               |         |
| Smoke/dust/flames                        | 98.1%  | 97.8%                          | 99.0%                         | .28     |
| Insecticides/paints/fumes/odor           | 1.5%   | 1.4%                           | 2.0%                          | .66     |
| Chemical solvents/petrol/diesel/kerosene | 1.0%   | 1.1%                           | 0.3%                          | .19     |
| Ammonia, oxygen or other gases           | 0.0%   | 0.0%                           | 0.0%                          | -       |
| Other chemical hazards                   | 0.0%   | 0.0%                           | 0.0%                          | -       |
| <b>Physical Agents</b>                   |        |                                |                               |         |
| Loud noise (from machine/people)         | 32.1%  | 20.9%                          | 77.0%                         | <.01**  |
| Extreme temperatures                     | 5.9%   | 0.0%                           | 29.7%                         | <.01**  |
| Dark/in rooms with inadequate lighting   | 0.8%   | 0.1%                           | 3.8%                          | <.01**  |
| Heights                                  | 8.5%   | 0.7%                           | 40.2%                         | <.01**  |
| Underground or tunnels                   | 0.0%   | 0.0%                           | 0.0%                          | -       |
| Insufficient ventilation                 | 1.4%   | 0.0%                           | 7.2%                          | <.01**  |
| Slip, trip, or falling hazards           | 2.1%   | 1.0%                           | 6.6%                          | <.01**  |
| Ultraviolet or x-rays                    | 0.6%   | 0.8%                           | 0.0%                          | <.01**  |
| Dangerous tools                          | 9.3%   | 4.6%                           | 28.5%                         | <.01**  |
| Other physical hazards                   | 0.0%   | 0.0%                           | 0.0%                          | -       |
| <b>Biological Agents</b>                 |        |                                |                               |         |
| Viral                                    | 3.9%   | 0.2%                           | 18.9%                         | <.01**  |
| Bacterial                                | 0.4%   | 0.0%                           | 1.8%                          | <.01**  |
| Fungal                                   | 4.4%   | 5.3%                           | 1.0%                          | <.01**  |
| Parasitical                              | 20.6%  | 18.2%                          | 30.1%                         | .10     |
| Other biological hazards                 | 0.0%   | 0.0%                           | 0.0%                          | -       |
| <b>Work with Heavy Loads</b>             |        |                                |                               |         |
| Usually                                  | 0.8%   | 0.9%                           | 0.0%                          | .20     |
| Sometimes                                | 6.8%   | 7.2%                           | 5.0%                          |         |
| No                                       | 92.5%  | 91.9%                          | 95.0%                         |         |
| <b>Work with Dangerous Tools</b>         |        |                                |                               |         |
| Shed stick                               | 11.7%  | 1.8%                           | 51.4%                         | <.01**  |
| Heddle rod                               | 11.2%  | 0.9%                           | 52.9%                         | <.01**  |
| Beating comb                             | 21.3%  | 2.6%                           | 96.9%                         | <.01**  |
| Axis rod                                 | 17.5%  | 1.9%                           | 80.8%                         | <.01**  |
| Iron rod                                 | 63.8%  | 79.2%                          | 1.3%                          | <.01**  |
| Loom                                     | 11.3%  | 2.6%                           | 46.4%                         | <.01**  |
| Needle <sup>1</sup>                      | 3.4%   | 0.9%                           | 13.9%                         | <.01**  |

| Workplace Hazards              | Total | Children Working in Households | Children Working in Factories | p value |
|--------------------------------|-------|--------------------------------|-------------------------------|---------|
| Arrow                          | 9.7%  | 1.1%                           | 44.7%                         | <.01**  |
| Cross-hull                     | 7.2%  | 0.8%                           | 33.1%                         | <.01**  |
| Plough <sup>1</sup>            | 0.1%  | 0.2%                           | 0.0%                          | .30     |
| Sickle and hammer <sup>1</sup> | 4.5%  | 5.6%                           | 0.0%                          | <.05*   |
| Spade                          | 23.1% | 7.0%                           | 87.9%                         | <.01**  |
| Scissor <sup>1</sup>           | 20.1% | 6.3%                           | 76.1%                         | <.01**  |
| Gloves                         | 14.3% | 3.1%                           | 59.6%                         | <.01**  |
| Axe <sup>1</sup>               | 0.4%  | 0.2%                           | 1.3%                          | <.05*   |
| Knife <sup>1</sup>             | 0.6%  | 0.8%                           | 0.0%                          | .08     |
| Brush (for carding)            | 24.3% | 30.3%                          | 0.0%                          | <.01**  |
| Blade <sup>1</sup>             | 5.1%  | 6.4%                           | 0.0%                          | .32     |
| Stand for balling yarn         | 2.4%  | 2.9%                           | 0.0%                          | .20     |
| Shovel                         | 0.5%  | 0.7%                           | 0.0%                          | <.01**  |
| Others                         | 1.1%  | 1.4%                           | 0.0%                          | .32     |

Base: Children who worked in the carpet industry in the past 12 months. Information missing for one HH-based child carpet worker (Weighted N = 6).

Source: Nepal PC Household child survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

Note: Multiple response items, so totals may exceed 100 percent.

<sup>1</sup> Tools of sharp, trapping, pinching or crushing nature, considered to be dangerous.

**Table 53. Who Abused Child Carpet Workers by Setting**

|  | Total               | HH Carpet child worker | Factory Child Worker | p value |
|--|---------------------|------------------------|----------------------|---------|
| Weighted N=  | 2,392               | 1,508                  | 884                  |         |
| <b>“Who reprimands or punishes you?” <sup>1</sup></b>  |                     |                        |                      |         |
| Employer/Supervisor  | 37.8%               | 26.5%                  | 57.0%                | <.05*   |
| Co-worker  | 15.7%               | 0.2%                   | 42.2%                | <.01**  |
| Parents  | 48.7%               | 73.3%                  | 6.6%                 | <.01**  |
| Relatives (grandfather/sisters/brothers etc.)  | 4.2%                | 1.6%                   | 8.5%                 | <.05*   |
| <b>“Who made you feel uncomfortable?” <sup>2</sup></b>   |                     |                        |                      |         |
|  | Insufficient Sample |                        |                      | -       |
| Weighted N=  | 494                 | 394                    | 100                  | -       |
| <sup>1</sup> Base: Children who were engaged in income generating or productive work in the past 12 months and were reprimanded at work.                     |                     |                        |                      |         |
| <sup>2</sup> Base: Children who were engaged in income generating or productive work in the past 12 months and were touched inappropriately at work at work. |                     |                        |                      |         |
| Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).  |                     |                        |                      |         |

**Table 54: Reason for Acquiring Debt by HHs with Children Working in Different Industries**

|   | Carpet HHs with Carpet Child Workers | Non Carpet HHs with Child Workers | p value |
|---|--------------------------------------|-----------------------------------|---------|
| Weighted N=   | 4,996                                | 2,106                             |         |
| <b>“Why has anybody in this household borrowed that money (last debt)”</b>  |                                      |                                   |         |
| Purchase house or to expand or improve existing house   | 2.9%                                 | 2.4%                              | <.05*   |
| Purchase of land  | 6.6%                                 | 1.2%                              |         |
| To expand family business   | 2.6%                                 | 22.1%                             |         |
| To celebrate festival, wedding or funeral of family member  | 31.7%                                | 13.8%                             |         |
| To purchase appliance for domestic use  | 15.8%                                | 16.7%                             |         |
| To purchase a vehicle (car or motorcycle)   | 0.5%                                 | 6.2%                              |         |
| To pay off another debt   | 1.7%                                 | 6.0%                              |         |
| To go abroad (foreign employment)   | 3.5%                                 | 11.8%                             |         |
| For the treatment   | 20.4%                                | 14.6%                             |         |
| For the study   | 14.1%                                | 4.9%                              |         |
| To raise livestock (goat, bull etc)   | 0.1%                                 | 0.3%                              |         |
| Others  | 0.1%                                 | 0.0%                              |         |
| Total   | 100%                                 | 100%                              |         |
| Base: Children interviewed for the PC study whose households have acquired any debt.<br>Source: Nepal PC Household survey (Dec. 2008-April 2009). |                                      |                                   |         |

**Table 55: Suggestions to Improve Working Conditions by Child Carpet Workers by Setting**

|  | Total | HH Child Carpet Worker | Factory Child Worker | p value |
|--|-------|------------------------|----------------------|---------|
| Weighted N=  | 2,644 | 1,977                  | 666                  |         |
| <b>“Which of the following conditions should be improved?”</b> |       |                        |                      |         |
| Work time  | 69.6% | 87.0%                  | 17.8%                | <.01**  |
| Pay/wages  | 88.2% | 97.1%                  | 61.9%                | <.01**  |
| Illumination/lighting  | 71.2% | 84.1%                  | 33.0%                | <.01**  |
| Ventilation  | 60.5% | 72.7%                  | 24.1%                | <.01**  |
| Arrangement of heater  | 62.7% | 78.9%                  | 14.7%                | <.01**  |
| Noise control  | 51.2% | 61.1%                  | 21.6%                | <.01**  |
| Work-space   | 58.9% | 68.3%                  | 30.8%                | <.01**  |
| Time for breaks  | 67.1% | 80.3%                  | 28.2%                | <.01**  |
| Weekly work schedule   | 69.8% | 85.7%                  | 22.5%                | <.01**  |
| Stop scolding to workers                                       | 73.5% | 89.2%                  | 26.7%                | <.01**  |
| Stop punishment to workers                                     | 67.7% | 86.0%                  | 13.3%                | <.01**  |
| Arrangement of drinking water to workers                       | 68.2% | 80.6%                  | 31.2%                | <.01**  |
| Foul odor or unsanitary surroundings                           | 72.1% | 82.6%                  | 41.0%                | <.01**  |
| Chemical exposure  | 61.6% | 82.6%                  | 5.9%                 | <.01**  |
| Education/literacy for workers                                 | 15.7% | 19.4%                  | 4.6%                 | .30     |

|       | Total | HH Child Carpet Worker | Factory Child Worker | p value |
|-------|-------|------------------------|----------------------|---------|
| Other | 1.4%  | 1.1%                   | 2.6%                 | .29     |

Base: Children who were engaged in income generating or productive work in the past 12 months and had any suggestions for improvement.  
Note: Multiple response items, totals may not add up to 100%.  
Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

**Table 56: Medical Assistance and Reasons for Not Receiving Medical Assistance by Setting**

|  | Total | HH Carpet Child Worker | Factory Child Worker | p value |
|--|-------|------------------------|----------------------|---------|
| Weighted N=  | 7,365 | 5,993                  | 1,372                |         |
| <b>Were you taken to a medical clinic/HP/hospital for any injuries or sickness? (% "Yes")</b> <sup>1</sup> | 67.3% | 71.3%                  | 49.6%                | <.01**  |
| <b>"What was the reason you were not taken to a health facility?"</b> <sup>2</sup>                         |       |                        |                      |         |
| Weighted N=  | 2,410 | 1,718                  | 692                  |         |
| Lack of money  | 2.1%  | 0.7%                   | 5.5%                 | <.05*   |
| Too far away   | 2.7%  | 3.8%                   | 0.0%                 | .42     |
| Not necessary/injury was not severe & needed no treatment  | 47.1% | 58.2%                  | 19.6%                | <.01**  |
| Took care of injury in village   | 4.2%  | 5.2%                   | 1.8%                 | .33     |
| Went to local healer   | 2.2%  | 1.7%                   | 3.4%                 | .38     |
| Local treatment at home  | 2.6%  | 1.7%                   | 4.8%                 | .13     |
| Self-treatment by buying medicines   | 38.0% | 26.4%                  | 66.9%                | <.01**  |
| Others   | 2.4%  | 3.3%                   | 0.0%                 | .43     |

<sup>1</sup> Base: Children interviewed in the PC study who were sick or injured in the last 12 months  
<sup>2</sup> Base: Children interviewed in the PC study who were sick or injured in the last 12 months and did not receive medical treatment.  
Note: Multiple response items, totals may not add up to 100%.  
Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

**Table 57: Location and Administration of Medical Treatment to Child Carpet Workers by Setting**

| <b>"Where were you treated? Who administered the treatment?"</b> | Total | HH Child Carpet worker | Factory Child Worker | p value |
|--|-------|------------------------|----------------------|---------|
| Weighted N=  | 4,955 | 4,275                  | 680                  |         |
| <b>Place in the health facility where treated</b>                |       |                        |                      |         |
| In first-aid/preliminary examination room                        | 39.7% | 37.9%                  | 51.3%                | .22     |
| In out-patient department  | 50.8% | 51.8%                  | 44.7%                |         |
| Confinement to medical clinic or hospital                        | 9.4%  | 10.2%                  | 4.0%                 |         |
| Emergency room   | 0.1%  | 0.1%                   | 0.0%                 |         |
| <b>Person who administered the treatment</b>                     |       |                        |                      |         |
| Doctor   | 74.6% | 76.7%                  | 61.2%                | .07     |
| Other health practitioner  | 25.4% | 23.3%                  | 38.8%                |         |
| Self   | 0.0%  | 0.0%                   | 0.0%                 |         |

|                   |      |      |      |
|-------------------|------|------|------|
| Parents/Relatives | 0.0% | 0.0% | 0.0% |
| Local healers     | 0.0% | 0.0% | 0.0% |
| DK/NR             | 0.0% | 0.0% | 0.0% |

Base: Children interviewed in the PC study who were sick or injured in the last 12 months and received medical treatment.  
Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

**Table 58: Type of Medical Treatment Administered to Child Carpet Workers by Setting**

| “What type of treatment were you administered?”      | Total | HH Carpet child worker | Factory Child Worker | p value |
|--|-------|------------------------|----------------------|---------|
| Weighted N=  | 4,955 | 4,275                  | 680                  |         |
| Anti-septic and bandage                              | 14.2% | 16.0%                  | 2.6%                 | <.01**  |
| Prescription drugs                                   | 82.5% | 80.1%                  | 97.3%                | <.01**  |
| Bought drugs without prescription                    | 0.7%  | 0.5%                   | 1.9%                 | .32     |
| Stitches   | 1.5%  | 1.7%                   | 0.0%                 | .53     |
| Surgery  | 0.2%  | 0.3%                   | 0.0%                 | .47     |
| Free treatment from the hospital of the refugee camp | 15.1% | 17.5%                  | 0.0%                 | <.05*   |
| X-ray  | 2.0%  | 2.3%                   | 0.0%                 | .53     |
| Blood test   | 1.2%  | 1.3%                   | 0.0%                 | .59     |
| Others   | 0.1%  | 0.1%                   | 0.0%                 | .59     |

Base: Children interviewed in the PC study who were sick or injured in the last 12 months and received medical treatment.  
Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

**Table 59: School Attendance by Child Carpet Workers by Gender and Setting**

| “Are you currently attending school?” (“Yes”) | Total  | HH Child Carpet Worker | Factory Child Worker | p value |
|---|--------|------------------------|----------------------|---------|
| Weighted N=                                   | 10,907 | 8,747                  | 2,160                |         |
| Male  | 56.3%  | 98.5%                  | 1.9%                 | <.01**  |
| Female  | 82.4%  | 95.5%                  | 4.2%                 | <.01**  |
| Total   | 77.5%  | 95.9%                  | 3.2%                 | <.01**  |

Base: Children who were engaged in income generating or productive work in the past 12 months.  
Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

**Table 60: School Attendance by Child Carpet Workers by Age and Setting**

| “Are you currently attending school?” (“Yes”) | Total  | HH Child Carpet Worker | Factory Child Worker | p value |
|---|--------|------------------------|----------------------|---------|
| Weighted N=                                   | 10,907 | 8,747                  | 2,160                |         |
| 5-8   | *      | *                      | *                    | -       |
| 9-13  | 92.7%  | 99.7%                  | 2.5%                 | <.01**  |
| 14-17   | 68.7%  | 93.1%                  | 3.3%                 | <.01**  |
| Total   | 77.5%  | 95.9%                  | 3.2%                 | <.01**  |

Base: Children who were engaged in income generating or productive work in the past 12 months. Insufficient sample size (n<30) for children 5-8.  
Source: Nepal PC Household survey (Dec. 2008-April 2009), Nepal PC Factory worker survey (April-July 2009).

**Table 61: Chores Interfering with HH-Based Working Children’s Education by Type of Work**

|  | HH Carpet child worker | Other child worker | p value |
|--|------------------------|--------------------|---------|
| Weighted N=  | 8,336                  | 3,097              |         |
| <b>Do your chores interfere with your studies? (%“yes”) <sup>1</sup></b> | 15.9%                  | 28.0%              | .09     |
| <b>How do your chores interfere with your studies? <sup>2</sup></b>      |                        |                    |         |
| Weighted N=  | 1,327                  | 869                |         |
| Have to leave school sometimes   | 19.1%                  | 48.1%              | .05     |
| Arrive late at school  | 29.5%                  | 70.6%              | <.01**  |
| Feel tired in classroom  | 1.7%                   | 0.6%               | .30     |
| Not enough time to study   | 77.1%                  | 84.9%              | .54     |
| Tired to study at home   | 9.2%                   | 1.6%               | <.05*   |

<sup>1</sup> Base: HH Children who were currently attending school and perform household chores.  
<sup>2</sup> Base: HH Children who were currently attending school, perform household chores and report that chores affect their studies.  
Note: Multiple response items, totals may not add up to 100%.  
Source: Nepal PC Household survey (Dec. 2008-April 2009).

## APPENDIX C – MEASURES TO INDICATE CHILD LABOR

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One of the study's objectives was to produce reliable, statistically sound, and nationally representative estimates of the number and prevalence of working children who were engaged in unacceptable work (child labor). By unacceptable work, the study meant that the nature of the work and/or the working conditions exploited and/or abused working children. The prevalence meant the percentage of child carpet workers who were engaged in that unacceptable work. In order to accomplish that objective, the study needed to identify and measure the kinds of work and working conditions that were unacceptable. The exploitation and abuse of working children take many forms and are often hidden from view.

### C.1. Common International and National Standards

This study relied on international standards and looked to international conventions for guidance in identifying unacceptable kinds of work and working conditions. In general, international and Nepalese standards agreed. Nepal had ratified many ILO conventions and the UN Convention on the Rights of a Child (UNCRC), and Nepal had passed legislation that was based on or adapted international standards.<sup>44</sup> Both sets of standards agreed on the following:

- **Minimum working age.** Children should not be employed until they reach a certain age. This was the basis for ILO Convention 138 and was noted in the UNCRC and several Nepalese Acts, most recently in the 1999 Child Labour Act.
- **Hazardous work.** Children should not be engaged in work that was likely to jeopardize their health, safety, or morals. This was noted in many Conventions, especially in the UNCRC and ILO Conventions 90 and 182. This was specifically noted in Nepal's 1999 Child Labour Act and the 2007 Constitution, and Nepal's 1992 Labour Act mentioned a number of health and safety conditions that needed to be controlled.
- **Overwork or overtime.** Children should not work an excessive number of hours or at night and needed rest (breaks). This was noted in the UNCRC and ILO Convention 138 (Recommendation 146). Several Nepalese Acts, most recently the 1999 Child Labour Act, specifically limited the number of hours that a child could work and prohibited their working at night.
- **Forced and bonded labor.** Children should not be forced/coerced to work. This was the basis for ILO Conventions 29 and 105, and these forms of labor were specifically noted

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<sup>44</sup> Nepal ratified Convention 138 in 1997, the UNCRC in 1989, Conventions 29 and 182 in 2002, and Convention 105 in 2007.

in Nepal's 1999 Child Labour Act, 2001 Bonded Labour Prohibition Act, and the 2007 Constitution.

- **Child trafficking.** Children should not be trafficked into work. This was the basis for the Palermo Protocol and was noted in Nepal's (2007) Constitution.

## C.2. Differences between International and National Standards

Although the international and national standards agreed in general about the kinds of work and working conditions that were unacceptable for children, the two sets of standards differed in some specific details and in the implementation. The differences included the following:

- **The age of a child (16 vs. 18).** International standards defined a child as a person under 18 years of age, but Nepal's 1999 Child Labour Act defined a child as a person under 16 years of age. For that reason, Nepal's legal protection of children differed from international standards by not protecting children 16-17 years of age.
- **The minimum age to work (15 vs. 14).** International standards set the minimum age to work at no less than 15 years, although countries were permitted to initially specify 14 years. Nepal's 1999 Child Labour Act set the minimum age at 14 years.
- **The minimum age to be engaged in hazardous work (16 vs. 18).** International standards set the minimum age to be engaged in any work that was likely to jeopardize the health, safety, or morals of young people at no less than 18 years, although countries were permitted to set that at 16 years with the condition that the workers' health, safety, and morals were fully protected and the workers received adequate training. Nepal's 1999 Child Labour Act set the minimum age to be engaged in hazardous work at 16 years.
- **The establishments that are regulated.** International standards did not exclude any workplaces or establishments from regulation. Nepal's 1992 Labour Act did not regulate establishments with fewer than ten employees.

## C.3. Standards and Measures for this Study

### C.3.1. Standards for this study

This study relied on international standards whenever there were differences between the two sets of standards. This study based its analysis on the following:

- A child was any person younger than 18 years of age.
- The minimum age to be engaged in hazardous work was 18 years of age.

- The measures of unacceptable work and working conditions were applied to all children (persons under 18) who were employed in the carpet industry, even when they were working in their own household with their family or in workshops (factories or sheds) of any size.

This study utilized Nepalese standards when they defined specific issues that were not defined by international standards. Examples included:

- Listing specific occupations that were hazardous.
- Limiting the specific number of hours that a child could work in a day (or hours or days in a week) and the hours of work before a child needed to rest (break time).
- Setting the specific nighttime hours when a child could not work.

This report presents estimates of the existence and prevalence of unacceptable work using both international and Nepalese standards to facilitate the comparison.

### **C.3.2. Measures and Indicators Developed by This Study**

This study developed a set of measures to indicate the existence of three unacceptable forms of child work:

- Hazardous work
- Excessive work
- Child trafficking

The study also estimated the prevalence of those forms of unacceptable work, which was the number of children engaged in that form of unacceptable work divided by the number of children working in the carpet industry in Nepal.

#### **C.3.2.1. Measuring Hazardous Work**

The study developed three measures that indicated the existence and prevalence of hazardous work. Two measures identified whether the work was defined as inherently hazardous by international and national standards. The third measure examined the characteristics of the working conditions and workplace and the medical histories of the working children.

- **Work Defined as Hazardous**

ILO convention 182 specifies that hazardous types of work “shall be determined by national laws or regulations or by the competent authority” (Article 4). To decide whether the work was defined as inherently hazardous, the study looked at Nepalese standards. Nepal had defined specific occupations as hazardous and prohibited employing children to work in those

occupations, according to the list of Risky Business or Works that was attached to Nepal’s Child Labour Act. If the occupation or industry was listed, it was hazardous work and, therefore, unacceptable work for children.

For each of the sampled children working in the carpet industry the following variables were examined:

- i. National standards that defined occupations, processes, or industries as hazardous.
- ii. Each child’s age.
- iii. Each child’s working status. A child had to be working in the carpet industry to be counted. This variable was included because non-working children and children working in other industries had been interviewed in the household survey.

Although both Nepalese and international standards agree that no children should be working in hazardous work, they disagree on who qualifies and is protected as a child. By international standards, children are all persons younger than 18 years of age, and the category of child carpet worker encompasses all persons under 18 years of age who are working in the carpet industry. The variable definition used to compute hazardous work according to international standards is presented in Table 62.

**Table 62. Hazardous Work (International Standards): Variable Definition and Data Crosswalk**

| Indicator   | Variable |  | Qualifying Codes |       |
|---|----------|--|------------------|-------|
| Child is a usual child carpet worker  | WOR      | Child worked in carpet-related activities the last 12 months | 1                | Yes   |
| Child's Age in Completed Years  | AGE      | Current age  | 1                | 5-11  |
|   |          |  | 2                | 12-13 |
|   |          |  | 3                | 14-15 |
|   |          |  | 4                | 16-17 |
| <b>Child is in Hazardous Work (International Standards) if WOR = 1 &amp; (AGE = 1 or AGE = 2 or AGE = 3 or AGE = 4)</b> |          |  |                  |       |

However, by Nepalese standards, as expressed by the 1999 Child Labour Act, children are all persons younger than 16 years of age, and only those children (under 16) were prohibited from working in processes that were listed as hazardous. Persons 16-17 years old were not considered to be children and were not covered and protected by the Child Labour Act. The variable definition and data crosswalk used to compute hazardous work according to Nepalese standards is presented in Table 63.

**Table 63. Hazardous Work (Nepalese Standards): Variable Definition and Data Crosswalk**

| Indicator   | Variable |  | Qualifying Codes |       |
|---|----------|--|------------------|-------|
| Child is a usual child carpet worker  | WOR      | Child worked in carpet-related activities the last 12 months | 1                | Yes   |
| Child's Age in Completed Years  | AGE      | Current age  | 1                | 5-11  |
|   |          |  | 2                | 12-13 |
|   |          |  | 3                | 14-15 |
| <b>Child is in Hazardous Work (Nepalese Standards) if WOR = 1 &amp; (AGE = 1 or AGE = 2 or AGE = 3)</b> |          |  |                  |       |

- **Working Conditions Reported as Hazardous**

In addition to specifying that hazardous types of work “shall be determined by national laws or regulations or by the competent authority” (Article 4), Recommendation No. 190 (ILO, 1999) specifies that particular consideration should be given to specific types of work. The third measure to indicate if work was hazardous involved (a) reviewing international conventions to learn which specific conditions were listed as being unacceptable, (b) developing a list of those conditions, and (c) interviewing working children to learn whether those conditions were present in their workplaces. The 1999 ILO Recommendation 190 supplemented Convention 182 and identified a number of specific hazardous characteristics of work (Part II), including:

- Work that exposes children to physical, psychological, or sexual abuse;
- Work underground, under water, at dangerous heights, and in confined spaces;
- Work with dangerous machinery, equipment, and tools, or which involves the manual handling or transport of heavy loads;
- Work in an unhealthy environment, which may, for example, expose children to hazardous substances, agents or processes, or to temperatures, noise levels, or vibrations damaging to their health; and
- Work under particularly difficult conditions such as work for long hours or during the night, or work where the child is unreasonably confined to the premises of the employer.

The physical environmental conditions of the children’s work and workplaces were described in the results section, as well as whether the working children received any training or adult supervision. One of the main challenges that confronted any quantifiable research into hazardous child labor was how, or whether, to quantify the level or intensity of the health and safety threat posed by hazards. For many of those factors, the potential for causing harm varied depending on the level or quantity. Until they reached critical thresholds, many substances and conditions would not cause injuries or illnesses. This study did not collect information on the critical thresholds for hazardous substances and conditions. To decide whether the characteristics of the working conditions or workplace were hazardous, the study examined children’s self-reports of

the presence in their workplace of substances or conditions that were considered to be unacceptable by international standards. To decide whether the hazards had affected the children’s health and safety, the study also examined children’s reported history of injuries. More specifically, for each of the sampled children working in the carpet industry the following variables were examined:

- i. Each child’s age.
- ii. Each child’s working status. A child had to be working in the carpet industry to be counted. This variable was included because non-working children and children working in other industries had been interviewed in the household survey.
- iii. International standards that legally defined which characteristics of working conditions or workplaces were hazardous for children of different ages.
- iv. The characteristics of each working child’s working conditions and workplace.
- v. Evidence from each child’s self-reported medical history to determine whether the child appeared to have suffered injury from working.

Each of these variables included multiple categories and values. The specific variable definition and data crosswalk used to compute the measure that indicated hazardous work based on the working conditions reported by children is presented in Table 64.

**Table 64. Indications of Hazardous Work (Working Conditions): Variable Definition and Data Crosswalk**

| Indicator   | Variable |   | Qualifying Codes |                                |
|---|----------|---|------------------|--------------------------------|
| Child's Age in Completed Years                    | AGE      | Current age   | 1                | 5-11                           |
|   |          |   | 2                | 12-13                          |
|   |          |   | 3                | 14-15                          |
|   |          |   | 4                | 16-17                          |
| Child is a usual child carpet worker              | WOR      | Child worked in carpet-related activities the last 12 months  | 1                | Yes                            |
| Work that exposes children to psychological abuse | PSY      | Are you reprimanded or punished at work?  | 1                | Yes                            |
| Work that exposes children to physical abuse      | PHY      | Have you ever been reprimanded, punished, or abused at work to the extent that you were physically injured? | 1                | Yes                            |
| Work that exposes children to sexual abuse        | SEX      | Have you ever been touched in an inappropriate manner or in a way that made you feel uncomfortable at work? | 1                | Yes                            |
| Work underground                                  | UND      | In the past 12 months, did you have to work in an environment with any...?                                  | 1                | Work underground or in tunnels |
| Work at dangerous heights                         | HEI      | In the past 12 months, did you have to work in an environment with any...?                                  | 2                | Work at heights                |
| Work with dangerous                               | TOO      | What are the tools or machinery   | 3                | Knife                          |

| Indicator   | Variable |  | Qualifying Codes |  |
|---|----------|--|------------------|--|
| machinery, equipment, and tools   |          | that you use for your work?  | 5                | Scissor  |
|   |          |  | 6                | Nail   |
|   |          |  | 9                | Cutting plyer  |
|   |          |  | 10               | Hook   |
| Work which involves the manual handling or transport of heavy loads   | HEA      | Do you have to carry heavy loads when you work?                            | 1                | Yes  |
| Work in an unhealthy environment which may, for example, expose children to hazardous substances, agents or processes, or to temperatures, noise levels, or vibrations damaging to their health   | SMO      | In the past 12 months, did you have to work in an environment with any...? | 3                | Smoke or dust  |
|   | INS      |  | 4                | Insecticides, paints, or fumes/odour from them   |
|   | CHE      |  | 5                | Chemical solvents, petrol, diesel, kerosene, and mercury, or in areas with exposures form them |
|   | AMM      |  | 6                | Ammonia, oxygen, or other gases  |
|   | NOI      |  | 7                | Loud noise   |
|   | TEM      |  | 8                | Extreme temperatures   |
|   | DAR      |  | 9                | Dark or in rooms with inadequate lighting  |
|   | TO2      |  | 10               | Dangerous tools  |
|   | VEN      |  | 11               | Insufficient ventilation   |
|   | SLI      |  | 12               | Slip, trip, or falling hazards   |
|   | XRA      |  | 13               | Ultraviolet or x-rays  |
|   | VIR      |  | 14               | Virus  |
|   | BAC      |  | 15               | Bacteria   |
|   | FUN      |  | 16               | Fungus   |
| PAR   | 17       | Parasites  |                  |  |
| Work for long hours   | HOU      | Does child work for long hours?  | 1                | Yes  |
| Work during the night   | NIG      | Does child work at night?  | 1                | Yes  |
| Child suffered a work-related injury in the last 12 months  | INJ      | Child suffered a work-related injury in the last 12 months                 | 1                | Yes  |
| <b>Child is in Hazardous Work (Working Conditions) if WOR = 1 &amp; (AGE = 1 or AGE = 2 or AGE = 3 or AGE = 4) &amp; (PHY=1 or PSY=1 or SEX=1 or UND=1 or HEI=2 or TOO=3 or TOO=5 or TOO=6 or TOO=9 or TOO=10 or HEA=1 or SMO=3 or INS=4 or CHE=5 or AMM=6 or NOI=7 or TEM=8 or DAR=9 or TO2=10 or VEN=11 or SLI=12 or XRA=13 or VIR=14 or BAC=15 or FUN=16 or PAR = 17 or HOU=1 or NIG=1 or INJ = 1)</b> |          |  |                  |  |

### C.3.2.2. Measuring Excessive Work

This measure analyzed whether each child's work load was appropriate or excessive for that child's age. This measure included the issue of the minimum age to work and international standards about acceptable work and unacceptable work.

ILO Convention 182 alluded to excessive work when cautioning against hazardous work. Recommendation 190 that supplemented Convention 182 was specific in citing “work under particularly difficult conditions such as work for long hours.” The UN Convention on the Rights of the Child specifically cited the right of a child to rest, leisure, play, and recreational activities and generally restated the need to protect the child against economic exploitation and hazardous work and establish a minimum age for employment and regulation of the hours of employment. ILO Convention 32 noted that children 13-15 years of age should be doing only light work that would not harm their health or development and would not interfere with their attending school and then mentioned in general terms that the hours of work should be limited.

To measure each child’s workload, the study collected data on the total hours of work during the last three days from all of the currently working child carpet workers (those who had worked during the past seven days). Then, each child’s total hours of work per week were matched with the child’s age and compared with the standards that defined whether the work load was age-appropriate. The hours of work were for the total work load, which included for household-based child carpet workers the hours the child spent performing unpaid household services. The following standards were used to define what was excessive work for children of different ages.

- **Children 5-11:** Economic activities were excessive work if a child under-12 worked for one or more hours per week (seven days). Economic work for one hour during seven days defined a child as economically active, and SIMPOC set the standard of 12 as the minimum age to be economically active. None of the countries specified children under-12 as the minimum age to work. Any combination of economic work and unpaid household services were excessive work if a child under-12 worked for 28 or more hours per week. This new standard was equivalent to an average maximum workload of four hours per day.
- **Children 12-13:** Economic activities were excessive work if a child under-14 worked for 14 or more hours per week, which was equivalent to an average maximum workload of two hours per day. This amount of economic work was the category of permissible light work permitted for children 12-14 in developing countries (and 13-15 elsewhere). The SIMPOC standard used under-15, but the project used under-14 because that is what the three countries used for light work. Any combination of economic activities and unpaid household services was excessive work if a child under-14 worked for 35 or more hours per week, which was equivalent to an average maximum workload of five hours per day. This standard was based on the thresholds shown in UCW studies and Edmonds’ review (Edmonds, 2008; ILO-IPEC, 2004, 2007).
- **Children 14-15.** This category was created to correlate with Nepal’s minimum age. The same standards apply to all children 14-17.

- **Children 16-17.** These are the oldest children based on the international standard age. Economic activities were excessive work if a child under-18 worked for 43 or more hours per week. Work for 43 hours exceeded the equivalent of an average maximum workload of seven hours per day for a 6-day workweek or six hours per day for a 7-day workweek. Any combination of economic activities and unpaid household services was excessive work if a child under-18 worked for 43 or more hours per week.

The criteria used for the different age groups are summarized in Table 65.

**Table 65. Measuring Excessive Work**

|                                 | Economic Work |                  | Combination of Work |                  |
|---------------------------------|---------------|------------------|---------------------|------------------|
|                                 | Work          | Child Labor      | Work                | Child Labor      |
| Children under-12 (5-11 years)  | <1 hour       | 1 or more        | <28 hours           | 28 hours or more |
| Children under-14 (12-13 years) | <14 hours     | 14 or more       | <35                 | 35 or more       |
| Children under-16 (14-15 years) | <43           | 43 hours or more | <43                 | 43 hours or more |
| Children under-18 (16-17 years) | <43           | 43 hours or more |                     |                  |

Note: The criteria for measuring excessive work were developed by the Research on Children Working in the Carpet Industry in India, Nepal, and Pakistan project, 2007-2012.

In order to create the measure that indicated excessive work, the following variables were examined for each of the sampled children working in the carpet industry:

- Each child's age.
- Each child's working status. A child had to be working in the carpet industry to be counted. This variable was included because non-working children and children working in other industries had been interviewed in the household survey.
- Total number of hours that each child worked per week. For this, the project studied only the current workers (children who had worked at least once during the last seven days) to ensure that the children's recollection would be more accurate. The total hours of work included economic activities (children in employment) and, for household-based child carpet workers, unpaid household services (children in other productive activities).
- International standards that defined the minimum age to be employed and distinguished between acceptable versus excessive hours of work.

Each of these variables included multiple categories and values. The specific variable definition and data crosswalk used to compute the measure that indicated excessive work is presented in Table 66.

**Table 66. Indications of Excessive Work: Variable Definition and Data Crosswalk**

| Indicator  | Variable |  | Qualifying Codes    |       |
|--|----------|--|---------------------|-------|
| Child is a current child carpet worker   | WOR2     | Child worked in carpet-related activities the last 7 days ( <i>computed variable</i> ) | 1                   | Yes   |
| Child's Age in Completed Years   | AGE      | Current age ( <i>computed variable</i> )   | 1                   | 5-11  |
|  |          |  | 2                   | 12-13 |
|  |          |  | 3                   | 14-15 |
|  |          |  | 4                   | 16-17 |
| Number of hours spent on Market Work   | MAR      | Number of hours spent on Market Work   | Continuous Variable |       |
| Number of hours spent on the combination of HH chores and Market Work  | COM      | Number of hours spent on the combination of HH chores and Market Work                  | Continuous Variable |       |
| <p><b>Child is in Excessive Work if WOR2 = 1 &amp; ((AGE = 1 &amp; (MAR &gt;= 1 hour or COM &gt;=1 hours) or (AGE = 2 &amp; (MAR &gt;= 14 hours or COM &gt;=35 hours) or ((AGE = 3 or Age = 4) &amp; (MAR &gt;= 43 hours or COM &gt;=43 hours)))</b></p> |          |  |                     |       |

### C.3.2.3. Measuring Child Trafficking

Trafficking was different than the other forms of unacceptable work because trafficking, which was the organized movement of children for the purpose of exploitation, preceded unacceptable work. The study developed a set of variables that indicated whether children had been trafficked to work in the carpet industry. Trafficking involved the movement (organized by a third party, neither the parents nor the child) of a child for the purpose of exploitation. The existence of trafficking depended on (a) whether the child moved from one place to another for the purpose of work, (b) whether the movement was organized by a third party (neither the child nor the parents), (c) whether the child resulted in unacceptable work, and whether (d) the process of engaging the child into that work had been purposive with the intent to exploit the child.

Measuring trafficking was difficult. Trafficking consisted of the actors, transactions, and process of a person entering work and involved multiple locations (the child's origin, possible interim locations, and the workplace destination), multiple actors (the child, the child's parents or guardians, labor contractors, and possibly the employer), and often multiple transactions. In addition, the purpose of each transaction and the motivation of the actors were often unclear. The study analyzed multiple variables that were indicators of trafficking, including:

- i. Each child's working status. A child had to be working in the carpet industry to be counted. This variable was included because non-working children and children working in other industries had been interviewed in the household survey.
- ii. Each child's residential status (whether accompanied by parents or, if married, spouse). The study included this as a measure of vulnerability to exploitation and social isolation, or the lack of social (family) support.
- iii. Each child's migration status (born locally or immigrated). Trafficking required that the child had moved from one place to another. Children who had migrated might have been

- trafficked to the workplace and were more vulnerable to being trafficked because they were no longer enveloped in the social support at home.
- iv. Each child’s reason for migration (whether job-related). Trafficking would not occur if the child moved for schooling or social (family, marriage, etc.) reasons.
  - v. Involvement of another party (not the child or the parents) in the decision to migrate. That indicated that the child had not made an independent decision to migrate, though the child and parents might have agreed with the decision that was made by someone else.
  - vi. Involvement of labor contractor in actual movement/migration. Someone else (a labor contractor) had organized the move/migration to work.
  - vii. Exploitive nature (child labor) of child’s work or workplace. This variable was measured using the other measures of hazardous and excessive work.

The specific variable definition and data crosswalk used to compute the existence of indications of child trafficking is presented in Table 67.

**Table 67. Indications of Child Trafficking: Variable Definition and Data Crosswalk**

| Indicator   | Variable |   | Qualifying Codes  |              |
|---|----------|---|-------------------|--------------|
| Child is a usual child carpet worker  | WOR      | Child worked in carpet-related activities the last 12 months ( <i>computed variable</i> ) | 1                 | Yes          |
| Migrated to location where interviewed  | MIG      | Were you born here or elsewhere?  | 2                 | Elsewhere    |
| Currently not living with either parents or spouse  | PAR      | Who do you live with?   | 2                 | Others       |
| Somebody in addition to the child decided that the child would migrate  | SOM      | Who made the decision that you would move here?   | 1                 | Father       |
|   |          |   | 2                 | Mother       |
|   |          |   | 3                 | Others       |
| Labor contractor was involved in move   | CONT     | Was a labour contractor/recruiter involved in finding you a job?                          | 1                 | Yes          |
| Moved to current location for job related purposes  | JOB      | Did you have a job waiting for you when you came here?                                    | 1                 | Yes          |
|   | REA      | What was the main reason you came to this village, town, or locality?                     | 1                 | Job transfer |
| 2   |          |   | Looking for a job |              |
| Working in Hazardous Work   | HW       | Is child in Hazardous work?   | 1                 | Yes          |
| Working in Hazardous Conditions   | HC       | Is child in Hazardous conditions?   | 1                 | Yes          |
| Working Excessive Hours   | EW       | Is child working Excessive Hours?   | 1                 | Yes          |
| <b>Child is in Child Trafficking if WOR = 1 &amp; MIG=2 &amp; PAR = 2 &amp; CONT = 1 &amp; (JOB = 1 or REA = 1 or REA = 2) &amp; (SOM = 3) &amp; (HW = 1 or HC = 1 or EW = 1)</b> |          |   |                   |              |

### C.3.3. Indications of Other Unacceptable Forms of Child Work

This study did not collect sufficient information to create measures that indicated the existence of other forms of unacceptable work, including forced labor and bonded labor. However, the study

identified variables that were critical to understand these two unacceptable forms and presented a descriptive analysis of these variables.

This study analyzed whether each working child had been forced/coerced in the past to start working and/or was being forced to continue work at the time of the research. One important factor was the age of the child carpet worker when he or she started working. At that time, was the child too young to be considered capable of making an independent voluntary decision?

The study asked each child carpet worker directly whether the child thought that he or she was able to leave their work if they so desired. Those who reported that they could not leave were asked the main reasons why they were unable to leave work. The most direct indications of forced or bonded labor were when child carpet workers reported that they could not leave because they were still repaying a debt and when they reported that their employer had threatened to harm them (a clear menace of punishment).

In most studies of forced labor, poverty and indebtedness were viewed as causing the child to leave home, often as forced or bonded labor, after which the child would be exploited and confined or restrained in a distant workplace. The research team started the study assuming that any children exhibiting three characteristics (having migrated, living unaccompanied by parents, and working in a factory) had increased vulnerability to coercion and exploitation by labor contractors and employers because those children would lack the protection and social support that would have been provided in their natal localities by the presence of parents and family. Therefore, the study assumed that those three characteristics could be used as filters that would identify the children most at risk of forced/bonded labor and child trafficking.

The study also focused on another factor – the family’s poverty and indebtedness. Indications of the increased potential for forced or bonded labor included families being in debt and having difficulty repaying their debts. If the family was being forced to repay debts by supplying workers, the child was also in forced or bonded labor. The study interviewed adult respondents in the carpet households for information about family poverty and indebtedness and how that might have affected children’s participation in the industry workforce, including whether that might have played a part in coercing the children to work. Some carpet households reported that they had supplied labor to the lender to repay the outstanding debts, and sometimes the member of the household who had provided the labor was a child. When children working in the carpet industry were asked their reasons for working, did they report that they were working to repay outstanding family debts? Because of the close link between debt and the possibility of forced/bonded labor, the study analyzed whether the children who were working to repay family debt were the same children who reported being unable to leave their job, especially those who could not leave because they were repaying a debt.

More specifically, the following variables were analyzed when discussing forced and bonded labor:

- i. Each child's age.
- ii. Each child's residential status (whether accompanied by parents or, if married, spouse).
- iii. Each child's migration status (born locally or migrated).
- iv. Financial status and indebtedness of the parents and family.
- v. Cash advances paid to the parents or family.
- vi. Family history of repaying debts by offering family labor.
- vii. Involvement of another party (not the child or the parents) in the decision for the child to enter the workforce.
- viii. Each child's self-reported ability to leave the work.
- ix. If unable to leave the work, each child's reason for not being able to leave.

## APPENDIX D – WEIGHTING

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This study used a variety of sampling methodologies to design statistically and economically efficient samples for each of the populations surveyed. As a result, sampling designs departed from a Simple Random Sample, assigning different probabilities of selection to different population units. The following weights were developed to compensate for these unequal probabilities of selection.

### Household Survey

The project wanted to be able to produce statistically valid data for both strata, and so households were stratified disproportionately, with the weaving stratum receiving an initial allocation of 300 weaving HHs and an equal number of control HHs, and the Processing stratum being allocated a total of 300 processing HHs and 270 Control HHs (due to the exclusion of control HHs in Kathmandu valley). PSUs within each stratum were selected using a multistage PPS methodology at the district, VDC and the ward/cluster<sup>45</sup> level. In addition to the disproportionate stratification of weaving and processing HHs, the population of carpet HHs found in each cluster was different from expected, and so the population of households according to the frame was adjusted down. Weights were therefore developed to compensate for unequal selection probabilities as computed from the post-adjusted population estimates.

Since non-carpet HHs were only chosen as a benchmark for carpet HHs, their weight relative to the population of non-carpet HHs was not of interest, but only as a comparison to carpet HHs. In order to keep geographic factors constant, each carpet HH in the sample should be compared to the same number of non-carpet HHs within its community. The same weights were applied to non-carpet and carpet HHs, with an adjustment for sample size differences at the cluster level.

Finally, in the household surveys all children in a household were selected and so their probability of selection was equal to that of the household, except that 110 children identified in the HHs sampled could not be interviewed. This child non-response appeared to be randomly distributed across clusters and types of HHs (carpet or control), so children interviews were given a final weight adjustment by cluster and type of household to compensate for non-response. Given the PPS methodology, weights were quite homogenous, as exemplified by the distribution of normalized weights<sup>46</sup>.

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<sup>45</sup> The Ward was not the PSU in all cases. In some areas where specific information down to the ward level was not available, groups of wards and their estimated number of HHs were listed in the sampling frame. For this reason, the term “cluster” is used to refer to the PSU.

<sup>46</sup> Normalized weights were obtained by dividing each weight by the overall average weight, so that the mean weight was 1. Normalized weights were useful to assess the presence of extreme weights. Extreme weights were the result of inefficient

**Table 68: Descriptive Distribution of Normalized Children Weights**

| Min    | Percentiles |        |        |        |        | Max    | Mean   |
|--------|-------------|--------|--------|--------|--------|--------|--------|
|        | 5           | 25     | 50     | 75     | 95     |        |        |
| 0.0486 | 0.0548      | 0.1392 | 0.4531 | 1.6467 | 2.2959 | 5.5113 | 1,0000 |

**Table 69: Weighted and Unweighted Distribution of Children by Type of Household, Gender, and Age**

|               | Unweighted        |                       | Weighted          |                       |
|---------------|-------------------|-----------------------|-------------------|-----------------------|
|               | Carpet Households | Non Carpet Households | Carpet Households | Non Carpet Households |
| <b>Age</b>    |                   |                       |                   |                       |
| 5-8           | 25.6%             | 27.5%                 | 21.7%             | 25.6%                 |
| 9-13          | 41.7%             | 43.0%                 | 43.4%             | 39.4%                 |
| 14-17         | 32.7%             | 29.5%                 | 34.9%             | 35.0%                 |
| Total         | 100%              | 100%                  | 100%              | 100%                  |
| <b>Gender</b> |                   |                       |                   |                       |
| Male          | 48.5%             | 47.6%                 | 42.0%             | 47.9%                 |
| Female        | 51.5%             | 52.4%                 | 58.0%             | 52.1%                 |
| Total         | 100%              | 100%                  | 100%              | 100%                  |

**Factory survey**

For the factory surveys there were two levels of selection:

- a) Factories, including factory observations and factory manager surveys
- b) Workers, including those apparently above 20 and those apparently below 20.

Factories were sampled using proportional stratification by factory size. Although this was an a priori self-weighting (epsem) design, many factories were found to be closed, and so the number of factories in each stratum was re-estimated based on the closure rate at each stratum. Weights were therefore only needed to weight factories in each stratum according to the actual proportion each stratum represented in the post-adjusted population.

At the worker level, the selection methodology used was the same for each factory and stratum, regardless of the number of workers in the factory: From each factory listing (workers apparently above or below 20), four workers were selected at random. If there were four or fewer workers

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sampling allocations, resulting in excessive clustering of the sample. Extreme weights and excessive clustering were undesirable because they amplified the standard error from specific clusters, incrementing sampling variance.

in a group, then all of them were included in the sample. This sampling approach departed from an epsem design: workers had a probability of selection proportionally inverse to the number of workers in the factory. In order to adjust for this design effect, weights that were inversely proportional to the probability of selection of each worker were developed. These weights were multiplied by the corresponding factory weight to obtain a final worker level weight.

This approach yielded overall balanced normalized weights (see Table 70), with some outliers, mostly due to the under-sampling of workers in the group above 20 relative to the population size.

**Table 70: Descriptive Distribution of Normalized Factory Worker Weights**

| Min    | Percentiles |        |        |        |        | Max     | Mean   |
|--------|-------------|--------|--------|--------|--------|---------|--------|
|        | 5           | 25     | 50     | 75     | 95     |         |        |
| 0.1127 | 0.1762      | 0.4229 | 0.7753 | 1.3688 | 2.3947 | 11.8630 | 1,0000 |

**Table 71: Key Factory Worker Variables (Weighted and Unweighted)**

|                                      |                      | Unweighted   |             | Weighted     |             |
|--------------------------------------|----------------------|--------------|-------------|--------------|-------------|
|                                      |                      | N            | %           | n            | %           |
| <b>Selection Group</b>               | Group A (< 20 Years) | 473          | 33%         | 238          | 17%         |
|                                      | Group B (> 20 Years) | 950          | 67%         | 1185         | 83%         |
| <b>Age</b>                           | <18                  | 326          | 23%         | 177          | 13%         |
|                                      | ≥18                  | 1,097        | 77%         | 1246         | 87%         |
| <b>Number of workers per factory</b> | 1-29                 | 454          | 32%         | 524          | 37%         |
|                                      | 30-49                | 460          | 32%         | 431          | 30%         |
|                                      | 50-99                | 369          | 26%         | 316          | 22%         |
|                                      | 100+                 | 140          | 10%         | 151          | 11%         |
| <b>Total workers in sample</b>       |                      | <b>1,423</b> | <b>100%</b> | <b>1,423</b> | <b>100%</b> |

## **APPENDIX E – RESEARCH INSTRUMENTS**

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