CONFRONTING CHILD LABOR IN GLOBAL AGRICULTURAL SUPPLY CHAINS: UNPRECEDENTED CHALLENGES & UNCOMMON COLLABORATIONS

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INTRODUCTION

From the tea estates embracing the rolling hills of Rwanda and the endless palm plantations spanning across Indonesia to the familiar grapevines thriving in the dry soil of California's Sacramento valleys¹ and tobacco of North Carolina,² young hands cultivate and harvest our food and the raw ingredients of our lives. Some of these children work in conditions that build agency and capability, while others struggle in circumstances harmful to dignity and development. Imagine the commonplace items in every household. We might buy fair trade coffee and certified chocolate, but do we know who harvested our sugar and hauled our palm oil? Unlike sugar, we might not even know that palm oil is ubiquitous, estimated to be in half

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¹ Stephen Stock & David Paredes, *Child Labor: Young Hands Picking Our Food*, NBC (Aug. 31, 2012, 6:19 AM), http://www.nbcbayarea.com/investigations/series/children-in-the-field/Children-in-the-Field-Picking-Our-Food-164796976.html.

² US: Tobacco Group Adopts Child Labor Protections, HUMAN RTS. WATCH (Oct. 2, 2014), http://www.hrw.org/news/2014/10/02/us-tobacco-group-adopts-child-labor-protections.

of all packaged products sold in supermarkets—from ice cream to shampoo to pizza dough.³ But for a few prominently egregious examples of child exploitation, the world of hazardous child labor remains outside of our everyday consumer concerns and awareness.

While mentions of "child labor" in the media often project images of children working in crowded factories, chained into slavery, or being sexual exploited, most of hazardous child labor can be found on small family fields—often next to their own parents or relatives—hidden by the shrubs and invisible to the rest of the world.⁴ To put things in perspective, while a smaller number (5.5 million) of children are estimated to endure forced labor (sexual exploitation, slavery, and state-imposed labor), an estimated total of 264 million children ages 5 to 17 were engaging in some sort of economic activity in 2012.⁶ Of this group, 168 million were engaging in "child labor" activities—that is, activities that violate international labor standards, the International Labour Organization (ILO) Conventions Nos. 138 and 182. Within this group of child laborers, almost half, estimated at 85.3 million, were engaging in "hazardous work" or the worst forms of child labor (WFCL). The agricultural sector warrants special attention, accounting for more than half of child laborers (58.6 percent) and most hazardous work incidents.

Due to the invisible nature of hazardous child labor in the agriculture sector, continuing exploration of the issue from various disciplines is critical. Given the sheer number of children in this sector—where progress has been slow—agriculture must be prioritized in our hazardous child labor

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³ Which Everyday Products Contain Palm Oil?, WORLD http://www.worldwildlife.org/pages/which-everyday-products-contain-palm-oil (last visited Nov. 30, 2014).

 $^{^4}$ See, e.g., Int'l Labour Org. [ILO], The Twin Challenges of Child Labour and EDUCATIONAL MARGINALISATION IN THE ECOWAS REGION 27 (2014), available at http://www.ucw-project.org/attachment/ECOWAS child labour educational marginalisation 20140709 130339.pdf [hereinafter ILO TWIN CHALLENGES-ECOWAS] (citing that at least eight in ten child agricultural workers are found on family farms in Burkina Faso, Guinea, Liberia, Mali, Niger, Nigeria and Togo).

⁵ Types of forced labor include forced labor exploitation, forced sexual exploitation, and state-imposed forced labor. ILO, 2012 GLOBAL ESTIMATE OF FORCED LABOUR EXECUTIVE SUMMARY 1 (2013), available at http://www.ilo.org/wcmsp5/groups/public/---ed_norm/--declaration/documents/publication/wcms_181953.pdf [hereinafter ILO GLOBAL ESTIMATE].

ILO GLOBAL ESTIMATE, supra note 5, at 1.

YACOUBA DIALLO, ALEX ETIENNE, & FARHAD MEHRAN, ILO, GLOBAL CHILD LABOUR TRENDS 2008 TO 2012 (2013) [hereinafter GLOBAL CHILD LABOUR TRENDS].

⁸ *Id.* at viii.

⁹ Id. at ix.

eradication effort. 10 In April 2014, the California International Law Center convened an interdisciplinary group of experts—from international institutions, governments, public-private partnerships, civil society, and academics—at the University of California, Davis, School of Law to advance the conversation and bring it closer to the public. The symposium speakers included Alfred Babo of Smith College; Eric Biel of the US Department of Labor (DOL); Anupam Chander of the University of California, Davis, School of Law; Andrew Dillon of Michigan State University; Erika George of the University of Utah, S.J. Quinney College of Law; Patricia Jurewicz of the Responsible Sourcing Network; Deborah Levison of the University of Minnesota; William Myers of the University of California, Davis; Mil Niepold of the Consensus Building Institute; Jane Nyambura of the Ethical Tea Partnership; Lisa Pruitt of the University of California, Davis, School of Law; Paul Rosenthal of Kelley, Drye & Warren LLP; Damien Sanfilippo of the Better Cotton Initiative; Harold Schmitz of Mars, Inc.; Natasha Schwarzbach of Bonsucro; Howard-Yana Shapiro of Mars, Inc.; Constance Thomas of the International Labour Organization's International Programme on the Elimination of Child Labour (ILO-IPEC); and Nick Weatherill of the International Cocoa Initiative. The conversation among scholars and practitioners from multiple continents was made possible by financial support from Mars, Inc., an agriculture-based company that, like others in its industry, is seeking to end the worst forms of child labor in its supply chains. Hazardous child labor in agriculture is an extremely complex issue, often taking root in regions characterized by crippling poverty, limited educational opportunities, vulnerable crops, and weak social and technical infrastructure. II Since the mid-2000s, little legal scholarship has focused on international hazardous child labor in agricultural settings.¹² From global perspectives to viewpoints on the ground, the

¹⁰ ILO, CHILDREN IN HAZARDOUS WORK 9 (2011), available at http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_155428.pdf [hereinafter CHILDREN IN HAZARDOUS WORK]; ILO, ILO: ACCELERATING ACTION AGAINST CHILD LABOUR 5 (2010).

¹¹ For a discussion of factors influencing the existence of child labor, see for example THE WORLD OF CHILD LABOR: AN HISTORICAL AND REGIONAL SURVEY (Hugh D. Hindman ed., 2011).

¹² See id. (focusing on agriculture in passing); SUSAN C. MAPP, GLOBAL CHILD WELFARE AND WELL-BEING 2010; CHILD LABOUR IN A GLOBALIZED WORLD: A LEGAL ANALYSIS OF ILO ACTION (G. Nesi, L. Nogler, & M. Pertile eds., 2013) (focusing generically); G. K. LIETEN, HAZARDOUS CHILD LABOUR IN LATIN AMERICA 2011; ENSLAVED INNOCENCE: CHILD LABOUR IN SOUTH ASIA (Biswamoy Pati & Shakti Kak eds., 2012) (confining focus to certain geographical regions). *Cf.* Eric V. Edmonds, *Child Labor*, in HANDBOOK OF DEVELOPMENT ECONOMICS VOLUME 4 (T. P. Schultz and J. Strauss, eds., Elsevier Science 2008) (noting that 143 empirical works on child labor in economics have been published in the first half of this decade).

symposium articles provide indispensable insights into the current workings and theories on the elimination of hazardous child labor and inform us of the complexity that we now face going forward.

This symposium issue presents a plethora of viewpoints by seasoned representatives of various stakeholder groups. The issues raised herein are not intended to cover the entirety of the vast scope of the child labor struggle. They offer instead important insights into the existing realities, questions, successes, and critiques of current child labor eradication efforts.

At the highest institutional level, Constance Thomas, head of the International Labour Organization's International Programme on the Elimination of Child Labour, apprises us of the extensive breadth of international efforts working on the elimination of hazardous child labor. She leads us through the historical gains made over the last quarter century and reminds us that, despite past progress, the road ahead is "long and hard," requiring stakeholders to seek systematic, coherent and community-based collaborations.

Examining current international collaborative efforts, several authors focus on the various stakeholders and explore their unique contribution and impact. In "Incorporating Rights," Erika George focuses on the relationship between law and corporate social responsibility. 14 She briefly introduces us to the relevant legal instruments on regulating children's working conditions and suggests that in order to protect and actualize children's rights, we will need to look beyond the laws. Examining the long-standing public-private multi-stakeholder collaboration in the cocoa industry, the author suggests that we look to business practices and responsibilities as venues for change. While Professor George directs our attention to business practices, Eric Biel of the United States Department of Labor reminds us of the "paramount importance" of national governments in the international efforts to eradicate hazardous child labor. The author describes some of the on-the-ground initiatives supported by the DOL and urges us to deliberate on the most effective and appropriate roles and obligations undertaken by the different stakeholders.1

In "A Bitter Harvest," Natasha Schwarzbach and Ben Richardson direct our focus to another set of stakeholders. Via sugar—the most common but uneventful agricultural products in the world—the authors examine the current certification schemes utilized by members of sugarcane industry.

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Constance Thomas, Addressing Child Labor in Agriculture Supply Chains within the Global Fight Against Child Labor, 21 UC DAVIS J. OF INT'L & POL'Y 131, 132 (2015).

¹⁴ Erika George, *Incorporating Rights: Child Labor in African Agriculture and the Challenge of Changing Practices in the Cocoa Industry*, 21 UC DAVIS J. OF INT'L L. & POL'Y 59 (2015).

¹⁵ Eric R. Biel, Confronting Child Labor in Global Agricultural Supply Chains: The Way Forward, 21 UC DAVIS J. OF INT'L L. & POL'Y 43 (2015).

Schwarzbach and Professor Richardson suggest that effective elimination of hazardous child labor requires active engagement of influential actors along the supply chains—from growers to millers and traders in addition to corporations and national governments.¹⁶

While laws and policies have been adopted at the international, national, organizational, and corporate levels, for true changes to take root, they must ultimately emerge organically at the community level. Here, Afred Babo, an anthropologist and sociologist at Smith College, raises the complex and often contentious role of social norms by highlighting the community's importance as the conduit between international labor laws and the children. Pointing out the persistent "significant functional gaps" between the community's daily life and international policies, Professor Babo suggests that policymaking must be shaped by the community's onthe-ground realities. Thus, for child protection to be effective, it should be integrated with traditional/indigenous teaching and modern education.¹⁷

Going beyond the most conventional stakeholders (governments, corporations, and civil society), the most important stakeholders, the children, remain unrepresented in the policymaking process. Deborah Levison returns our attention to the fundamental question: what is the child's best interest? She asks whether eliminating all job opportunities for children serves them in the long run. Professor Levison examines the comments made by children in response to US legislative efforts and concludes that perhaps we should focus on improving and making safe and protective the environment in which children can work to gain better life skills. That is, while we attempt to reduce the hazardous aspects of children's work, we do not do so by reducing all beneficial work opportunities. 19

Two of the symposium articles continue in Volume 21, Issue 2 of the *UC Davis Journal of International Law & Policy*. Paul Rosenthal and Anne Hawkins illuminate the challenges that national governments face when resorting to regulations to confront child labor in agriculture, by focusing on

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Natasha Schwarzbach & Ben Richardson, A Bitter Harvest: Child Labour in Sugarcane Agriculture and the Role of Certification, 21 UC DAVIS J. OF INT'L L. & POL'Y 99 (2015)

Alfred Babo, Child Labor in Cocoa Growing Communities in Cote d'Ivoire: How to Adopt International Norms with Local Rules? 21 UC DAVIS J. OF INT'L L. & POL'Y 23 (2015).

Views Expressed by Other Stakeholders on the Right to Development Criteria and Operational Sub-Criteria, in U.N. Human Rights Council, Working Group on the Right to Development on its Thirteenth Session, at 9 U.N. Doc. A/HRC/WG.2/13/CRP.2 (May 7-11, 2012) ("Children are key stakeholders in development, and taking their views into account will help ensure that government policies are effective and promote their best interests. This could be enhanced through the establishment of participation in policy-making.").

¹⁹ Deborah Levison, *Thoughts on the Regulation of Child Labor in Agriculture*, 21 UC DAVIS J. OF INT'L L. & POL'Y 81 (2015).

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the US's effort in the cocoa sector.²⁰ The authors suggest that requiring businesses to investigate and disclose activities in their supply chains might be a promising approach in the long run. William Myers concludes the symposium issues by leaving us with some theoretical questions. He urges us to continue deliberating on some foundational assumptions of child labor policies: the amorphous concept of child labor, the accountability of international efforts, and the purpose and goals of intervention. Professor Myers stresses that international, national, and local policymakers and stakeholders must reflect upon these concerns to guide their formulation and implementation of child labor elimination strategies.²¹

To situate the contributors' works, this introduction hopes to provide some context—mainly in the form of constraints—as we go forward to confront the conditions perpetuating hazardous child labor. To understand progress, we must keep in mind that international efforts will continue to struggle with current challenges internal to child labor policies while confronting novel threats external to these policies. I begin in Part I with a brief discussion on two constraints internal to child labor policymakingthat is, the inadequacy of both definitions and data—to provide insights into the uncertain grounds supporting multi-stakeholder actions. Then I situate child labor in the overarching conversation of agricultural development and sustainability. Thus, part II explores some pressing challenges external to the current child labor efforts that would have tremendous negative impact on the agricultural communities and subsequently hazardous child labor eradication. Finally, I touch on the "uncommon collaborations" going forward, positing that hazardous child labor is a critical, yet often overlooked, indicator of future agricultural sustainability and development.

I. THE UNCERTAIN PRESENT: DEFINITIONS & DATA

While the struggle to eliminate children laboring in harmful conditions has been on-going for more than a century, 22 crucial information and instruments to measure and identify hazardous child labor remain unsettled and in some cases, lacking. What constitutes hazardous child labor? Where is it most prevalent? And what is the magnitude and concentration of hazardous activities? Conflicts over definitions remain unresolved and contentious. Data detailing the true scope and distribution of hazardous child

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²⁰ Paul C. Rosenthal & Anne E. Hawkins, *Applying the Law of Child Labor in Agricultural Supply Chains: A Realistic Approach*, 21 UC DAVIS J. OF INT'L L. & POL'Y (forthcoming May 2015).

²¹ William E. Myers, *Considering Child Labor Accountability in Agriculture*, 21.2 UC DAVIS J. OF INT'L L. & POL'Y (forthcoming May 2015).

 $^{^{22}}$ $\it See$ $\it generally$ Holly Cullen, the Role of International Law in the Elimination of Child Labor (2007).

labor remain hard to gather. Without understanding the difficulty of determining hazardous activities and collecting data, ambiguity and the lack of critical information could potentially lead to unrealistic expectations. Without addressing these fundamental components of child labor policies, the international community would hamper the realization of its own efforts.

A. Defining Hazardous

The symposium focuses on the worst forms of child labor, particularly hazardous labor, rather than the encompassing category of "child labor." However, because they are not two distinct categories, sometimes it is necessary to use the term "child labor" and "hazardous child labor" interchangeably. The use of the term "child labor" might carry different meanings to different parts of society. For some, the term seems to be synonymous with children engaging in any work at all, whether harmful or helpful. 4

Before we settle for the definition of child labor set out by international institutions, the definition of the "child" receives no consensus across societies. The definition of a "child" is customary based on chronological age in the West, while in many societies, the distinction between a child and an adult often depends on social cultural factors. *See generally* FRANZISKA HUMBERT, THE CHALLENGE OF CHILD LABOUR IN INTERNATIONAL LAW 14-34 (2009); GERRY RODGERS & GUY STANDING, EDS., ILO, CHILD WORK, POVERTY AND UNDERDEVELOPMENT (1981).

²⁴ "Important differences of perspective on child labor begin with defining it, for there is no common concept that united everyone discussing the problem. As a result the term 'child labour' has become severely devalued and problematic. It is not used to signify so many different things that it is almost useless except as an emotion-laden slogan useful for mobilizing public indignation and action." JOHN SISLIN & KARA MURPHY, APPROACHES TO REDUCING THE USE OF FORCED OF CHILD LABOR: SUMMARY OF A WORKSHOP ON ASSESSING PRACTICE 88 (2009) (citing William E. Myers, Appreciating Diverse Approaches to Child Labor, Address at the Stanford University Conference: Child Labor & the Globalizing Economy: Lessons from Asia/Pacific Countries (Feb. 7-9, 2001)).

Children (5-17 years old) in Productive Activities					
Children in Employment				Children in Other Productive Activities	
			PERMISSIBLE Light Work	CHILD LABOR Hazardous	
Worst Forms	of Child Labor	Employment Below	(12-14 years old)	Unpaid Household	
Hazardous Work by Children (Exposure to physical, psychological or sexual abuse, dangerous machinery, heavy loads, unhealthy environment, long hours, night work, etc.)	Other Worst Forms of Child Labor (All forms of slavery or similar practices, child prostitution, illicit activities, etc.)	Minimum Age	Work not Designated as Worst Forms (15-17 years old)	Services Other Activities	

Table 1. International Standards on Child Labor Statistics²⁵

The term "child labor," as many contributors to this symposium observe, ²⁶ carries a very distinct meaning in international law, one which excludes "light work" that is permissible for children. ILO Convention 138 explicitly recognizes a distinction between child labor and "light work":

> National laws or regulations may permit the employment or work of persons 13 to 15 years of age on light work which is (a) unlikely to be harmful to their health or development; and (b) not such as to prejudice their attendance at school, their participation in vocational orientation or training programmes approved by the complement authority or their capacity to benefit from the instruction received.²

Nevertheless, popular discourse often uses "child labor" to subsume

art. 7.1, June 26, 1973, 1015 U.N.T.S. 297, available at http://www.ilo.org/dyn/normlex/en/ f?p=NORMLEXPUB:12100:0::NO:12100:P12100 INSTRUMENT ID:312283:NO (emphasis added).

²⁵ ILO, 18TH INTERNATIONAL CONFERENCE OF LABOUR STATISTICIANS: REPORT OF THE CONFERENCE 66 (2009).

See, e.g., Erika George, supra note 14, at 66-68.

²⁷ ILO, Convention (No. 138) Concerning Minimum Age for Admission to Employment

permissible work for children, an otherwise distinct set of activities. Thus, the "worst forms" of child labor or "hazardous child labor" is used to avoid perpetuating the indiscriminate use of the term and to reflect the need to prioritize international efforts.²⁸ The worst forms of child labor refer to activities that include slavery, prostitution, illicit activities such as drug trafficking,²⁹ and—most ambiguous but yet highly applicable in the agriculture context— "work which, by nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children" or "hazardous child labor." The ILO Recommendation 190 elaborates that such activities include conditions which expose children to physical, emotional or sexual abuse; work which includes dangerous machinery or tools, manual handling or transport of heavy load; work in unhealthy environments; or work in difficult conditions such as long hours or at night.³¹ Because the agricultural sector contains the highest incidents of hazardous labor (59 percent of children in hazardous labor are in the agriculture sector),³² urgent and more targeted efforts are needed, perhaps at times, at the cost of preventing other lesser forms of child labor.

Although the category of "hazardous child labor" allows international efforts to anchor on more specific and quantifiable types of activities, the practical problem of interpretation remains. When does non-hazardous work become harmful labor? When does a workload become heavy for children of different physical statures? To add to this varied interpretations, member nations of the ILO have the discretion to classify which type of economic activities engaged by which age group is considered permissible or hazardous. Subsequently, there is no one legal definition of hazardous child labor (and also no single statistical measure of hazardous child labor) across countries. According to the ILO's Understanding Children's Work, not all member states even have a national list of hazardous activities. Even for the countries that have them, there are large differences in what

³¹ ILO, Worst Forms of Child Labour Recommendation No. 190 (Jun. 17, 1999), available at http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100 INSTRUMENT ID:312528:NO.

²⁸ The Hague Global Child Labour Conference, Roadmap for Achieving the Elimination of the Worst Forms of Child Labour by 2016, at i, (May 10-11, 2010) ("Removing these children from the worst forms and offering them a future without child labour is an urgent priority.").

²⁹ ILO, Convention (No. 182) Concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour art. 3(a)-(c), June 17, 1999, 2133 U.N.T.S. 161, *available at* http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO: 12100:P12100_ILO_CODE:C182 [hereinafter ILO Convention 182].

³⁰ *Id.* art. 3(d).

³² CHILDREN IN HAZARDOUS WORK, *supra* note 10, at 9.

ILO Convention 182, *supra* note 29, art. 4.1.

³⁴ ILO TWIN CHALLENGES-ECOWAS, *supra* note 4, at 10.

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constitutes a hazardous activity for children.³⁵

B. The Dearth of Data

The struggle over definitions feeds into another challenge in the elimination of hazardous child labor: measuring its occurrences.³⁶ Credible, specific and up-to-date data on child labor—and even more so in the case of hazardous child labor—remain elusive, even after decades of study.³⁷ First, there is a need for systematic measurements of hazardous child labor across the agriculture subsectors in order to guide policy responses. Second, there is a need for systematic evaluation of data gathering instruments.

Little is known about the distribution of hazardous child labor across the agricultural subsectors.³⁸ While cocoa, coffee, cotton, and tobacco are often the focus of current consumer activism, other ordinary crops are also linked to child labor activities. The US Department of Labor lists these tainted crops to include bamboo, bananas, beans, blueberries, citrus, cocoa, coffee, corn, cotton, garlic, flowers, grapes, nuts, olives, palm oil, pineapples, rice, rubber, sugarcane, tea, tobacco, tomatoes, and yerba mate, among others.³⁹ This list of goods does not provide any additional information for us to determine which crop sector warrants the most attention—that is, the sources provided for each crop did not provide us of the number of children laborers or the scope and scale of hazardous activities. 40 Similarly, while the ILO estimates that around 60 percent of hazardous child labor can be found in agricultural settings, it does not provide any further insights to how this number is distributed within subsectors. The ILO acknowledges that we do not know the full scope because "there have been virtually no statistics on occupational injuries and illness for children in the developing world."41

³⁵ Id.; ILO, THE TWIN CHALLENGES OF CHILD LABOUR AND EDUCATIONAL MAGINALISATION IN THE SEEAR - AN OVERVIEW 3 (2014), available at http://www.ilo.org/ ipecinfo/product/download.do?type=document&id=25520.

³⁶ The struggle over definition of what constitutes "child labor" further complicates child labor measurements. John Sislin, Appendix E, Definitions of Child and Forced Labor, in JOHN SISLIN & KARA MURPHY, supra note 24, at 89.

³⁷ ILO TWIN CHALLENGES-ECOWAS, *supra* note 5, at 47.

³⁹ U.S. DEP'T. OF LABOR, LIST OF GOOD PRODUCED BY CHILD LABOR OR FORCED LABOR (2013), available at http://www.dol.gov/ilab/reports/child-labor/list-of-goods/.

⁴⁰ The U.S. Dep't, of Labor List of Goods links cocoa, coffee, cotton, rice, sugarcane, tea, and tobacco as the crops with the highest number of countries where child labor was used in the production of such crops. Bibliography to U.S. DEP'T. OF LABOR, LIST REQUIRED BY THE TRAFFICKING VICTIMS PROTECTION REAUTHORIZATION ACT OF 2005 (Oct. 1, 2013), available at http://www.dol.gov/ilab/reports/pdf/2013TVPRA Bibliography.pdf.

⁴¹ CHILDREN IN HAZARDOUS WORK, *supra* note 10, at 9.

While progress has been made, what remains of hazardous child labor in agriculture is a daunting task to identify and measure, and thus, difficult to regulate and eradicate. For children aged 5-17, the largest number of children (33.9 million) engaged in hazardous labor live in Asia and the Pacific, but they are also pervasive across Saharan Africa (28.8 million), Latin America and the Caribbean (9.6 million), and the Middle East and North Africa regions (5.2 million). While incidents of hazardous child labor are found on all continents, it is hard to operationalize this data into policies with little else. The sheer breath of hazardous child labor is compounded by the difficulty of identifying them. Collecting accurate data on hazardous child labor is particularly difficult where hazardous activities take place on family farms, which are often both remote and dispersed and where work can take place at various time during the week and fluctuate according to the seasons (as opposed to forced child labor in large factories or vast commercial plantations).

Although there is an urgent need for more detailed data to understand the scope and distribution of hazardous child labor, the existence of data does not necessary mean that what they purport to show is accurate. In cases where data have been gathered, mainly on the more general category of child labor, the estimates don't converge cross different surveys. Urrently, some of the most important instruments for gathering information on child labor in developing countries include: the ILO SIMPOC surveys, the World Bank multi-purpose household surveys, the Core Welfare Indicator Questionnaire (CWIQ) surveys, UNICEF Multiple Indicator Cluster Survey (MICS). Data gathered by these surveys are often used by countries and institutions to monitor progress and guide policies. However, a 2010 study that examined survey estimates from 35 countries found that there are significant and often large differences between estimates of

⁴² GLOBAL CHILD LABOUR TRENDS, *supra* note 7, at viii (because there is no sector breakdown, the statistics for hazardous child labor noted here include other sectors in addition to agriculture).

 $^{^{\}bar{4}3}$ ILO, Rooting Out Child Labour from Cocoa Farms-Paper No. 4: Child Labour Monitoring-A partnership of Communities and Government 10, 39-39 (2007).

⁴⁴ CHILDREN IN HAZARDOUS WORK, *supra* note 10, at 9.

⁴⁵ ILO TWIN CHALLENGES-ECOWAS, *supra* note 5, at 25.

⁴⁶ *Id.* at 13 (warning that cross-country data comparisons of child employment should be interpreted with caution due to different survey instruments and reference years).

⁴⁷ In this section, only statistics on child labor were examined to demonstrate the difficulty of capturing data, the author is unaware of any study that examines estimate variance of data concerning hazardous child labor.

⁴⁸ Discrepancies in child labor statistics have existed since 1990s, for a discussion, see Christiaan Grootaert & Ravi Kanbur, The World Bank, Child Labor: A Review 7 (1994).

children's economic activity from one survey to another. 49 For example, in Cameroon, the MICS survey for the year 2000 put children's economic activities at 64 percent while, only a year later, the Priority Survey estimated children's economic activities at 16 percent. In Mali, child labor estimates increased from 28 percent (DHS) to over 75 percent (SIMPOC) over a fouryear period.⁵⁰ In Senegal in 2005, estimates of child economic activities by the Demographic and Health Survey were one third higher than those obtained by SIMPOC surveys. In São Tomé and Príncipe, the MICS-2's estimate was six times higher than that of the Living Standards Measurement Study Survey for the same year.⁵¹ Of course, not all estimates vary so widely. The same study notes that estimates of school attendance are consistent across different surveys, indicating that the discrepancy is specific to the ways surveys measure and define work activities.⁵² Thus, in cases where instruments to measure incidents of child labor exist, more effort is needed to study and validate the types of surveys and data collection methods used.⁵

Reliance on data that distort the true extent of hazardous child labor activities could result in misallocation of resources and misprioritization of eradication efforts. The need for accurate and detailed data remains a priority. Thus, to confront hazardous child labor at the global scale, discussions on data gathering must reach some degree of standardization. Standardization would allow separately-administered or crop-specific surveys to build on and relate back to larger-scale national and international surveys such as the SIMPOC or MICS. Standardization must also take into account crop-specific timelines. Agricultural child labor activities are seasonally dependent. Detailed data gained from subsectors—such as those carried out by multi-stakeholder initiatives in the cocoa industry in Cameroon, Côte d'Ivoire, Ghana, and Nigeria 55—can be used to supplement

⁵¹ *Id.* at 4.

⁴⁹ GUARDCELLO, ET AL., UNDERSTANDING CHILDREN'S WORK, TOWARDS CONSISTENCY IN CHILD LABOUR MEASUREMENT: ASSESSING THE COMPARABILITY OF ESTIMATES GENERATED BY DIFFERENT SURVEY INSTRUMENTS 44 (2010).

⁵⁰ *Id.* at 5.

⁵² *Id.* at 44.

⁵³ Eric V. Edmonds, *Child Labor*, in HANDBOOK OF DEVELOPMENT ECONOMICS VOLUME 4 3607-700, 3620 (T.P. Schultz & J. Strauss, eds., Elsevier Science 2008).

⁵⁴ See, e.g., Economic Community of West African States [ECOWAS], West Africa Regional Action Plan to Eliminate Child Labour, Especially the Worst Forms, at 7-8 (adopted at Meeting of ECOWAS Ministers of Labour, Employment and Social Affairs) (Dec. 7, 2012), available at http://www.ilo.org/wcmsp5/groups/public/---africa/documents/meeting document/wcms_195493.pdf (last visited Nov. 30, 2014).

⁵⁵ See Sustainable Tree Crops Program & Int'l Inst. of Tropical Agriculture, Child Labor in the Cocoa Sector of West Africa: A Synthesis of Findings in Cameroon, Côte d'Ivoire, Ghana, and Nigeria (2002), available at

general national and international labor surveys such as the ILO surveys on child labor and correct for information gaps.

Because of the breadth of hazardous child labor, gathering adequate and detailed data must become a collaborative task, requiring concerted effort from various groups of multi-stakeholder cross the subsectors. For these disparate measurements to relate to each other, a systematic approach calls for a common operational definition and a standard of measurement. Expectation of progress and program designs must account for these internal constraints.

II. A CERTAIN FUTURE: UNPRECEDENTED CHALLENGES

Despite the outstanding concerns over data gathering, definitions, and the distribution of hazardous child labor, overarching data indicate that there is a trend forward progress. From 2008 to 2012, the number of child laborers have dropped from 215 million to 168 million (by 47 million).⁵⁶ The number of children in hazardous work declined by 30 million over the same time range,⁵⁷ and by more than half over the past decade (from 171 to 85 million).⁵⁸ Yet progress going forward will be met with different kinds of challenges. Constance Thomas, Director of ILO-IPEC, observed that despite progress, the remaining hazardous child labor is harder to eradicate, for it is rooted deeply in poverty, traditions, the lack of infrastructure, conflicts, and other factors.⁵⁹ This section examines the impact on children's livelihood and working conditions when these persistent and unresolved factors collide with more pressing threats (multipliers): climate change risks, dramatically disappearing arable land, escalating urbanization, an ever-increasing population, and demand for food.

Much of these burdens will be shouldered by smallholders and their families. As recognized by UN Under-Secretary General and UNEP Executive Director Achim Steiner, "smallholder farmers can continue to be marginalized or be recognized as catalyst for a transformation of the way the world manages the supply of food and the environmental services that underpin agriculture [.]".60 In this context, there are two sets of smallholders:

http://www.globalexchange.org/sites/default/files/IITA CocoaResearch.pdf.

⁵⁶ GLOBAL CHILD LABOUR TRENDS, *supra* note 7, at ix.

⁵⁷ *Id.* at 4.

⁵⁸ *Id*.

Constance Thomas, Director, ILO's Int'l Programme for the Elimination of Child Labour, Keynote Address at the University of California Davis School of Law Symposium: Confronting Child Labor in Global Supply Chains (Apr. 4, 2014), available at http://mediasite.ucdavis.edu/Mediasite/Play/b1839acbb8b14c6bb0697c15dd4cce9d1d.

⁶⁰ Press Release, Int'l Fund for Agriculture and Dev. [IFAD], Smallholder Farmers Key to Lifting Over One Billion People Out of Poverty, Jun. 4, 2013, http://www.ifad.org/media/

the present and the future smallholders. The present smallholders—current heads of household—are crucial to agricultural sustainability and to efforts confronting hazardous child labor. Because of their central role in influencing their children's working conditions, stressors impacting their livelihoods directly impact incidents of hazardous child labor. On the other hand, children of these households make up the future class of smallholders. We must recognize that these children are the invisible drivers of the future's sustainability. While the agricultural sustainability dialogue often focuses on the present smallholders, within a few years, children working in hazardous conditions now will be the smallholders of tomorrow. Thus, the degree of which children are consistently engaging in dangerous activities indicates future social and environmental unsustainability. Under these conditions, these children lack the opportunity to develop, be educated, and become capable farmers of tomorrow.

Climate change risks endanger smallholders and their families by reducing their productivity. Agriculture is one of the sectors most sensitive to global warming.⁶² The impact of climate change is estimated to reduce global agricultural productivity by 15 to 30 percent by 2080. 63 For some countries in certain developing regions of Africa, South Asia, and South America, agricultural productivity could decline by up to 50 percent.⁶⁴ In some locations, a combination of temperature and precipitation changes could result in a complete loss of agricultural activities. 65 The climate impact on agriculture is one of great magnitude, given that 85 percent of the world's 525 million farms are smallholdings—small family farms with plots less than 2 hectares. Lacking the latest technology and techniques, these farms are often unproductive.⁶⁶ Because child labor consists primarily of work on family smallholdings, ⁶⁷ these farmers must also be responsible for reducing

press/2013/27.htm [hereinafter IFAD Smallholder].

⁶¹ CHILDREN IN HAZARDOUS WORK, *supra* note 10, at 61.

⁶² W. R. CLINE, CTR. FOR GLOBAL DEV. & THE PETERSON INST. FOR INT'L ECON. GLOBAL WARMING AND AGRICULTURE: IMPACT ESTIMATES BY COUNTRY 300 (2007).

⁶³ IFAD, Climate Change and the Future of Smallholder Agriculture, http://www.ifad .org/climate/roundtable/ (last visited Nov. 10, 2014).

W.R. CLINE, supra note 62, at 58.

⁶⁵ *Id*.

NWANZE OKIDEGBE, WORLD BANK, RURAL POVERTY: TRENDS AND MEASUREMENT, RURAL STRATEGY BACKGROUND PAPER 3, (2001). See also Oksana Nagayets, Small Farms: Current Status and Key Trends, in INT'L FOOD POL'Y RESEARCH INST. [IFPRI], THE FUTURE OF SMALL FARMS: PROCEEDINGS OF A RESEARCH WORKSHOP 355 (Jun. 26-29, 2005),

http://www.ifpri.org/sites/default/files/pubs/events/seminars/2005/smallfarms/sfbgpaper.pdf (discussing other characteristics of smallholders).

⁶⁷ ILO, MARKING PROGRESS AGAINST CHILD LABOUR: GLOBAL ESTIMATES AND TRENDS 2000-2012 23 (2013), available at http://www.itcilo.org/fr/community/news/Global

hazardous child labor while battling new threats to their livelihoods.

Climate change impacts not only threaten the livelihoods of smallholders, its mitigation strategies could conflict with efforts to eliminate hazardous child labor.⁶⁸ In the case of biofuels, cultivators must take into account its effect on smallholders' access to land and subsequent livelihood.⁶⁹ Cultivation of liquid biofuel such as sugarcane and palm oil has been linked not just to child labor, 70 but also to displacement of smallholders due to land grabbing.⁷¹ A recent case study shows that farmers' loss of rights over land, due to acquisition of property for commercial biofuel crops in Ghana, affected households' food security and reduced crop yields. ⁷² Biofuel production not only reduces the amount of arable land for smallholders, it also causes smallholders to divert food production to biofuel production. Experts suggest that this diversion can raise food prices, leading to substitution of nutrition-poor food and decreasing overall consumption.⁷³ All of which would subsequently lead to child malnutrition.⁷⁴ While a win-win balance could be reached, the tension between environmental efforts and social costs—the worsening of smallholders' livelihood, jeopardizing of children's food security and nutrition, and the increasing of demand for child labor—must be recognized.

While climate change decreases productivity and environmental demands compete for arable land, the demand for food worldwide increases. In order to meet urbanization and population growth, the current worldwide

estimates20002012_report_EN.pdf.

⁶⁸ INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE [IPCC], IPCC FOURTH ASSESSMENT REPORT: CLIMATE CHANGE 2007 8.4.4 (2007), available http://www.ipcc.ch/publications_and_data/ar4/wg3/en/ch8s8-4-4.html.

⁶⁹ Barbara Esteves Ribeiro, Beyond Common Place Biofuels: Social Aspects of Ethanol, 57 ENERGY POL'Y 355, 355 (2013).

⁷⁰ See, e.g., Edward Smeets, et al, The Sustainability of Brazilian Ethanol-an Assessment of the Possibilities of Certified Production, 32 BIOMASS AND BIOENERGY 781–813 (2008); ARANTXA GUEREŇA & RICARDO ZEPEDA, OXFAM AMERICA, THE POWER OF OIL PALM: LAND GRABBING AND IMPACTS ASSOCIATED WITH THE EXPANSION OF OIL PALM CROPS IN GUATEMALA: THE CASE OF THE PALMAS DEL IXCÁN COMPANY 56 (2013), available at http://www.oxfamamerica.org/static/oa4/the-power-of-oil-palm.pdf.

Philip McMichael, Biofuels and the Financialization of the Global Good System, in FOOD SYSTEMS FAILURE: THE GLOBAL FOOD CRISIS AND THE FUTURE OF AGRICULTURE 61, 66-67 (Christopher Rosin, Paul Stock & Hugh Campbell eds., Routledge 2011).

⁷² See Emmanuel Acheampong & Benjamin Betey Campion, Livelihoods in Ghana: The Case of Jatropha Curcas, 6 SUSTAINABILITY 4587-4607 (2014), available at http://www.mdpi.com/2071-1050/6/7/4587/pdf.

⁷³ M.C. Tirado et al., Addressing the Challenges of Climate Change and Biofuel Production for Food and Nutrition Security, 43 FOOD RESEARCH INT'L 1729, 1737 (2010), available at http://ucanr.edu/datastoreFiles/608-148.pdf.

⁷⁴ *Id*.

agricultural output will need to rise substantially, by 70 to 100 percent. These smallholders and their families play a major part in feeding and fueling the world's 9 billion, as they provide over 80 percent of the food consumed globally. Not only smallholders must produce more crops for export, they must do so on smaller plots of land, all while battling their own food security and malnutrition. These smallholders include half of the world's currently undernourished people and make up the impoverished majority. Smallholders in developing countries, particularly, are most vulnerable to the impacts of climate change, and would be likely to experience increase likelihood of crop failure, food insecurity, and decreasing human development indicators. These vulnerable households are also the actual grounds where hazardous child labor will be confronted. Children will face twice the impact of climate change. On one hand, increasing global demand will likely necessitate demand for family labor. On the other, children's normal working conditions might become much more hazardous when they suffer from malnourishment and food insecurity.

Understanding how these greater threats could stymie international efforts to improve children's conditions is most critical for both policymakers and consumers. First, hazardous child labor is fundamentally linked to environmental and developmental sustainability, and it must be reflected accordingly in our conversations as we go forward. Second, these overarching challenges remind us that we must remain realistic in our expectation of progress.

III. COMMON GOALS & UNCOMMON COLLABORATIONS

Just as farmers must face the unprecedented challenges of a changing

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World Summit on Food Security, *Declaration of the World Summit on Food Security*, at 2, WSFS/2009/02 (Nov. 16-18, 2009,), *available at* ftp://ftp.fao.org/docrep/fao/Meeting/018/k6050e.pdf; ROYAL SOCIETY OF LONDON, REAPING THE BENEFITS: SCIENCE AND THE SUSTAINABLE INTENSIFICATION OF GLOBAL AGRICULTURE 47 (2009), *available at* https://royalsociety.org/~/media/Royal_Society_Content/policy/publications/2009/429496779. pdf.

⁷⁶ IFAD Smallholder, *supra* note 60.

⁷⁷ See T.S. Jayne, Jordan Chamberlin & Derek D. Headey, Land Pressures, the Evolution of Farming Systems, and Development Strategies in Africa: A Synthesis, 48 FOOD POL'Y 1-17 (2014) (in Africa for example, in the majority of 40 land-constrained countries, smallholder farms are gradually shrinking).

⁷⁸ See M.C. Tirado, et al., supra note 73.

⁷⁹ Nagayets, *supra* note 66, at 364.

W. E. Easterling, et al., *Food, Fibre and Forest Products*, in CLIMATE CHANGE 2007: IMPACTS, ADAPTATION AND VULNERABILITY, CONTRIBUTION OF WORKING GROUP II TO THE FOURTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE 273-313 (M. L. Parry, et al., eds., Cambridge University Press 2007).

world, ⁸¹ academics, businesses, civil society, consumers, and national and international policymakers must also reform our approach toward understanding and addressing hazardous child labor. We must engage our efforts in an "unprecedented and uncommon collaboration"—a term popularized by plant scientist Howard-Yana Shapiro—to join competitors and conventionally-unrelated groups of actors and stakeholders to support the world's farmers in meeting these challenges. ⁸²

Hazardous child labor must be incorporated as a critical component in the current environmental and agricultural sustainability dialogues. Part of this uncommon collaboration requires collaboration at the broadest level of the agricultural sustainability movement, ⁸³ which currently does not focus on child labor. ⁸⁴ The concept of sustainability of agricultural and food systems can be traced back to environmental concerns emerging in the 1950s, centering on the need to develop agricultural technologies and practices that do not adversely affect the environment. ⁸⁵ Concerns regarding industrial farming and environmental harms—e.g., issues concerning biodiversity, toxicity of pesticides and synthetic fertilizers, genetic engineering, and industrial pollution, among others—dominate our sustainability conversations. ⁸⁶ Even the concept of "uncommon collaboration" originated from environmental concerns. ⁸⁷ In 2010, a multi-

Agricultural sustainability experts agree that current farming practices must undergo extensive renovation to meet future needs, for the same farmers must produce more crops on the same, or less, unit of land and water. *See* UN CONF. ON TRADE AND DEV., TRADE AND ENVIRONMENT REVIEW 2013 i (2013).

⁸² "[The] lack[] of information flow between scientists, practitioners and policy makers is known to exacerbate the difficulties, despite increased emphasis upon evidence-based policy." Jules Pretty et al., *The Top 100 Questions of Importance to the Future of Global Agriculture*, 8 INT'L J. OF AGRICULTURAL SUSTAINABILITY 219, 221 (2010), available at http://ucanr.edu/blogs/food/blogfiles/5698.pdf.

⁸³ SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK [SDSN], SOLUTIONS FOR SUSTAINABLE AGRICULTURE AND FOOD SYSTEMS ix (2013).

⁸⁴ ACCELERATING ACTION AGAINST CHILD LABOUR, *supra* note 11, at 75.

⁸⁵ Jules Pretty, *Agricultural Sustainability: Concepts, Principles and Evidence*, PHIL. TRANSACTIONS OF THE ROYAL SOC'Y B 447 (2007), *available at* http://rstb.royalsociety publishing.org/content/363/1491/447.full.pdf+html.

For example, Professor Luna similarly raised the lack of focus on farmworkers in conversations of sustainability in the United States: "integrated sustainability approaches to the nation's food systems are stymied without consideration of the labor workforce. It proposes that relegating farmworkers to invisible roles foregoes opportunities to improve food systems and systematically repeats the cycle of harm that farmworkers and other agricultural laborers ensure." Guadalupe T. Luna, *The Dominion of Agricultural Sustainability: Invisible Farm Laborers*, 2014 Wis. L.R. 265, 267 (2014).

⁸⁷ In order to protect the remaining forest, Mars, Inc., the U.S. Department of Agriculture, IBM, and the University of California, Davis, and others came together to increase the production efficiency of cacao plants by sequencing, assembling and annotating

disciplinary team of experts and representatives from the world's major agricultural organizations, academic and professional institutions congregated to identify the most pressing questions for the future of global agriculture. Out of the 100 questions chosen, none addressed child labor specifically. While within the agricultural sustainability and environmental dialogues, experts have collectively called for paradigm shift in light of climate change and the increasing global food demand. Part of this shift must incorporate the pervasiveness of hazardous child labor and its implication for future agricultural sustainability and development. While "relatively little attention has been paid to the social dimension of sustainable development, in particular, the implications for . . . child labour. The elimination of child labour can be part of 'climate-smart development' but the case needs to be made *now*."

At the more operational level, internal to current framework of child labor policies, uncommon collaboration depends on public and private stakeholders—governments, international institutions, shareholders. corporations, agricultural community, consumers, smallholders, children laborers, and especially *competitors* within the same industry and across industries joined by a common goal. Uncommon collaboration creates a common language across the various supply chains to promote understanding, more robust engagement, and holistic solutions. Even industry has acknowledged a convergence point where "sustainability has moved from mainly a reputational concern to an idea that's mutual, responsible and business-critical."91 The concept of uncommon collaboration parallels a more organic nature of an agricultural community, aptly expressed by a farmer from La Arboleda Community Mill, who noted:

If it takes a village working together to raise a child . . . then it

s again common and then releasing it to the public domain. Howard Ver

the cacao genome and then releasing it to the public domain. Howard-Yana Shapiro, Address at TedxAmsterdam (Nov. 30, 2010), http://tedxtalks.ted.com/video/TEDxAmsterdam-2010-Howard-Yana.

Twenty of the 100 questions focus on agricultural development, which mention topics such as social capital, gender and extension, development and livelihoods, governance, economic investment, and power and policy making. Jules Pretty, et al., *The Top 100 Questions of Importance to the Future of Global Agriculture*, 8 INT'L J. AGRICULTURAL SUSTAINABILITY 219-230 (2010), *available at* http://ucanr.edu/blogs/food/blogfiles/5698.pdf.

⁸⁹ U.N. Conference on Trade and Development, *Wake up Before It is Too Late: Make Agriculture Truly Sustainable Now for Food Security in a Changing Climate*, at 7, UNCTAD/DITC/TED/2012/3 (2013), *available at* http://unctad.org/en/publicationslibrary/ditcted2012d3 en.pdf.

 $^{^{90}}$ ACCELERATING ACTION AGAINST CHILD LABOUR, supra note 11, at 75 (emphasis added).

⁹¹ KPMG, A TASTE OF THE FUTURE: THE TRENDS THAT COULD TRANSFORM THE CHOCOLATE INDUSTRY 12 (2014), *available at* http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Documents/taste-of-the-future.pdf.

makes sense that it takes a farmer, a CEO, a banker, a teacher and many others to work together to change the world. 92

Industries across various crop subsectors have begun to collaborate and synchronize their efforts to confront hazardous child labor. Some of the current multi-stakeholder and public-private initiatives in the agricultural sector include the Better Cotton Initiative (BCI), Bonsucro, the Eliminating Child Labour in Tobacco Growing Foundation (ECLT), the Ethical Tea Partnership (ETP), the International Cocoa Initiative (ICI), the National Coffee Association (NCA), the Roundtable on Sustainable Biofuels (RSB), and the Roundtable for Sustainable Palm Oil (RSPO), which are at various stages of progress in their program to confront these issues in their supply chains. While certain crops have received more attention than others, the data on hazardous child labor in each particular crop subsector remain uncaptured. A possible uncommon collaboration is to create a network of non-related subsectors to unite effort on the ground and aide international institutions in their effort to account for incidents of hazardous child labor.

Many multi-stakeholder initiatives focus on providing formal education opportunities for children as alternatives to labor. Yet uncommon collaborations focusing beyond the realm of formal education have shown promise in reducing the need for child labor by targeting other root causes. For example, collaboration can create infrastructure where none existed. Programs working with the information technology sector to make available public satellite payphones in villages where there are no fixed lines or electrical supply have shown to increase smallholder profits and reduce incidents of child labor. More recently, CocoaLink—an initiative formed by a public private partnership between the World Cocoa Foundation and Orange, the world leading mobile telecom operator—provides a platform for free information exchange and technical support for farmers in Côte d'Ivoire. CocoaLink connects farmers with agricultural experts for real-time consultation on issues such as diseases, pest control, and fertilizer

⁹² Meriwether Hardie, *Uncommon Alliances: Reflections on the 2012 Certification and Sustainability Workshop*, THE FROG BLOG (RAINFOREST ALLIANCE) (Jun. 25, 2014), http://thefrogblog.org/2012/06/25/uncommon-alliances-reflections-on-the-2012-certification-and-sustainability-workshop/.

⁹³ See Diether W. Beuermann, Inter-American Development bank, Information and Communication Technologies, Agricultural Profitability, and Child Labor in Rural Peru IADB Doc. OVE/WP-02/11 (2011), available at http://www.oecd.org/countries/peru/50048462.pdf.

⁹⁴ Press Release, World Cocoa Foundation, New CocoaLink Mobile Technology Program to Improve Livelihoods of 100,000 Cocoa Farmers in Côte d'Ivoire (May 29, 2013), http://worldcocoafoundation.org/wp-content/uploads/FINAL-CocoaLink-CDI-Press-Release-ENGLISH-5-28-2013.pdf (last visited Nov. 30, 2014).

practices. Collaborating with environmental efforts also correlates positively with reducing child labor and stabilizing food security for smallholder households. For example, application of conservation agriculture, which is based on the principle of minimal soil disturbance and crop rotations, in the long run would reduce the need for child labor. Conservation farming techniques generally reduce labor demand around 50 percent, and specifically hazardous child labor by reducing weed growth and application of harmful pesticides, activities which often engage children. Another approach focuses on utilizing advances in science to increase crop yield to combat children's malnutrition and growth stunt. According to plant scientist Howard Yana-Shapiro, sustainable child labor policies must focus on the insidious effect of nutrition on perpetuating the need for child labor across generations. Malnourished children working in hazardous conditions become smallholders with less capability, thus perpetuating their dependency on the next generation of child laborers.

To achieve a common future of agricultural sustainability, food security, and, most of all, human capability for all, key players across the sustainability dialogue must recognize that smallholders and their children are the true keepers of future sustainability and development. Without ensuring that children can become farmers with full capability, sustainability will be short-lived. Given the pressure of climate change on the agricultural community, solutions of this scale require a collective engagement of all—common and uncommon—sectors of society.

CONCLUSION

Throughout history, child labor subjected to agriculture demand has proved remarkably persistent. Children engaging in hazardous activities will continue to be a part of our food supply in the near future.⁹⁹ Despite the

98 *Id*.

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⁹⁵ CocoaLink-Connecting Cocoa Communities, World Cocoa Foundation, http://worldcocoafoundation.org/cocoalink/ (last visited Nov. 19, 2014).

Norah Mwamadi & Bernd Seiffert, Reducing Child Labour in Agriculture through Good Agricultural Practices: GAO Experiences 3, NAT. CONF. ON ELIMINATING CHILD LABOUR IN AGRICULTURE (Sep. 5, 2012), http://www.fao.org/fileadmin/user_upload/fao_ilo/pdf/Other docs/Safer-Agricultural-Practices-FAO-experiences.pdf.

⁹⁷ *Id*.

⁹⁹ Studies of European Countries revealed the school system's persistent battle to enforce school attendance in rural European during the nineteenth and twentieth centuries. *See e.g.*, COLIN HEYWOOD, CHILDHOOD IN NINETEENTH-CENTURY FRANCE: WORK, HEALTH AND EDUCATION AMONG THE "CLASSES POPULAIRES" (CAMBRIDGE UNI. PRESS, 1988) (studying child labor in France); Joe M. Borras Llop, *Schooling and Child Farm Labour in Spain, circa 1880-1930*, 20 CONTINUITY AND CHANGE 385-406 (2005); Mats Sjoberg, *Working Rural Children, Hearding, Child Labour and Childhood in Swedish Rural Environment 1850-1950*,

progress the international community has achieved so far on various fronts, our dramatically changing world will continue to stress the most vulnerable—smallholder households and their children—and subject their subsistence to constant pressure. At the same time, this most vulnerable group must also shoulder the burden of eliminating hazardous child labor. Having overseen countless ILO-IPEC on-the-ground initiatives, Constance Thomas reminds us that going forward requires "more than isolated, ad hoc project interventions and good intentions to achieve the level of progress needed." For real and sustainable progress in light of all these challenges, we not only need uncommon collaboration among governments, corporations, civil society organizations, and farmers, but we need these collaborations to be systematic and enduring.

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in INDUSTRIOUS CHILDREN 106-28 (Ning de Coninck-Smith, Bengt Sandin, and Ellen Schrumpf eds., Odense Uni. Press 1997); Hugh D. Hindman, *Unfinished Business: The Persistence of Child Labor in the US*, 18 EMPLOYEE RESPONSIBILITIES AND RIGHTS J. 125-31 (2006) (stating that the United States's agriculture sector has been historically the largest employer of child labor, the occurrence of which has continue to persist to the present day).

¹⁰⁰ Constance Thomas, supra note 13 at 154.